

**Vocational Skill Development in Bangladesh: Practice of
Selected Trade Courses and Its Role in Trainees'
Employability**

By

DILRUBA SULTANA

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Supervisor

Dr. Mariam Begum

Professor

Institute of Education and Research

University of Dhaka

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Declaration by the Researcher

It is hereby declared that the thesis entitled '**Vocational Skill Development in Bangladesh: Practice of Selected Trade Courses and Its Role in Trainees' Employability**'

submitted to the Institute of Education and Research, University of Dhaka in fulfillment of the requirement for the Degree of Doctor of Philosophy is my own original work. The thesis does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing. The thesis also does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution. Finally, I affirm that there is no plagiarized content in any part of the thesis.

Date:

DILRUBA SULATAN A

Registration no & Session: 17/2016-2017

Institute of Education and Research

University of Dhaka

CERTIFICATE OF THE SUPERVISOR

I am very glad to certify that the thesis entitled '**Vocational Skill Development in Bangladesh: Practice of Selected Trade Courses and Its Role in Trainees' Employability**' conducted Dilruba Sultana, a doctoral student at the institute of Education and Research, University of Dhaka, is a complete research work and may be submitted for further evaluation.

Therefore, it is recommended that the thesis be submitted to the University of Dhaka through the Institute of Education and Research (IER) for further required formalities leading to its acceptance in partial fulfillment of the requirement for the degree of Doctor of Philosophy.

Supervisor:

Date:

Professor, Dr. Mariam Begum
Institute of Education and Research
University of Dhaka

**Vocational Skill Development in Bangladesh: Practice of Selected Trade Courses and Its
Role in Trainees' Employability**

Dilruba Sultana

Doctor of Philosophy

Institute of Education and Research, University of Dhaka

Abstract

The main focus of the study was to explore the practice of selected vocational trade courses including exploring the existing communication between vocational training organizations and relevant industry sectors in ensuring the proper usages of vocational trainings in the relevant industry sector and increasing the possibility of employability of the target groups. This study applied mixed research approach and necessary data were collected using data collection methods like, FGD, Interview, Observation and Survey as per Mixed Research Approach. The participants of the study were the relevant people from Vocational Skill Development sector, e.g. higher officials from BTEB, Principals and Trainers, current trainees and graduates of different vocational training courses from the Technical Training Centers and higher officials from the relevant industry sectors. Through analyzing the collected data major findings emerged in the specific areas of the research questions of the study. For example, pedagogical practice of theoretical and practical classes of vocational training courses are different from each other, the current pedagogical practice of vocational training courses give more emphasis on theoretical part of the course rather than the practical part, a few training organizations started to offer the vocational training courses under NTVQF, in many cases they are just offering only the RPL courses, most of the training organizations are not well equipped with necessary tools and equipment required for practical classes, the industry sectors do not have any kind of communication and connection with the vocational training organizations, even for recruitment they do not communicate with the vocational training organizations and there is gap between supply-side and demand-side of vocational trainings and relevant skills.

LIST OF ACRONYMS

Acronym	Elaboration
ADB	Asian Development Bank
BGMEA	Bangladesh Garments Manufactures and Exporters Association
BGTTC	Bangladesh German Technical Training Center
BIGD	BRAC Institute of Governance and Development
BMET	Bureau of Manpower Employment and Training
BTEB	Bangladesh Technical Education Board
CACS	Competency Assessment and Certification System
CBT	Competency-Based Training
CBT & A	Competency-Based Training and Assessment
CS	Competency Standards
FGD	Focus Group Discussion
GMR	Global Monitoring Report
GWA	Gender and Water Alliance
ILO	International Labour Organization
ISC	Industry Skill Council
ISMO	Industrial Sewing Machine Operation
MOE	Ministry of Education
NSDC	National Skills Development Council
NSDP	National Skills Development Policy
NSDA	National Skills Development Authority
NTVQF	National Technical and Vocational Qualification Framework
OHS	Occupational Health and Safety
RPL	Recognition of Prior Learning
RTO	Registered Training Organization
SDG	Sustainable Development Goal
SDC	Swiss Development Cooperation
SEIP	Skill for Employment Investment Program
SMO	Sewing Machine Operation
TTC	Technical Training Center
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational Scientific and Cultural Organization
VSD	Vocational Skill Development

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CHAPTER I

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1. Context and Background of the Study

Along with the mainstream or general education system, vocational skill development sector is acknowledged and considered as one of the most important areas for economic growth and development of any country. In the current global changes and economy, the countries which have higher levels of education including globally required skills and competencies able to adjust with the changes and global opportunities more efficiently (MOE, 2011). In the current rapidly evolving employment landscape, it is also very crucial for Government and individual to seize the opportunities by the new employment trends preparing the future skilled human resources as required globally (World Economic Forum, 2016). Reaching the lower end of middle-income country status is in 2014 Bangladesh is now in a crossroads to establish itself showing a high-productivity growing economy and adjustable skilled human resources as per global trends. But general education attainment of the workforce of Bangladesh is still weak including negligible vocational skills training. "...only 21 percent of the population above 15 years if age reported having had any vocational training outside of formal schooling system (The World Bank, 2018, pg.15)". "The percentage of BTEB enrolment in Secondary Education is 11.01% in 2014, the percentage of BTEB enrolment in Higher Secondary Education and Diploma (All) 1st& 3rd Semester is 16.18% in 2014. Compared with general secondary education, only about 2.85% of students enrolled in secondary-level vocational program (both SSC voc and the National Skills Standard [basic] (ADB, 2015, pg. ix)".

As a result, in Bangladesh the biggest problem for development is its large number of unskilled people. But population of the country could be converted into human resources developing their knowledge and skills through different vocational trainings. “The Government of Bangladesh recognized that to reduce poverty and mitigate the limitations of school education, more citizens need to have access to both formal and informal skills training to develop their skills that will increase their employability (MOE, 2011, pg. 39).” Many studies also reported that ‘vocational skills development’ considered as core national strategy in many developed countries, like, Australia, Canada, Japan and US (Mcgrath, 2012 as cited in Khan 2017). Realizing the potential importance of ‘vocational skills development’ recently Bangladesh Government is taking different categories of initiatives in the vocational skill development sector to strengthen this particular sector. In Bangladesh about 20 ministries and departments are working to provide some types of vocational skills trainings and in this regard the Ministry of Education and the Bangladesh Technical Education Board is the main responsible body for quality assurance through accreditation of training providers, curriculum development of vocational training programs, examinations and certifications (ADB 2015). The Government of Bangladesh adopted the ‘National Technical Vocational Qualification Framework (NTVQF) in 2009 and as per the NTVQF different training courses has been developed by BTEB (BIGD, 2018), developed the ‘National Skills Development Policy’ in 2011 to guide skill development strategies and coordinate the all elements of vocational skill trainings and training providers (MOE, 2011), prepared action plan to increase female enrolment in the vocational education to 40% by 2030, took initiative to expand training institutions, predicted to have labour force of 100 million by 2020 (BIGD, 2018). But in the Bangladesh still the gap is widening between the knowledge and skills providing through existing vocational training programs and the skills and competencies

demanded by employers (Raihan, 2014). Skills like, critical thinking, problem solving, leadership, communication, work ethics and team work are considered as very essential to cope with the changing technology and global requirements. But these are largely missing skills for workers in Bangladesh which are also crucial in increasing employability of the workers (The World Bank, 2018). Through different vocational training courses those skills need to be addressed to develop the skilled human resources as per employers' demand. But quality teaching and learning is also considered as a big challenge in the vocational skills training organizations for inadequate provision of modern learning facilities and insufficient teacher training opportunities (The World Bank, 2018). So, the present study is intended to explore the current practice of vocational training courses including the implementation status of vocational trade courses under NTVQF from the perspectives of both course design and classroom practices in the real scenario. Simultaneously, the study also explored the existing relationship between industry sectors and training organizations including the usage and importance of vocational trainings in the industry sectors and in increasing the employability of the target groups. In addition, from the perspective of vocational training courses and training providers the present study also explored to what extent the vocational training courses are able to address the needs of the employers considering the recent technological changes and global requirements.

1.2. Problem Statement of the Study

The vocational skills development is a key area of concern in recent Bangladesh (ADB, 2016). It has been emphasized as central focus of the education system in many developing and recently developed countries like Bangladesh as a way of preparing the potential workforce for rapid industrializations and development. Accordingly, Bangladesh Government is providing skills development and technical training through 20 ministries and their various departments.

Especially BTEB is providing various kinds of trainings to different target groups, BMET is offering different trainings through its 38 Technical Training Centers (TTCs), BGMEA is also offering different kinds of trainings to the garments sectors professionals.

National Skills Development Policy -2011 provides guideline on different important aspects of Vocational Skills Development, like, the policy specified Nationally Recognized Qualifications, Programs and Providers Quality, Strengthened Role for Industry Sectors in Skills Development, etc. National Training and Vocational Qualifications Framework (NTVQF) also requires three essential components, like, Nationally recognized competency standards, Competency-Based Training (CBT) Delivery System and Competency Assessment and Certification System (CACS).

But in Bangladesh, one of the main weaknesses of Vocational Skills Development programs is the insufficient linkage between supply and demand, i.e. the effective linkage between the training institutions and employers (ADB, 2015). Even in the central level, employers cannot participate in policy or curricula development or in providing trainers. Insufficient linkage with the employers and the training institutions results in slow and inadequate response to labour market developments and less scope to use the trainings in the professions or workplace of trainees (ADB, 2015). Enterprises or industry sectors are not enthusiastic enough or feel the need of providing vocational skills trainings to its workers (The World Bank, 2018). This is well-acknowledged and there is evidence that there is skill gap in this sector, i.e., there is a mismatch of jobs and skills, the difference between the salary package for skilled and unskilled workers is very less which is a clear indication that the vocational trainings are not highly values in the job market or to the demand side. Even after receiving vocational trainings some remain unemployed or can not get job in their area of training which is another evidence of mismatch between skills

and competencies of vocational training programs and job market (Newaz, 2013). But to deliver quality and relevant learning experience to students, especially to cope with the new technological changes that is happened in the industry sectors, the collaboration between industry sectors and training providers is very important and it is very essential to build effective partnership between these two parties.

On the other hand, quality teaching and learning is also a great challenge with insufficient learning facilities and teachers training opportunities in the vocational skill development institutes. In Bangladesh most of the vocational skill development organizations face limitations to allot sufficient fund for the purpose of increasing teaching-learning facilities and teachers' professional development opportunities within the institutions. This leads them to compromise with quality teaching and learning and hamper the practical learning of the students as they have little or no access to required tools and equipment for doing the practical task properly (The World Bank, 2018).

Considering the above-mentioned issues and perspectives of Vocational Skill Development in Bangladesh, especially, the skills gap and communication gap between the industry sector and vocational training organizations and insufficient teaching-learning facilities and teachers' training opportunities, the present study intended to explore the current practices of vocational skills development and the usage of those skills trainings both from the target groups' and employers' perspectives.

1.3. Research Questions of the Study

The study is intended to explore the procedure of designing and developing of vocational training courses in current practice including further pedagogical practice in the real classroom scenario. As currently BTEB developed the vocational training courses in line with the NTVQF and started to implement these NTVQF vocational training courses the present study will also look into the current implementation status of vocational training courses under NTVQF. On the other hand, the main place to use the knowledge and skills of vocational training courses is the industry sector. So, the vocational training organizations and the relevant industry sectors need to have a strong linkage and effective communication in a regular manner so that the needs of the industry sectors can be well-addressed through the vocational training courses. If it is possible to address the needs of the industry sectors through different vocational training courses then the industry sectors will be positive to create the opportunities to use different kinds of vocational training courses in their total system. However, considering the above-mentioned perspectives of vocational skill development sector the present study carried out to answer the following research questions:

Research Question 1: What is the current practice of some selected trade courses including the pedagogical practice and practice of designing and developing the syllabus of vocational training courses?

Research Question 2: What is the current status of implementation of vocational trade courses under NTVQF?

Research Question 3: What is the existing communication between vocational training organizations and industry sector and how far the trade courses are relevant to address the needs of the employers?

Research Question 4: How can the vocational skill development trainings provide help to the industry sector?

Research Question 5: To what extent are the vocational skill development trainings increasing the possibilities of employability of the target groups?

Purpose of the Study

The purpose of the present study was specified based on the problem statement of the study and some of the important factors which were significantly supported by the literature Review of the study. At present Quality of Education and appropriate vocational skill development are two serious issues behind the very low productivity of our workforce (Majumder, 2018). For addressing the issue of vocational skill development BTEB introduced the NTVQF in 2009 and started to implement the vocational training courses under NTVQF from 2012. The 2nd phase of action plan of 5 years (2016 -2020) is now going on in regards to implementing the vocational training courses under NTVQF (Majumder, 2018) which is very significant in the vocational skill development sector. So, the present study intended to analyze the current status of vocational training courses under NTVQF exploring the practiced procedure in designing and developing the syllabuses of vocational training courses and the pedagogical practice in facilitating the vocational trainings in the real classroom situation. On the other hand, knowledge alone is insufficient for employability rather individuals need to be able to apply the knowledge and skills in the specific context (Claxton & et al., 2012). In case of vocational skills

development trainings, the graduates of different vocational training programs should be able to use the skills and knowledge of particular training in their workplaces. For this purpose, the linkages with industries, employers, job markets and training providers are the most important element and in this regard the training institutions should be able to reflect information from the relevant industries and job market in the training programs (World Bank, 2018). But in Bangladesh the graduates of different vocational training courses are not fully equipped to use the learning from the training in their employment, in many cases the skills and competencies do not match with the requirements of the industry sector (World Bank, 2018). So, one of the important purposes of the present study is also to explore the existing relationship and communication of the industry sectors and vocational training organizations and how far their relationship is ensuring the proper usage of vocational trainings in the industry sector increasing the employability of the target groups.

1.4. Statement of Potential Significance and Benefits of the Study

In the current age of globalization and tremendous technological changes the significance of Vocational Skill Development is highly recognized worldwide. The 2030 agenda for sustainable development emphasized on productive employment and inclusive sustainable economic growth (BIGD, 2018). Similarly, in the advancement of technological changes and industrial growth the demand for skilled and competent human resources has been increasing day by day. In the context of globalization and to meet the global demand with required quality vocational skill development trainings the Government of Bangladesh is also attempting several initiatives to keep pace with the global demand of developing skilled human resources through different vocational training programs. But still the system of current vocational skill development training system of Bangladesh is noted to have noticeable shortcomings which ultimately drive

the whole system in lack of skilled human resource production (Karim & Mia, 2015). In addition, the vocational skill development sector of Bangladesh is still seeming unexplored in its different components. Recently the Government of Bangladesh introduced several initiatives in this sector, like, introduce the NTVQF in 2009 and NSDP in 2011 but the progress of implementation of those initiatives is still negligible. BTEB developed the vocational training courses under NTVQF but in regards to implementation these vocational training courses appear to be highly ambitious and the training organizations are not ready and un-equipped to implement all the levels of vocational training courses under NTVQF. This study explored the development procedure of vocational training courses including the teaching-learning practice of both the existing vocational training courses and the vocational training courses under NTVQF which allowed the study to find out the shortcomings and reasons behind the skills gap in the job market and limited implementations of vocational training courses under NTVQF. So ultimately, the findings of this study related to current pedagogical practice of vocational training courses will be able to respond to improve the teaching-learning practice of vocational training courses as well as to accelerate the implementation of vocational training courses under NTVQF.

Apart from this the researcher believes that the present study must be considered as one of the important studies in creating scope and opportunities to strengthen the relationship and communication between the industry sectors and vocational training providers. In this regard the study revealed significant number of findings related to existing communication between industry sector and vocational training organizations, relationship between the supply-side and demand -side of vocational trainings both in qualitative and quantitative manners which will be able to contribute significantly to ensure the proper usage of skills and competencies of the vocational trainings in the relevant industry sectors of Bangladesh. Therefore, providing the way

forward to ensure the proper usage of vocational trainings in the industry sectors this study highlighted the importance of vocational skill development programs in increasing the employability of the target groups. From this perspective the findings of this study may be useful for the particular target groups of the vocational training courses to match their education and vocational trainings with the global job market. So, the benefits of this study are ultimately contributing for all the relevant parties of vocational skill development sector of Bangladesh, like, the industry sectors, employer groups, training providers and the particular target groups. Moreover, the findings of this study provided in-depth insights into different initiatives of vocational skill development sector which will be able to contribute significantly to improve and develop the whole vocational skill development sector of Bangladesh.

1.5. Organization of the Dissertation

As a whole this dissertation divided into seven chapters in total. The first chapter is entitled 'Introduction and Background of the Study' and this chapter included the sections like, title of the study, introduction and background of the study, problem statement of the study, research questions of the study, purpose of the study, statement of potential significance of the study and summary of the dissertation. The second chapter is the 'Relevant Literature Review and Conceptual Framework of the Study' and in this literature review chapter relevant literature were reviewed under some of the major sections, like, definition and concepts of skills and skills development, concepts of employability and linkage of education, vocational skill development and employability and vocational skill development from the national and global perspectives. In chapter three the research design and methodology were outlined in detail including the research approach and rationale, research site of the study, qualitative design of the study, quantitative design of the study, data analysis process, validity and reliability, subjectivity, ethical concern of

the study and limitation of the study. The data analysis and result section of the study was divided into three main chapters (chapters four, five and six) based on the data collection approach and thematic areas of the collected data. For example, based on the qualitative data the practice, development and implementation of vocational training courses under NTVQF were explored and analyzed in chapter four. In chapter five all the qualitative and quantitative data related to pedagogical practice of vocational training courses were analyzed and sorted out the relevant results whereas chapter six outlined only the quantitative data analysis of vocational skill development trainings and employability from the perspective of target groups. Chapter seven ends with interpreting the major findings according to all of the research questions which the present study intended to answer throughout the study. Finally based on the interpretation of the major findings chapter seven also included the recommendations and conclusion of the study specifying some of the important recommendation for further study.

CHAPTER II

RELEVANT LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1. Introduction

Review of the literature included investigation into pertinent topics for providing the necessary understanding and background information of the significant concepts and perspectives of the whole study. For any kind of a research the literature review is very important because it describes how the present research is related to prior research, it shows the originality and relevance of the research problem specially how the research is different from other researches, it justifies the present methodology of the research and it actually demonstrates the researcher's preparedness to complete the research. As one of the essential preliminary tasks the researchers required to go through the existing literature in order to acquaint himself/herself with the available body of knowledge in the particular area of the interest. In fact, the literature review is an integral part of the research process and makes a valuable contribution to almost every operational step of the research. In the initial stages of research literature review helps the researcher to establish the theoretical roots of the study, clarify the ideas and develop the particular research methodology. Later in the process, the literature review serves to enhance and consolidate the researcher's own knowledge base and helps the researcher to integrate the research findings with the existing body of knowledge. So, we can say that for conducting any kind of a research literature review is very important considering its core functions in conducting and completing a research, for example, it provides a theoretical background to a study, it helps a

researcher to establish the links between what the researcher is proposing to examine and what has already been studied, it enables the researchers to show how the findings of the research will contribute to the existing body of knowledge.

Focused of the present study were pedagogical practice of vocational trade courses, implementation status of vocational trade courses under NTVQF, existing communication between vocational training organizations and relevant industry sectors, relevancy of trade courses to address the needs of the employers, usage of vocational trainings in increasing the employability of the target groups.

Considering the importance of literature review and the main focused areas of the study the researcher reviewed the previous research activities related to vocational skill development in Bangladesh and elsewhere, explored basic concepts, existing vocational skill development system of the country and relevant policies in regards to this in the following three sections which also includes the Conceptual Framework of the study:

Section 1: Basic Definitions and Concepts Related to the Present Study

Section 2: Previous research activities related to vocational skill development and employability

Section 3: Context, System and Policy Practice of Vocational Skill Development in Bangladesh

Section 4: Conceptual Framework of the study

2.2. Section 1: Basic Definitions and Concepts Related to the Present Study

2.2.1. Definition and Concepts of Skills

The concepts of skills are used in many different ways in different contexts, a widely shared definition of the term does not exist at the international level. In a general sense,

...the term skills is used to refer to the work-related capabilities of people to perform a job successfully. It should be distinguished from the concepts of abilities which refer to more fundamental and enduring attributes of an individual, such as physical and cognitive abilities that are formed over a longer period, often beginning in early childhood education (World Economic Forum, 2016, p. 54).

On the other hand, skills are multi-dimensional and multi-stage concepts that are developed in one individual's life in various stages starting preprimary to primary, secondary and tertiary education including on-the-job trainings, professional development training and adult education. Skills for jobs can encompass i) fundamental cognitive skills, such as: basic literacy, basic numeracy and basic science knowledge, ii) higher-order cognitive skills, like, analytical skill, critical thinking, problem solving, effective communication, leadership skill, etc. iii) non-cognitive or soft skills, such as: socio-emotional skills, personality traits, behaviour, discipline and work ethics, etc. iv) Technical skills, like, job-relevant professional skills applicable for specific occupation (The World Bank, 2018).

Skills are the main tools to improve individual's employment capability as well as offer jobs to the human resource of a country and contribute substantially to increase country's productivity and growth.

According to World Bank's Skills Toward Employment and Productivity (STEP) framework there are three types of skills: i) *Cognitive skills* include the ability to understand complex ideas, adapt effectively to the environment, learn from experience, engage in various forms of reasoning and overcome obstacles using thoughts (via literacy, numeracy, and other abilities) to solve

abstract problems. ii) *Non-cognitive skills* involve characteristics across multiple domains (including social, emotional, personality, behaviours and attitudes) not included under cognitive skills, for example, work habits (effort, discipline, and determination), behavioural traits (self-confidence, sociability, and emotional stability), and physical characteristics (strength, dexterity and endurance). iii) *Technical skills* are a combination of cognitive and non-cognitive skills used to accomplish specific tasks (skills used at work and in daily life).

In addition, the policy notes III, 2013 also said about *foundational (basic) skills* and higher-order skills. Foundation skills overlap with the concept of cognitive and non-cognitive skills, which are acquired through daily life and primary education (such as: functional literacy and numeracy and non-cognitive skills). On the other hand, foundational skills are required before attaining *higher-order skills*, and they are transferable across different jobs. Conversely, higher-order skills are more specialized skills and are often less transferable across different jobs.

2.2.2. Definition and Concepts of Skills Development

A broad definition of skills development as part of human capability enhancement requires comprehensive and coordinated attention to the spectrum of skills comprising foundation skills, transferable skills and job specific skills (Ahmed, n.d.).

...skills development is defined as the full range of formal and non-formal vocational, technical and skills-based education and training for employment and or self-employment. Skills development includes: Pre-employment and livelihood skills training, e.g. TVET, apprenticeships and school based TVET, Education and training for employed workers, e.g. workplace training and employment oriented and job-related short courses (MOE, 2011, p. 8).

Skills development is not a one-time activity in an individual's life -it is incremental, cumulative and transformational. In the Bangladesh Education Sector Review 2013 World Bank mentioned that "skills development is an incremental and lifelong process, acquired through formal and non-formal education (pre-primary to higher education), networks, jobs and other means. Weak

and in-equitable learning outcomes in earlier years of education provide a poor foundation for skill building later in life (World Bank, 2013, pg. 124)”. In this paper it is also mentioned that Skill Development is a fundamental and basic element to enhance productivity and economic growth and create job opportunities for the people of the country.

2.2.3. Concepts of Employability

Employability is one of the most important manifestations of the rapid changes of global trends in the last two decades. So, considering the importance of employability in this global age all the trainings and educational providers targeting to respond to this new employability indicator through their new approaches and initiatives, all types of training providers and diverse clienteles expected to make employable including up to date knowledge, skills and trainings.

Though it is a well-established concept that ‘employability’ is a concept of current time for rapid changes in the globalization era but the scholars of employability explained that the concept of employability did not emerge just to respond to the rapid changes in the economic and public policy environment since 1990 (Mcgrath, 2015). In 1998, Gazier, one of the leading theorists of employability mentioned that in the last century the concept of ‘employability’ had seven stages:

i) *Dichotomic employability*: The concept of the dichotomic employability emerged in the beginning of the 20th century in Britain and America. In this concept there is mainly a distinction between those who are employed and those who cannot be (Mcgrath, 2015).

ii) *Socio Medical Employability*

iii) This theme emerged around the time second world war in the USA, Britain and Germany. Especially this concept particularly addresses the social, physical and mental deficits of individuals which made them unfit for the employment (Mcgrath, 2015).

iv) *Manpower Policy Employability*

This concept mainly developed in USA in 1960s to extend the deficit approach of the socio-medical model to other social groups. The focus of this concept was on the gap between their knowledge, skills and attitude and those required by the labour market (Mcgrath, 2015).

v) *Flow Employability*

This preliminary French account emerged in 1960s. It defined employability a “the objective expectation, or more or less high probability, that a person looking for a job can have of finding one” (Ledurt 1966, quoted in Gazier 1998:44 as cited in Mcgrath, 2015).

vi) *Labour Market Performance Employability*

This concept emerged in the end of 1970s, focusing on the measurable outcomes of the labour market which resulted from specific interventions, like, period of employed, work hour, wage rates, etc. (Mcgrath, 2015).

vii) *Initiative Employability*

This concept emerged in the late 1980s in the human resource development literature of North America and Europe. It said about the notion of the ‘Salaryman’ who worked for the same organization from leaving school to retirement. In this concept one of the arguments is that successful career development required the development of skills and attitudes that could support the workers to be successful in their current job and develop and motivated to get a better job in another organization (Mcgrath, 2015).

viii) *Interactive Employability*

This concept accepts the importance of individual agency, it argued that the employability of the individual is partly relative to the employability of others in the labour market, both as

competitors in the sense that high levels of dispersed employability might attract new employment opportunity in an area (Mcgrath, 2015).

2.2.4. Working Definition of Employability

Hillage and Pollard's (1998) widely cited definition of employability as an individual's ability to gain initial employment, maintain employment, abide by the rules between the same organization, obtain new employment if required and secure suitable and sufficiently fulfilling work (Mcgrath, 2015).

In the column of 'individual factors' it makes this clear that this is not just an ordinary matter of building skills and attitudes within the educational system rather such skills need to be supported by job seeking skills, to some extent developed by careers and employment services. In the broader perspectives of employability, it is also required to consider the impact of health factors (reflecting the socio-medical model of employability) by age and gender and by mobility.

On the other hand, Cieslic and Simpson (2006) suggested that low levels of employability tend to mutually reinforce with poor attitudes to education to prevent successful remediation of early failure (Mcgrath, 2015).

Some authors such as Hartshorn and Sear identified employability skills with enterprising skills as defined by Gibb, 1993 (Mcgrath, 2015). As employability skills are often actually attitudes and attributes- there is also some connections made between employability and and emotional intelligence/labour (Lees 2002 as cited in (Mcgrath, 2015).

2.2.5. Short-term and Long-term Approaches of Employability

There is clear distinction between short-term and long-term employability approaches. According to Winch and Clarke (2003) the short-term approaches of employability failure to make a distinction between the task, firm and occupational understanding of skills (as cited in

Mcgrath, 2015). In elaboration skill at a task is the ability to carry out that particular task, skill in the context of a farm is the ability to do a particular job specified by the employers, skill at the level of an occupation concerns the potential ability to fulfil all the tasks associated with or negotiated for an occupation and skill in an occupational sense entails significant transferability between different jobs.

2.3. Section 2: Previous research activities related to vocational skill development and employability

A substantial amount of research activities related to vocational skill development training and employability has been conducted nationally and internationally. In this section of the relevant literature review different categories of scholarly research works that are related to the concept of the present study has been reviewed and moving forward all these relevant research works and literatures were used to discuss the focused areas and major findings of the study. At this stage reviewing the diverse categories of research activities it revealed that extensive amount of research activities was conducted on different areas of vocational skill development trainings and employability but very few or none of them specifically addressed the focused areas of the present study. For example, the intensive literature review of the present study presented that the previous research activities were conducted in the following areas:

Existing situation of TVET in Bangladesh which includes condition of textbooks for the students of secondary vocational schools and high schools, equipment necessary for vocational skills training, enrollment capacity in the training institutions, performance of training institutions under private management, access to skills trainings, whole RPL process to identify strengths and challenges in the design and implementation, effectiveness and impact of RPL certification

on the economic and social outcomes, current practice of industry engagement in vocational skills development trainings, etc.

Vocational skill development trainings in developing the skilled workforce and economic development of the country which includes how the large amount of population can be converted into skilled workforce and human resources, relationships and interdependencies between education and training and the socioeconomic system, role of vocational skill development training in the economic performance of firms, vocational skill development and economic growth, technical education and skill acquisition to nation building, role of vocational education and training curricula in economic development, etc.

Existing vocational skill development programs and needs of the employers and industries which explored the areas like, how far the vocational skill development initiatives be able to meet the needs of the employers, how to establish the extent of collaboration between vocational skill development training providers and relevant industries, means of industry-institution collaboration, key reasons why vocational skill development training providers needs to improve the communication with industries, different collaboration initiatives, mismatch in demand by employers and the skills of the potential candidates, vocational curriculum in schools and the changing economy, alignment of education and training to labour market demand at higher level, employer's needs, job competency that employers seek before recruitment, role of stakeholders in building adequate competencies in students for job market, implication of partnership between educational institution and the employers in designing competency-based learning materials, skills mismatch, current practice of industry engagement in vocational skills development trainings, etc.

Perception of people about vocational trainings that includes attitude towards vocational education and training, mindset of the people towards vocational skill development trainings, etc.

Pedagogic practice of vocational trainings which explores the areas like, quality of the instructors for teaching hands on activities, teacher training, curriculum and syllabus and pedagogical challenges, key elements of teacher training systems, role of the instructor in facilitating the training, role of learners, quality of education and vocational skills development trainings, effectiveness of using ICT in facilitating the vocational training sessions, etc.

Global trends, employability and job involvements where explored the areas like, time and situation to engage in skill development dialogues and initiatives, the impact of the Fourth Industrial Revolution on employment, skills and education, the future of jobs and the changes in the global trends, consequences of those changes in the workforce development strategies, role of skills in enabling the transition and creating more job opportunities, students' job involvements and job satisfactions during industrial training, difference between job involvements and job satisfaction, relationship between job involvements and job satisfactions in industrial training, possible future investments, how to meet the globalization challenges and meet the globalization demands, people's economic activities and labour market statistics relating to employment, unemployment, underemployment and other aspects people's economic activities, etc.

Demand-side issues and Supply-side issues that analyzed and explored the areas like, challenges both on the supply-side and demand-side of the vocational skill development sector and how the two sides interact with each other, supply and demand gap, etc.

Vocational skill development trainings and development of women workforce which explored the areas like, implications of today's transformations on the future of woman workforce development, the participation of male and female students in the vocational skill development system and their instructors' attitude and perception in technical professions, importance of vocational training for underprivileged, marginalized groups and women, how vocational trainings can enhance women's competency in workplace, female participations in vocational skill development training, etc.

Shortcomings and challenges of vocational skill development training in Bangladesh which included the areas like, contemporary challenges in the teacher training systems of vocational trainings, different shortcomings of the vocational skill development system, support for effective vocational skill training is weak, etc.

So, in this section review of the previous research activities are organized according to the above-mentioned areas.

2.3.1. Existing situation of TVET in Bangladesh: In 1972 the constitution of Bangladesh said about work, employment, social security, decent jobs and protection against underemployment and non-employment. For example, “the constitution of Bangladesh in its article no 20 mentioned that ‘work is right, a duty and a matter of honour for every citizen capable of working and everyone shall be paid for the work’. Similarly, the article 15 ensures provision of basic necessities, right to work and right to guarantee employment and social security. The article 23 stated ‘everyone has the right to work, to free choice of employment, to just and favourable condition of work and protection against non-employment’ (Govt. of BD, UNDP, USAID & a2i, 2015, pg. 3)”.

In the recent years globally, Bangladesh is considered as one of the growing countries as the country made noticeable development in different socio-economic sectors, e.g. poverty reduction, gender equality, ensuring universal primary education, reducing child mortality, etc. Based on all these developments and considering the contribution of vocational skill development sector in creating skilled manpower and jobs, the Government of Bangladesh targeted to be a middle-income country by 2024. In 2019 Dr. Khan. M.A. analyzed the situation of vocational trainings in one of his studies. He mentioned that in Bangladesh formal vocational training are provided under BTEB, like, the short course, basic trade courses, CBT & A course, SSC and HSC vocational courses and other technical courses. Normally five types of providers offered different categories of vocational trainings, e.g. public and private technical schools and colleges, polytechnics, private training institutions, technical training centers and specialized institutes. The Asian Development Bank and International Labour Organization also mentioned there are different types of training providers in Bangladesh, including private institutions, government institutions operated by various ministries, as well as local and international non-government organizations (NGOs). "... about 59.3% of people received training from private institutions while 22.4% received training from Government institutions (ADB & ILO, 2016, pg.3)." But the important question is whether the training obtained by the worker is consistent with the present pattern of economic development and aligned with the needs of economic diversifications.

As Bangladesh is moving towards a middle-income country the situation of vocational trainings is changing in the country. Regarding enrolment he gave the data that "the average incremental rate of enrolment in BTEB is 13.84% (Khan, 2019, pg.9)". "The proportion of students enrolled in TVET increased from 0.4% in 2001 to 1.8% in 2013. In 2018, out of one million enrolled

students in 6,865 public TVET institutes about 25% students were girls, and out of the total 51 thousand teachers only 20% are female (Khan, 2019, pg.11)”. In 2016, in one of the studies ADB showed that “Technical and Vocational Education and Training (TVET) has expanded rapidly in Bangladesh over the last 15 years. In 2000, only 110,000 people enrolled in formal TVET programs but enrollment rose to 448,000 by 2010 and 690,000 by 2014 (BANBAIS, as cited in ADB, 2016)”. In the existing system of vocational skill development trainings, the entry requirements are completion of grade VIII, one of the studies indicated that as a result a good amount of target groups are excluded from the system, like, school dropouts, out of schools’ children, a potential group from the under privileged communities (Khan, 2019).

On the other hand, Bangladesh has a large amount of young population who are required to develop as skilled workforce for the future. “About 63% of the country’s total population belongs to the age group of 15 to 49 years and 37% of the labour force in the age of 15 to 29 years (Khan, 2019, pg.19)”. So, in his study Khan (2019) emphasized that the main challenge of our country is to develop this huge amount of young labour force with employable skills and to ensure an effective transition from school to work and relevant jobs. It is mentioned earlier that Bangladesh targeted to be a middle income country by 2024 in his study Khan (2019) argued that for achieving the middle income country’s status Bangladesh should upgrade the investment in the socio-economic development sector, like, expand the share of manufacturing in GDP, reduce the share of agriculture, increase and diversify exports, sending more skilled workers abroad, etc. and these require the country to give significant efforts to produce more skilled workers, expand and develop the vocational skill development training system and designing an inclusive vocational skill development system that will ensure the opportunities for the groups who were

excluded from the formal education system and did not get access to education and vocational skills development trainings.

However, the economic diversifications of a country require higher levels of education and need based different skills. Similarly, the education system also has to be up to the level to produce a labour force that would be able to support a modernize economy for coming future. Bangladesh has a large working-age population which implies that if decent employment opportunities are available, the country can be more productive collectively, as more people contribute to overall economy actively. So, it is a critical time for Bangladesh to improve the quality of the labour force for its expected economic growth. In the present situation of Bangladesh, a large cohort of population are preparing to enter the workforce and a huge number of people falling behind and from these perspectives the quality of the skills training of Bangladesh need to be improved urgently.

If we look at the qualification of labour force it is mentioned by Asian Development Bank and International Labour Organization that a little over one-fifth of the labour force has no formal education. More than a quarter has received only some years of primary education, while a 30% has made it to secondary education. The remaining 20 % has attended upper secondary school or above, with just over 60 % having received tertiary education (ADB & ILO, 2016).

Similarly, in regards to developing quality workforce curriculum, syllabus, textbooks and other materials also play vital role and in this regard exploring the Secondary Schools graduates' attitude towards textbooks for vocational education Novota & et.al mentioned for the development of any country it is very important that the practiced education system prepared the graduates for the labour market and for ensuring the required preparation of the workforce it is essential to provide as many quality textbooks as possible (Novota & et.al., 2012).

Equally ‘necessary equipment’ is important for ensuring proper achievement of the required skills by the trainees. In 2015 Mia & Karim one of their studies explored that in the existing vocational training system necessary equipment are not available in one third of the training organizations for teaching hands on activities and in many cases five percent of training institutions do not make proper use of available equipment. As per their key findings, reasons behind non-utilization of available equipment are: ‘instructors not available, instruments out of order, operation expensive, management careless, etc. (Mia & Karim, 2015, pg. xi).’

Surprisingly, in 2015 Mia and Karim specified that performance of private vocational training institutions is weakest though ensuring quality training for the human resource development through private sector is considered as an urgent need of the country. So, the importance of quality performance of the private sector and its expanded role in the vocational skill development sectors need to be overemphasized. However, current trend of Public-Private Partnership (PPP) in the development practice of the country created a new opportunity to reinforce the role of private sector involvement in the vocational skill development sector.

On the contrary in 2017 UNDP in one of its study mentioned that it is well recognized that private sector has an important and essential role to match the employers needs with skills and competencies of different vocational training programs so that the trained people, the young groups from underprivileged communities, women, people with disabilities can achieve the market related skills. This study by UNDP firmly stated that “...private sector partnerships ought to represent the stakeholder benefactors of skills development and provide an avenue for collaborative reform of the formal technical vocational education and training system (UNDP, 2017, pg xiii).”

2.3.2. Vocational skill development trainings in developing the skilled workforce and economic development of the country: Recently from 2015 Bangladesh achieved lower middle-income country's status to reach middle income country's level by 2024. For this purpose, government is trying to work in each and every aspects of the economic development which includes, employment generation, production and market expansion, education and technical and vocational skills reform, etc. Especially in the education and skills reform accommodating a large number of unemployed and unskilled people providing demand-based skills and training. The target to increase the technical vocational enrolment rate from 8% to 20 % by 2021. Though the total workforce of the country has serious lacking of necessary technical vocational trainings, data from a survey in 2012 showed that "...approximately 80% of the workforce had not received any training and among the 20 % that had , only 11% received training which was justifiable under the National Technical Vocational Qualification Framework (NTVQF)" (USAID et al., 2015, pg. 2). Not only this even statistical evidence indicates that the skills imparted by much of the TVET system are not those that the market requires (ADB & ILO, 2016). There are robust evidences that the lack of basic education and skills are problems faced by many industries. One of the keys complains is not that particular technical skills are missing, but that the core educational competencies are not sufficiently strong in the workforce. But workers need to have an adequate fundamental education to quickly acquire the required skills. In 'Bangladesh Education Sector Review' in 2013 World Bank also strongly supported that it is possible with Bangladesh to develop like China

...with its potential export growth labour-intensive manufactures products but unfortunately the current economic growth path leads the country into a 'low-skill and low-productivity trap where workers' skills are insufficient spur innovation and the demand for skills is too low to encourage workers to acquire higher skills (World bank, 2013, pg. 122).

One of the most important reasons behind underdevelopment of Bangladesh is its large amount of unskilled and inefficient people. But it is well acknowledged that if it is possible to convert the huge number of people into skilled and human resources, in that case this large amount of population could be the significant part of the country for development. In this area substantial number of research activities has also been conducted which mentioned that vocational skill development trainings can be one of the most important initiatives to convert the large amount of population into skilled workforce for labour market (Newaz, 2013). World Bank in 2013 also said “...this is an important time in the country’s history to engage in vocational skill development dialogue and initiatives (World Bank, 2013, pg. 122)”. In this report it is also sorted out that at this development stage of the country reskilling the current labour force is crucial as they are the important part to contribute to the economy of the country. For this purpose, i.e., for relevant and fruitful skills development it is important to change the economy structurally as jobs and skills are closely interrelated and education and skill development have played a significant role in the economic growth, reducing poverty and social transformation of the country. In one of his research activities Mouzakitis confirmed that vocational skill development system plays a crucial role in the social and economic development of the country and for playing a positive role in this regard vocational skill development system required to have an appropriate design of syllabus and curricula considering the market demands (Mouzakitis, 2010). He also said only general education or contribution of school is not enough to meet the market demands. He concluded the study strongly supporting that vocational skill development education and trainings should be like this, which “...through adequate and effective curriculum, prepares persons for employment in a trade or industrial occupation or enables employed persons in the same sectors to enhance their qualifications through further training such as for life learning

(Mouzakitis, 2010, pg.3918)”. Especially many of the researchers acknowledged that vocational skill plays significant role for human resource development and to build nation. In 2014 in a study Ogundele & et.al. stated firmly that skill acquisition is essential in the education sector because it contributes to develop the nation as human capital and prepared one for relevant employment. The skill acquisition prepared young people for particular job as per market demand and creates lifelong opportunities for self-development because skill acquisition includes competency and prepared the skilled person to carry out a job effective and efficiently for higher productivity. In 2013, in one of his studies Newaz also strongly recommended that to convert its large human capital as an asset Bangladesh should consider the vocational skill development sector as an industry which will develop a strong and efficient human workforce to boost the economy of the country. The European Center for the Development of Vocational Trainings also supported that vocational, education and training policies should follow and consider a complex relationship and interdependencies between education, training and the socioeconomic system of a country (ECDVT, 2009).

2.3.3. Existing vocational skill development programs and needs of the employers and industries: A good number of studies showed that Bangladesh has high demand for skilled human resources but existing vocational skill development training programs could not be able to meet the required demand of skilled human workforce. One of the important studies mentioned that workforce with vocational technical trainings is very short in supply. It showed that for every single person in the labour force with technical/vocational trainings there are more than 104 others with general education (SSC or HSC) and 34 others having university degree. There is also mismatch of jobs and skills, i.e. skills of the vocationally trained people are not matching with the needs of the employers (Newaz, 2013).

In 2015 in a concept note on 'Education for Employment' USAID & et al. mentioned that there is huge communication and coordination gap between the employers and the trainings providers, specially they don't know what to train, how to train and for whom to train, they don't identify the industries need and how to train the people for fulfilling the need. Along with this in 2016 ADB & ILO stated that there is still very less communication between the employers and the vocational training providers which creates little responsiveness of vocational skill training provision to employers demands – "...with no systematic feedback concerning industry requirements and no tracer studies of graduates, there is little scope for such responsiveness (ADB & ILO, 2016. Pg.7)."

Another researcher also supported this point by mentioning that in Bangladesh the gap between skill and competencies generated through vocational training providers and the skills demanded by the industries. For minimizing the gaps, the relevant industries should establish networks with the vocational training providers (Raihan, 2014). This study also pointed out that regarding building required collaboration between training providers and industries lack of initiatives by the training institutions and less responses from the industry-side is considered as one of the major challenges. The vocational skill development sector uses the syllabus and curriculum developed by academicians with very less or no understanding the needs of the employers and local level needs. But the strong collaboration between training institutions and employers is required as the collaboration mainly creates the relations between theories and practical things which is required for job market. The collaboration increases the knowledge and employability skills of the workforce, especially eight dimensions of employability skills for future "...learning, technology, communication, teamwork, problem solving, initiative and enterprise, planning & organizing and self-management (Raihan, 2014, pg.50)." Another study conducted by

the Department of Community Education, University of Indonesia in 2018 showed that there is a significant implication on the collaboration between training institutions and business world in designing and applying the competency-based learning materials analyzing and identifying the job orders and market demands. In 2017, Dewan & Sarker, in one of their studies argued that the vocational training centers which are situated near any kind of an industries should provide vocational trainings related to the particular industries. In addition to this the national core curriculum of vocational skills trainings could address the key desirable skills for employability. The study found that according to current changes in the economy of the country the curriculum of the vocational skills trainings is not revised as required. As the economy of the country is changing day by day the curriculum should be revisited frequently. It is also very essential to ensure active interaction between training providers and employers through several effective ways.

On the other hand, in a school's administrator survey in 2017 Dewan & Sarker mentioned that 47 percent of the school's administrators appreciated industries involvement in developing the training curriculum. In this particular survey it is also revealed that especially the TVET curriculum in schools is not revised to keep pace with the changing economy. In this regard active interaction is required between the school administrators and employers so that the curriculum developers and schools' can keep themselves updated regarding changing skills requirements of the industrial business. If employers can be engaged in providing inputs into the content, delivery mode and other aspects of the training courses that would surely enhance the employability of the target groups, employers will quickly get the right skilled workers as their requirements and on the other hand job seekers also will get appropriate employers according to their personal skills.

In broader concept TVET and or vocational skills trainings can not guarantee the employability or ensure job creation, supporting the existing policies and practices of the economic and social sector a well mixture of cognitive and non-cognitive skills can contribute to increase the employability of the people. So, in this point, providing vocational trainings to the large number of people may not help to achieve the desire results. Rather it is essential to give importance to the structural changes of the total education and training system, governance, management, resource provision and their use. Capacity building in the different levels of the systems also required (M. Ahmed, n.d.). The reality in Bangladesh is not representing the binary definition of employed and unemployed because the majority of the poor people of the country cannot afford to remain unemployed. Actually, majority of them are under-employed from insecure, vulnerable and low-wage work. The labour force survey conducted in 2010 indicated that "...employment in what is called the informal economy in Bangladesh is estimated to be around 90% of the total jobs in the labour market. This is work with unregulated work condition and wages, often in exploitative condition and includes work in family or individual enterprises" (Ahmed, n.d. pg 3). Toufiq, 2014 (as cited in ADB & ILO, 2016) in a study shows that 62% of the young workers may be undereducated in their jobs they are doing, "...undereducation rates are especially high among young managers (65%), young professionals (62%), and young technicians and associate professionals (92%), which mean that they had not received the level of education expected for their jobs (ADB & ILO, 2016, pg.5)." So, it is a great challenge in Bangladesh to link education and training with skills and jobs in such a way so that the whole education and training system can create "descent jobs" (M. Ahmed, n.d.).

To overcome this great challenge there is a need for improved communication between training providers and employers to ensure that the training which are being provided are relevant to both

employers and employees and also appropriate to address the current practices and attitudes of the whole relevant stakeholders. If the trainees, training providers and employers become aligned in beliefs and find out high skills solution, then there will be a real potential for fruitful partnerships among the supply and demand -side of the skill providers on employability. In 2011, in a study by the Department of Agricultural Engineering, Ghana, Amankwah & Swanzy stated very clearly that in regards to vocational skill development training programs industries are the main and only place for the participants to learn the real competencies and execute the skills and competencies achieved from the training institutions. Even in 2017, through a survey with employers Dewan & Sarker revealed that to ensure the more active participation of employers in the training process some kinds of incentives can be arranged and it is important to confirm the alignments of the trainings with the market demands. In the same study through a survey with workers they explained the fact in regards to this that in the hands-on activities of the vocational training programs there are very limited engagements of the employers which resulted lack of practical experiences in the training programs and the workers face difficulties to fit into them in the job market.

2.3.4. *Perception of people about vocational skill development trainings:* A few of the studies explored that the general people are not much aware and motivated about vocational trainings, many of the people's mindset is that going for vocational trainings means narrowing down vast opportunities of education, their believe is there will have a lot of opportunities if they go for general education (Newaz, 2013). The study showed that as result of this kind of unawareness and mindset of the people a few social dilemmas has been created in regards to vocational skill development trainings, like, only weaker students participate in the vocational trainings and they are not capable enough to continue general education, after completing vocational trainings they

will get very limited job opportunities. Whereas in the develop countries the majority of the people have opposite type of mindset and beliefs. For example, in 2011, European Commission established completely different attitudes of European citizens towards vocational education and trainings. The study showed that

...71% of the Europeans think that VET has a positive image in their country, 82% say that people in vocational education and training acquire skills that are needed by employers, over half (55%) of all respondents believe that VET leads to job which are well paid, 72% of the respondents think that VET offers good career opportunities, 83% of people saying that VET contributes positively to the economy of their country (European Commission, 2011, pg.7).

At the same time though the study established that European citizens think the vocational education and training has a positive image, the study also said ‘impressions of VET are not uniform across the European Union. There are countries where a high number of respondents think VET has a positive image, like, Malta, Austria and Finland. “...are also countries where the most people think VET offers high quality learning. Respondents in those countries with a relatively negative image of VET, such as Latvia, Lithuania and Slovenia (European Commission, 2011, pg. 8).” According to the findings of the study the fact in regards to this is “...VET is thought by most Europeans to give people access to modern equipment, with similarly high numbers of people believing that teachers and trainers in VET programmes are competent (European Commission, 2011, pg. 8).”

2.3.5. Pedagogic practice of vocational trainings: Desired outcomes are the first consideration for any kind of pedagogy or teaching-learning process. This point is also considerable for the pedagogy of vocational education. There are three different kinds of vocational education, e.g. working with practical materials, working with people and working with abstract concepts (B. Lucas et.al., 2012). For all categories of vocational education there are distinct outcomes and B.

Lucas, Ellen Spencer and Guy Claxton mentioned six categories of important outcomes for all vocational education, these are- i) routine expertise (being skillful), ii) resourcefulness (stopping to think to deal with the non-routine), iii) functional literacies (communication and the functional skills of literacy, numeracy and ICT), iv) craftsmanship (vocational sensibility, aspiration to do a good job, pride in a job well done), v) business-like attitudes (commercial or entrepreneurial sense-financial or social) and vi) wider skills for growth (for employability and lifelong learning). Those outcomes of vocational education are framed in terms of basic skills-literacy, numeracy and IT which is widely considered as 21st century skills (Lucas & et.al. 2012).

However, substantial number of studies showed significant relationship of pedagogic practice and trainees' achievement. Worldwide it is well recognized that provision of vocational skill development is very important for the development of any country, at the same time it is also well acknowledged that high-quality of the vocational skill development programs mostly depends on the quality of its teachers, trainers and teacher training programs. But in 2015, the Skills and Employability Branch of ILO sorted out some contemporary challenges in the TVET teacher training system, it showed that in practice there is

...lack of structure and relevance to ensure that vocational education and training is recognized as a potential career path that teachers and trainers are adequately prepared to share these skills to young people, lack of innovation and progress to ensure that vocational teachers training programs are constantly evolving and adapting to the latest advance in pedagogy and technology and lack of representation and communication to ensure that the teachers and trainers of vocational skill trainings have an active voice and collegial support system to encourage them and enhance job satisfaction (Axmann et al., 2015, pg. xiii)".

As a result, still in the teaching-learning practice of vocational training programs the training facilitation happened purely through lecturing. In a study by the Department of Agriculture Engineering, Ghana, in 2011, showed that

...most of the teachers do not have adequate trainings to make them competent, most of the teachers enter the polytechnics without training in basic education and experience in teaching, newly appointed teachers are not taken through any form of orientation in teaching methodologies, most teachers do not have any training until they decide to go for further studies which also depends on availability of funds (Amankwah & Swanzy, 2011, pg 107).

But vocational education and training is not like general education which ultimately helps students to achieve a certificate, practical learning and achievement of hands-on skills is the core of vocational education and training and for teaching the hands-on activities well-trained instructors are urgently required otherwise the trainees lose their interest to do the hands-on task and learn the required skills. So, it is really unfair to expect high-quality vocationally trained human resource without developing the high-quality instructors. A good number of studies explored the similar types of scenario in Bangladesh in regards to the training of the instructors of vocational skill development trainings. Especially, it was revealed that vocational training institutions in Bangladesh should give proper value to the position of the vocational training instructors provide expected level of facilities to attract skilled people to choose this a favourable profession, need to improve the current salary scale of the trade instructors. The study suggested that for improving the quality of the current teachers of the vocational trades required training programs should be arranged by proper authorities, experts from relevant industries can be involved in providing necessary training to the vocational teachers and sometimes different exchange programs can be arranged in different developed countries to help the vocational training instructors to achieve more contemporary knowledge (Newaz, 2013). Other studies, like, ADB, 2016 also showed that the capacity to train the vocational training instructors is really very limited in Bangladesh, as a result the instructors of the vocational training programs remain underqualified. Not only this, the opportunities for in-service training is also very less as a result the instructors of the vocational training institutions remain same in terms of both theoretical and

pedagogical skills and knowledge. For this kind of prevailing situation regarding developing the vocational training instructors, in the existing practice the salary of the instructors is low, many teaching positions are vacant “...the vacancy rate for sanctioned positions may as high as 50% (ADB, 2015 as cited in ADB, 2016).”

However, considering the current global technological trends many studies suggested to improve the quality of the instructors of with updated ICT skills. In 2015, Shamim and Raihan concluded one of their studies in that way that in Bangladesh one of the most important limitations of teaching -learning activities of vocational training programs is lack of ICT skills of the instructional staff, inappropriate and backdated instructional materials to achieve the objectives of the teaching-learning, inadequate strategies and techniques to motivate the trainees to learn, lack of ICT trainings of the instructors- updating all those above mentioned areas may improve the quality of the vocational and technical skill development trainings. Especially in this study they recommended that

...the adoption and use of ICTs in vocational technical education have a positive impact on teaching-learning and research. ICT can affect the delivery of education and hands-on activities and enable wider access of the target groups, it increases flexibility so that learners can access the education and training regardless of time and geographical barriers (Shamim & Raihan, 2016, pg.18).

Considering this perspective of the use of ICT in teaching -learning practices of vocational training programs they concluded their study by stating that policies in regards to pedagogical practice of vocational training courses should include essential and effective measures to prepare the instructors by giving appropriate in-service and initial teacher training in ICT (Shamim & Raihan, 2015).

However, in 2012, B. Lucas & et.al. conducted an intensive study on vocational pedagogy where they clearly showed how an overall vocational pedagogy can be developed. They offered a broad

categorization about the most appropriate learning methods: i) physical ii) material iii) people and symbols (words, number and images). In this study they also suggested that the teaching-learning process of vocational education should be happened in the context of practical problem-solving and for ensuring the high-quality vocational education a blend of teaching methods needs to be applied. According to them the best vocational education learning is “...broadly hands-on, practical, experiential, real-world as well as, and often at the same time as, something which involves feedback, questioning, application and reflection and, when required, theoretical models and explanations (Lucas & et.al., pg.9)”. They also suggested a number of teaching and learning methods after an authentic trail out and testing and these are:

...learning by watching, by imitating, by practicing (trial and error), through feedback, through conversation, by teaching and helping by real-world problem-solving, through enquiry, by thinking critically and producing knowledge by listening, transcribing and remembering, by drafting and sketching by reflecting on the fly by being coached by competing through virtual environments through simulation and role play, and through game (B. Lucas & et.al., pg.10).

They mentioned that the instructors of the vocational training programs need to have a clear understanding about diverse categories of teaching-learning methods for achieving specific learning outcomes. They should be capable to build an effective link between the desired outcomes and instructional design, otherwise both the teaching and learning may not be effective or good enough. Finally, they offered an approach to decision making where 10 key areas needs to be considered to confirm the best possible decision about vocational pedagogy. In each of the 10 considerable areas they listed two or three more relevant methods, for example, **i) role of the teacher-facilitative/didactic**, during facilitative methods the instructors can use learning through conversation, through real-world problem-solving and through enquiry and in case of didactic can use expert demonstration or lecturing. But to some extent both the methods facilitative and didactic can be appropriate. **ii) nature of activities-authentic/contrived**, the authentic

pedagogical methods include learning by watching, imitating or on the fly and the contrived methods would be a contextual one, like, a simulated activity, part of an apprenticeship or work placement or the inputs from the teacher. **iii) means of knowing-practice/theory**, practical methods are imitating, practicing, real-world problem solving and sketching and theoretical methods include listening to theoretical input, reflection on experience and coaching which draws out theories. For achieving the desired outcomes all vocational education requires to blend the theory and practice. Theory is essential before going to start a hands-on activity and theoretical understanding is very essential for developing resourceful employees. **iv) attitude to knowledge-questioning/certain**, questioning and certainty can be applied for types of subject of vocational education, any of the methods a vocational instructor planned to use in teaching can promote questioning and based on the subjects learned anyone can place certainty. **v) organization of time-extended/bell-bound**, for real understanding of a topic of vocational education and achieving the desired learning outcomes sometimes learners require longer time to explore the things in detail. **vi) organization of space-workshop/classroom**, workshop based pedagogical methods include watching, imitating, practicing, drafting, conversation, reflecting and learning on the fly and classroom-based teaching are mainly the transmissive practices. **vii) approach to tasks-group/individual**, group-based teaching methods require interaction with others and team work and individually oriented teaching methods require students' solo listening mode or working in isolation. The instructors of vocational trainings should think carefully to select grouping, group-size or individual method. **viii) visibility of processes -high/hidden**, the teaching methods which are focused on high visibility include coaching and reflection that emphasized on 'how' of learning. But any teaching method can be used to explore the learners' inside and the mind of the teachers in an explicit manner. **ix) proximity to teacher-virtual/face-**

to-face, virtual teaching methods include watching any kind of a video clip in a computer, using computer simulations, some games and any other virtual version or online methods. **x) role of learner-self-managing/directed**, the trainees/learners of vocational education should be skilled in self-management and they should know when to ask for help and when to defer with others. In the main goal of vocational education and teaching is to prepare the learners in that way so that they can perform skillfully as required (B. Lucas & et.al., 2012).

2.3.6. *Global trends, employability and job involvements:*

Now a days, skills development of the young people, has become a focus of attention in the global world.

One of the foremost reasons behind the recent global attentions to skills development is a “lost generation” of 200 million young people globally basic general education programs without acquiring the skills and capacities they need to function in the world of work and earn a living wage (UNESCO-GMR 2012). The scenario of Bangladesh in this regard is much more crucial. A third of Bangladesh’s population, about 50 million, falls within the age group 10-24 years. A significant proportion of them have not completed primary education. Others have not acquired basic skills and competencies essential to prepare themselves for their role as workers and citizens. So, a large proportion of this population of Bangladesh is clearly vulnerable to the risks and are faced with the challenges (GMR, 2012).

The international discourse and analysis have shown the need for a broader skills development vision beyond the traditional confines of TVET, many of the discourses recognized the significant role of formal general education at the same time realized that need to take a lifelong perspective of learning and capacity building, linking skills development with employment policies, skills and job agenda linked to social protection and upholding human rights and human

dignity of workers. In this perspective GMR 2012 speaks of three types of skills which constitute a spectrum of capabilities of all workers need to acquire and which enable them to become productive workers and citizen. These are described as foundational, transferable and technical and vocational skills (UNESCO-GMR 2012). The foundation skills include functional literacy and numeracy skills generally acquire through primary education. The foundation skills refer to competencies that enable learners to solve problems, communicate ideas and information effectively, learn to work in teams in a collaborative way, and conduct oneself with basic discipline in the work place. These skills also include being creative, taking initiatives when appropriate, show leadership and conscientiousness and demonstrate intrapreneurial capabilities. Acquiring computer and basic information technology skills are also seen as essential transferable skills. These skills enable young people to adapt to different work environments, take advantage of job-specific training and improve chances of being gainfully employed. Technical and vocational skills refer to skills and technical knowledge related to specific occupations and jobs. The training programs related to these skills are expected to prepare people to be directly employed in specific jobs or occupations. Training and skills development of this category are carried out through formal vocational and technical institutions offering relatively long duration courses as well as short training programs of various duration including formal and informal apprenticeship. Along with the above concept of spectrum of skills explained by GMR 2012 there are also a good number of international research reports and reviews that have attempted to address the issue of vocational skills development from global perspectives.

The current global economy is dynamically moving forward and with this dynamic global economic trend, Bangladesh is also integrated diverse developmental strategies for its economic growth and development which includes new technological changes, changes in the scenario of

job creation and skills required for market demands jobs within Bangladesh. But in a study by the World Bank, in 2018, it is mentioned that in the current global trend highest importance has been given on vocational and technical skills development and in spite of growing importance of technical and vocational skills, Bangladeshi stakeholders of vocational skill development trainings still have Industry sectors also are not pro-active enough to arrange inhouse vocational trainings for their workers there this types of investments in human resource development ensure expected level of positive results. "...only 2.1 percent of the population had any vocational training outside of formal schooling system (The World Bank, 2018, pg. 6)."

Another study by the World Economic Forum in 2016 explained that the current job market and the skills market-demand is changed radically comparing with the previous time and based on the global changes in the job market and employability skills the whole society as a whole the Government, business society and individuals are more concerned and sincere in identifying and developing skilled human resources who will be relevant with today's job market as well as will be demanded in the future job market, too. For this purpose, globally many countries have undertaken relevant and essential initiatives to develop the skilled workforce under highly consideration that the radical changes in the global trends will have a significant impact on skills requirement in all job market. But the study noted that in practice there are already large mismatches between the actual supply and demand of key work-related skills. "...with 38%of employers reporting difficulties in filling jobs in 2015, according to Manpower Group's most recent Talent Shortage Survey (World Economic Forum, 2016, pg.24)." According to this study skills gap may not happened between supply and demand of prevailing skills but also its importantly happened '...between today's skill base and future skills requirements'.

Later in 2018 one of the important studies by the World Bank specifically stated some of the crucial skills gap among the Bangladeshi workers which need to be improved for better coping with the global fast changing economy, like, **higher-order cognitive skills and non-cognitive/soft skills** which includes the skills such as ‘...critical thinking, problem solving, leadership, communication, work ethics and team work.’ According to this study these types of skills are very essential to fulfill the fast changing technological, business and employers’ requirements though these are identified as largely missing skills among the workers of Bangladesh. **Practical Technical Skills and Knowledge for Jobs**, the study explored that overemphasis on theoretical knowledge during formal education and training created serious lacking of practical and technical competencies among the professionals and workers of Bangladesh. **ICT Skills**, in this global age both the professionals and workers should be able use information technologies efficiently and employers also want the employees to be highly skilled in ICT. The study shows that the job opportunities in ICT sector is growing in Bangladesh and considering the high demand in Bangladesh more ICT skills are required to meet domestic and international market demands. **Foundational skills**, to some extent for lack of quality education and relevancy of primary and secondary education, the foundation skills, like, literacy and numeracy remain inadequate among the workforce of Bangladesh. **Job search and Career Development Skills**, the study mentioned that in Bangladesh one of the main reasons behind skills mismatch in the job market is low skills of the job seekers and education institutions in regards to searching job and job placement capacity (The World Bank, 2018).

However, as supply-side issues the study mentioned that there are limited opportunities of skills trainings for the workers of Bangladesh. Especially, “...skills trainings are particularly difficult

to access for female workers and poorer groups of the labour force. Females have traditionally been underrepresented in skills trainings (The World Bank, 2018, pg. 8).”

In this regard another research by Mouzakitis in 2010 said that in the age of globalization many countries have been undergoing rapid transformation and economic development in the last two decades. And in this global trend the most important changes happened in technological innovations, intensified competition in the world market and demographic demands. The study suggested that to meet these global demands it is important to lessen the gap between academic and vocational education and at the same time it is also very essential to strengthen the linkage and co-operation between education authorities, employers and industries (Mouzakitis, 2010).

2.3.7. Vocational skill development trainings and development of women workforce: In the current situation of Bangladesh Education and skill development have played a remarkable role in the economic growth, poverty reduction and social transformation in Bangladesh specially with the inclusion of women in the labour force in the last decade (World bank, 2013).

Women and men both have the right and need to be free to choose the education and the work they like. Similarly, if relatively well-paid jobs are available these should be open to all who are qualified, both women and men.

Bangladesh has made remarkable progress in achieving gender parity in primary and secondary level education. But a significant gap between women and men in participating vocational skill development training, employment in technical professions and overall employment in all categories of jobs is still pervasive in Bangladesh (GWA, 2014).

In a study by GWA, 2014, it was revealed that instructors from private vocational training providers said,

...in spite of ensuring highest safety and security and free education for female students, we do not get many female students in technical courses, except in Computer

Technology and Architectural Technology which they think require less movement outside of workplace. Women also have the ability to do any machine-driven work like men, however negative perception of their family and society to women doing these types of work limits their choice in taking up these vocations” (as cited in (GWA, 2014, pg. 9).

In this research paper it is also mentioned that -

...even after completing the training in electrical trade, some female students do not like to work in an electronics factory or workshop as they are afraid of work-related accidents with electrical machine. Also family resistance is a major reason why young woman are not being enrolled in heavy machine driven trades, because parents do not like to see their girl child as a technician or mechanic. Although these trades do not always require heavy and hard labour, some of them are fully automated now, there is still lack of interests of girls and their parents to enroll in technical trade (pg. 9).

In the same research paper, it is also mentioned that in general for women it is difficult to get or manage jobs in a male dominated labour market. There are also many other socio-cultural barriers and some practical reasons behind this. Most of the male and female participants mentioned some practical reasons, like, women do not know how to find or explore job opportunities, like men women do not have a good access to relevant information on vocational courses and related job opportunities, sometimes women get a job but due to an unfriendly environment, they feel forced to leave again and sometimes women give up trying for a job when they think it may be heavy work, etc.

It is also acknowledged that male trainees are very confident and specific in expressing the list of places and companies where they would get suitable jobs related to their vocational training courses. On the other hand, female students were less confident about where they would be employed and did not say anything about how they could be self-employed (GWA, 2014).

However, lack of awareness, lack of self-confidence, lack of family support, uneasiness in co-education is some of the main reasons for which girls felt constrained to get enrolled in vocational training courses. Along with these socio-cultural norms as well as direct and indirect

influence from parents, neighbours and training centre's instructor often influence female's access to technical vocational trainings.

From the above-mentioned detail review of the previous research activities, it is apparent that very few or none of the previous research activities specifically conducted on the focused areas of the present study. The present study focused on the areas like, pedagogical practice of vocational trade courses, implementation status of vocational trade courses under NTVQF, existing communication between vocational training organizations and relevant industry sectors, relevancy of trade courses to address the needs of the employers, usage of vocational trainings in increasing the employability of the target groups. Whereas the previous research activities that are reviewed in this study explored the areas, such as: existing situation of TVET in Bangladesh, vocational skill development trainings in developing the skilled workforce and economic development of the country, existing vocational skill development programs and needs of the employers and industries, perception of people about vocational trainings, pedagogic practice of vocational trainings, global trends, employability and job involvements , demand-side issues and supply-side issues, vocational skill development trainings and development of women workforce, shortcomings and challenges of vocational skill development training in Bangladesh, etc. So, based on the previous research activities it can be well-acknowledged that there is a particular research gap in the vocational skill development sector which is addressed by the present study.

2.4. Section 3: Context, System and Policy Practice of Vocational Skill Development in Bangladesh

2.4.1. Context of Bangladesh in Regards to Education, Vocational Skills

Development and Employability

Education is an important indicator in the global labour market, education can improve worker's productivity and lessen vulnerability in the employment arrangement. But the scenario of Bangladesh is not in the expected level- more than two-thirds of the labour force has less than primary education, with limited acquisition of basic competencies in numeracy, literacy and life-skills (World Bank, 2013).

In regards to education Bangladesh is targeting to build strong foundation of Quality Education, and from this perspectives education, training, skills and employment have been featured prominently in the Sustainable Development Goals (SDG) 2030 adopted by UN in September 2015. Goal 4 on education and lifelong learning have two targets on 'equal access for all women and men to affordable and quality technical and vocational and tertiary education'. (Target 4.3) and substantial increase of 'youth and adults who have relevant skills, including technical and vocational skills, for employment, decent job and entrepreneurship' (Goal 4.4). At the same time Government of Bangladesh recognizes that to join with the middle-income countries Vocational Skills Development of the large group of population is priority. For this purpose, along with different initiatives of the education sector Bangladesh has also taken remarkable initiatives in the skill development sector too. In the skills development sector one of the most mentionable initiatives is the National Skill Development Policy-2011 and its implementation in different aspects. But "skills training cannot compensate for years of poor-quality education in many parts of the country where millions of children are completing primary education without ever

acquiring foundational literacy and numeracy” (Dewan & Sarker, 2017, pg1). So, it is apparent that there should have a very good matching between Education, skills systems and employability. Education system required to build a good foundation for the target groups to become employable and the skills development system need to rely and build on that foundation (Dewan & Sarker, 2017). In this point Bangladesh is still far behind and need to go a long way to achieve this shift of education to vocational skills development and employability, a lot of work need to be undertaken to ensure that the curriculum reflects the realities of the world market and employability. “...it is not enough to extend primary education without improving its quality and making it relevant to today’s labour market landscape” (Dewan & Sarker, 2017, pg 5).

There is still disconnection between education and the demands of the labour market (Dewan & Sarker, 2017) because people with higher education have high unemployment rate due to spending a considerable amount of time to find out jobs matching with their level of education and skills. Currently for addressing this concern Bangladesh government focusing on the skill development sector introducing and implementing a National Skills Development Policy-2011, Technical Vocational Training in schools, a National Technical and Vocational Qualification Framework (NTVQF) and executing the Recognition of Prior Learning (RPL) across the country.

However, many skills training programs are intended to build on the foundation of education which targeted to build an educated, skilled and employable workforce with a practical vision. But in reality, many of the skills training programs have to compensate for the lack of foundational education (Dewan & Sarker, 2017). Though it is well recognized that the country’s development largely depends on having skills persons as required and it is imparted through the education system of the country and skills training related to the requirements of the job (Bd

Bureau of Statistics, 2015-2016). In 2017 UNICEF revealed in a survey that the schooling in Bangladesh not only lacks literacy and numeracy in primary level it also does not aligning education and training according to labour market demand at higher levels, to some extent a majority of the students had a negative view of the perceived returns to education and training. In the same survey by UNICEF in 2017 mentioned that nearly one out of two respondents replied negatively when asked about scientific and technical courses are offered. Based on the results of the 600 students surveys the particular study by UNICEF 2017 concluded that the current education system does not prepare students for the job market. The main basis of this kind of conclusion of the UNICEF's survey is the education system lacks of tools, like, apprenticeship programs, industrial training and career counselling. In this regards 71 percent of the respondents indicated that their schools do not provide career counselling, 89 percent of them indicated that their respective schools do not provide any services related to apprenticeship or industrial training.

On the other hand, there is a need to ensure employers active participation in the training process to be confirmed that the trainings are aligned with the market demand because in the existing system the scenario is different-

... employers emphasized work experience, rather than TVET, as an important criterion for hiring, very few employers provide opportunities for apprenticeships or formal training. This highlights another gap in the system (Dewan & Sarker, 2017, pg16).

Actually, in the current practice there is no linkage between education, vocational skills development and employability, these three important sectors are completely distinct in practice. For example, in a survey with the employers it showed that "...72 percent of the respondents indicated that they were not familiar with the TVET curriculum related to their respective sector and did not engage with TVET staff (UNICEF, 2017, pg 17)." Not only this the survey revealed

that the employers do not provide internship or apprenticeship facilities for students- a majority of the respondents indicated that they do not attend campus placement events. So, it is prominent that there is a lack of active interaction between employers and training institutions which established the mismatch between education, training and labour market demand.

From the view point of the workers there is another kind of serious lacking both in the education and vocational training systems, i.e., there is lack of practical and industrial exposure and in the survey by Dewan and Sarker 2017 the workers expressed that lack of hands-on experience is the biggest obstacle to finding a job, education and training systems do not provide practical experience and workers find it difficult to break into job market. The workers also mentioned that there is noticeable information gap between the job seekers and the employers, there is also lack of efficient demand-supply matching. The schooling system in Bangladesh focuses mainly on academia and rote learning neglecting basic foundational skills, effective teaching methods and job-oriented education and training which mainly created the negative implications for both the students and industrial business. Similarly lack of industrial training and apprenticeships in the schooling system and the unwillingness of the employers to provide on the job training reinforce the underemployment and unemployment among the people. The employers tend to recruit experienced people, as a result the inexperienced people either confront unemployment or accept informal sector positions to generate personal income (UNICEF, 2017). However, the imperfect information between the employers and job seekers is one of the main reasons behind high unemployment problem. For lacking of proper and concrete information employers are not getting quickly right skilled workers as their requirements and on the other hand job seekers also not getting appropriate employers who need their particular skills. In this regard actually “the problem originated from a combination of two kinds of factors i) deficiencies in basic

foundational skills arising from primary and secondary education quality and the quality of vocational training on offer and ii) inadequate market linkages characterized by a limited participation of the employers in designing training” (NORRAG-BIED, 2015, as cited by Ahmed, n.d.pg. 3). However, the National Technical Vocational Qualification Framework (NTVQF) has been developed in our country to address the existing deficiency in basic foundation skills and for assessing the qualifications achieved from different institutions and different means. The Bureau of Manpower, Employment and Training (BMET) exploring the skills demand by major destinations to align the qualifications acquired by the trainees with the changing situation both in domestic and international labour markets. BMET is also working to ensure the current needs of the workers migrating abroad are met well through different short courses.

2.4.2. Technical Vocational Education and Training System in Bangladesh

The Technical Vocational Education and Training (TVET) system of Bangladesh offers different categories of short courses (360 hours) in different trades along with the formal Technical Vocational Education and Training.

The formal structure of TVET includes two years Secondary School Certificate (Vocational) (SSC Voc), two years Higher Secondary Certificate (Vocational) (HSC Voc) and four years diploma (ADB, 2015). After completing grade VIII students can be enrolled in grade IX in the vocational/technical education stream and ultimately, they can go for four years diploma upon completion of SSC-voc and HSC-voc. They can also go for National Standards of Skills (NSS) 2, 3 and 4. Even just completing SSC-voc and having the certificate of NSS-4 students become eligible to be enrolled in various diploma programs (MOE, 2010).

Apart from this, after completing grade VIII- the students who are not interested to continue the main stream education, they have the opportunity to participate a 6 months vocational training program which is equivalent to NSS-1 and moving forward they can attend NSS-2, 3 and 4 respectively. Finally, the students who have the diploma degree become eligible to get admission in the bachelor programs (B.Sc.) of different disciplines, like, Engineering, Textile, Agriculture, etc. through required admission tests and adjustment of credits (MOE, 2010). This B.Sc. certificates leads them to go forward for postgraduation and PhD in Engineering/Technology.

On the other hand, those who discontinued the formal education and could not study beyond grade VIII can undertake different categories of vocational short courses (360 hours) in different trades. Though in practice, the youth group having higher levels of educational certificates are used to participate in those short trade courses, too (MOE, 2010).

From the management perspective the main public providers of TVET are Department of Technical Education under Ministry of Education, the Bureau of Manpower, Education and Training under the Ministry of Expatriate Welfare and Overseas Employment and the Ministry of Youth and Sports. In total 23 ministries and departments are working to provide some sorts of vocational training courses (ADB, 2015 & UNICEF, 2017). Among all those ministries under MOE, Bangladesh Technical Education Board (BTEB) is the apex responsible body for ensuring quality of all sorts of technical, vocational, education and training courses confirming accreditation of vocational training providers, curriculum and short course development, examinations, assessments and certification (ADB, 2015).

2.4.3. Structural Analysis of the Syllabus of Traditional Vocational Training Courses and Vocational Training Courses under NTVQF

In the existing TVET system of Bangladesh BTEB is mainly responsible to develop and guide the training organizations to deliver all kinds of vocational training courses. From this perspective BTEB develop the traditional vocational training courses as well as the vocational training courses under NTVQF according to the direction of NSDC. To some extent Bureau of Manpower Employment and Training (BMET) is also involved and responsible in this process, especially “for coordination of international demand data, including from Bangladesh missions abroad” (MOE, 2011, pg.26). As per guidance from the NSDC, BMET is mainly responsible to ensure more coordinated approach to skill development for expatriate workers which include an assessment of how existing training infrastructure can be best utilized to fulfill the overseas demand for skilled workers (MOE, 2011). In this regard BMET also develop the syllabus of different vocational training courses which mainly provide service to the overseas demand for skilled workers. For example, if we look at the syllabus of ‘Sewing Machine Operation’ – there are three types of syllabuses developed by BTEB and BMET. As traditional short course BTEB developed the course entitled ‘Industrial Sewing Machine Operation (ISMO)’ and BMET developed the course entitled ‘Sewing Machine Operator (SMO)’. On the other hand, under NTVQF, BTEB developed the similar course in a different structure entitled ‘Sewing Machine Operator (SMO)’, following National Competency Standards and CBT & A approach.

The traditional short course developed by BTEB includes the sections, like, course name, course outline, list of competencies, entry qualification, employment opportunity and machine, tools and equipment. The most detail part of this syllabus is the list of competencies and in this section-the generic/basic competencies, common competencies and core competencies

mentioned separately (Syllabus ISMO, BTEB, n.d.). On the other hand, the traditional short course ‘Sewing Machine Operator’ developed by BMET followed a very simple structure including just the sections, like, course name, course outline and course content. In this course syllabus there is nothing about competencies, the course contents are organized day-wise and separated the content from the theoretical and practical perspectives (Syllabus SMO, BMET, n.d.).

Currently for ensuring the quality issue BTEB developed the vocational training courses under NTVQF introducing the CBT &A approach. Through a series of workshops, the courses were designed to ensure a workable National Competency Standards for particular sector and occupation mentioning sector specific competencies and occupation specific competencies. The whole course is divided into five sections: the section 1 is about ‘The Qualification’, the section 2 is about ‘National Competency Standards’ the section 3 is about ‘The Generic Competencies’, the section 4 is about ‘The Sector Specific Competencies’ and the section 5 is about ‘The Occupation Specific Competencies’. In the first section specific qualification is mentioned that a person must achieve in order to work competently in the particular sector as a Sewing Machine Operator. Section 2 mentioned the unit of competencies, level and number of hours for the Generic Competencies, Sector Specific Competencies and Occupation Specific Competencies. For example, the units of generic competencies are –communicate in the workplace, work in a team environment, practice workplace cleanliness, practice Occupational Health and Safety (OHS), lead small team, demonstrated work values, perform negotiation skills. The units of Sector Specific Competencies are- work in the RMG sector, use hand tools and power tools for the RMG sector, interpret drawing and specifications in manuals for RMG sector, perform measurement and calculation. The units of Occupation Specific Competencies are- operate single

needle lock stitch machine, operate double needle lock stitch machine, operate four thread over lock machine, operate five thread over lock machine, etc. The sections 3, 4 and 5 detailed out each and every unit of generic, sector and occupation specific competencies including title of the unit of competency, unit code, unit descriptor, nominal hours, elements of competencies, performance criteria for each element of competencies, range of variables, evidence guide and accreditation requirements (Syllabus SMO under NTVQF, BTEB, 2013).

2.4.4. Policies and Frameworks in Regards to Vocational Skill Development

2.4.4.1. The National Skills Development Policy of Bangladesh

Skill Development Policy 2011 of Bangladesh is one of the major initiatives to improve the coordination and delivery of skills in Bangladesh for the betterment of the whole nation. From many perspectives this policy also reinforced on other important policies of Bangladesh government, like, Education Policy 2010, the Non-formal Education Policy 2006, the Youth Policy of 2003, the National Training Policy of 2008 and NSDC Action Plan of 2008. In fact, National Skills Development Policy-2011 of Bangladesh is a comprehensive national skills development policy which is guiding the skills development strategies and facilitates the improved coordination of all elements of skills training and other areas of skills development with the following vision-

...skills development in Bangladesh will be recognized and supported by government and industry as a coordinated and well-planned strategy for national and enterprise development. The reformed skills development system will empower all individuals to access decent employment and ensure Bangladesh's competitiveness in the global market through improved skills, knowledge and qualifications that are recognized for quality across the globe (MOE, 2011, p 11).

Based on the above vision the mission of skills development in Bangladesh is to support rapid and inclusive economic growth by enhancing individuals' employability (in wage/ self-employment) and ability to adapt in changing technologies and labour markets, improving the

productivity and profitability of enterprises and strengthening national competitiveness and reducing poverty.

On the other hand, to manage the human resources efficiently and more effectively it is required to give priorities on both formal and non-formal skills training programs apart from the mainstream TVET system of Bangladesh. So, the National Skills Development Policy (MOE, 2011) classified the skills development system in Bangladesh into four main systems, i) public (delivered to varying degrees by numerous ministries) ii) private (receive some form of government subsidies, e.g. MPO and grants) iii) private (commercial training institutions including madrashas) iv) industry based (institutions managed by industries and training delivered in the workplace, including apprenticeships).

All the skills training providers mentioned in the NSDP-2011 offer various types of formal and non-formal trainings to different target groups using different training delivery approaches and assessment techniques. So, in Bangladesh the scope of skills development is very diverse. Different types of skills training providers use their own ways instead of unifying the vision. The NSDP-2011 suggested to put it under a single regulatory framework to rationalize diverse efforts in TVET system and to provide a unified direction to the diverse group of providers.

On the other hand, “curriculum development is highly centralized, rigid, time consuming not based on need. The development of new courses, the expansion of high demand courses and the closing of obsolete courses do not always market needs. (MOE, 2011, p. 10).” As a result, the practice of skills training system has problems with quality and relevancy. The lack of uniform public sector delivery creates duplication of programs and the training providers become competitive for the same target groups. There is also very little links and communications

between different training providers. It is also not clear what training is being provided for which industry or occupation.

In practice the major challenge for skill development system is to address the needs of large population enhancing employability and securing safe and decent work (MOE.2011). In this regard the social partners particularly the employers and workers can play an important role to develop and implement a vision for skills development.

However, with some of the specific objectives, like, providing a clear statement and strategy for skills development, improving the quality and relevance of skills development, establishing more flexible and responsive delivery mechanisms addressing the needs of labour markets and individuals and the community, improving access to skills development for various groups of citizens including women and people with disabilities, enabling more effective planning, coordination and monitoring of skills development activities, the skills development policy 2011 provided guidance on some important aspects, like, Demand-Driven, Flexible and Responsive Training Provision, Nationally Recognized Qualifications [National Technical and Vocational Qualifications Framework (NTVQF)], Competency Based Training and Assessment (Industry Sector Standards and Qualifications Structure), Programs and Providers Quality Assured (Bangladesh Skills Quality Assurance System), Strengthened Role of Industry Sectors in Skills Development [Industry Skill Councils (ISCs)], Accurate Skills and Labour Market Data for Planning and Monitoring, Competent and Certified Instructors and Trainers, Effective and Flexible Institutional Management, Strengthened Apprenticeships, Improved Access for Under - represented Groups, Private Training Provision, etc. A few of the important and relevant sections with the present study are presented below with a little elaborately:

Competency Based Training and Assessment (Industry Sector Standards and Qualifications Structure)

According to the NSDP-2011 guideline the vocational skills development system of Bangladesh supposed to be responsive to the present and future needs of industries and employers and for doing this properly implementing a CBT & A system.

Currently one of the most concerns of skills development is that the needs of the labour market required to be clearly specified so that the practices training delivery and assessment system can address the required skills. The CBT & A system strongly supports the demand-driven training and develop an effective partnership between industry sector and the training organizations. CBT & A system giving more emphasis on the achievement and demonstration of practical skills demanded by industry instead of giving focus on the traditional theory-based approaches. The CBT & A system follow two important principles, like, “i) Progression through a competency-based training program will be determined by whether the students has met the set standards, and not by the time spent in training. ii) each learner’s achievement is measured against job -related competency standards rather than against the achievement of other learners” (MOE, 2011, P. 18). In this regard, each industry sector will develop the competency standards which will reflect occupation and key skill set required by the employers in a specific sector which will be known as the ‘*Industry Sector Standards and Qualifications Structure*’.

Competent and Certified Instructors and Trainers

In any effective skills development system Instructors and Trainers are the main key responsible personnel to make to program a successful one. So, they must need to be competent, need to

have up-to-date technical skills along with standard delivery skills to provide and assess different training programs in the training organizations.

NSDP-2011 suggested to introduce a “*National Training and Certification for Instructors and Trainers*” for development of training workforce. This system will ensure the common standards and qualifications of the trainers and instructors both in the public and private training organization under new NTVQF. For increasing the quality and professionalism of the skills training workforce this national certification system for trainers will work on to train and certify all the instructors delivering formal programs and employed by the government and private sector, to review the current pre-requisite for instructors and trainers to ensure the technical qualifications and industrial experience for the level of courses they are teaching, to develop incentives system for the private sector trainers, to develop a professional development plans for all public sector instructors to maintain updated skills and finally a national pool of certified national Master trainers will be created to implement the new instructor training programs. In addition, the system of training and certification for the Instructors and trainers will ensure development of national competency standards for the instructors and trainers to use this as the basis of assessment within the training organizations, will provide training to all the instructors and trainers for using competency-based training and assessment including recognition of prior learning, technology and English language supported learning. Especially, this new system will give priority to the female trainers to ensure equal access and trainers from industry and private training organizations will be given the opportunity to attend different professional development program as they are contributing significantly in the skills development of Bangladesh.

2.4.4.2. National Technical Vocational Qualification Framework (NTVQF)

In the global age, worldwide great emphasis has been given on TEVT. Especially, the Sustainable Development Goals (SDGs) highly focused on access to affordable TVET systems and creation of productive employment based on technical and vocational skills (UNESCO, 2016 as cited in BIGD, 2018). Like, under SDG 4-

the target 3 is: ensure all access for all women and men to affordable and quality technical, vocational and tertiary education including university by 2030, the target 4 is: substantially increase the number of youth and adults who have relevant skills, including technical vocational skills for employment decent jobs and entrepreneurship by 2030 (BIGD, 2018, pg 29).

On the other hand, SDG5 directly said about vocational training along with some other important concern, e.g. “...eliminate gender disparities by ensuring equal access for women in all levels of education and vocational training..... (BIGD, 2018, pg. 29).” This SDG 5 is also related to vocational training centers. To achieve the related goals mentioned above the Government of Bangladesh adopted ‘National Technical Vocational Qualification Framework (NTVQF)’ in 2008 with support from the International Labour Organization (ILO) through a TVET reform project. The intention of this initiative is to improve national employability and reduce poverty by improving the quality of vocational education and training. BTEB is responsible to implement this National Qualification Framework in designing and providing the vocational training courses and authorized to provide necessary guidance to all Registered Training Organizations (RTOs). In this regard BTEB encourages all RTOs to follow a single national guideline. This National Qualification Framework is internationally recognized and providing a comprehensive guideline about different levels of vocational trainings including Pre-Voc-1 & Pre-Voc-2 in comparison with the mainstream Education System. For example, the graduates of the Pre-Voc-1 & Pre-Voc-2 will get the National Pre-Vocation Certificate 1 (NPVC 1) & National Pre-

Vocation Certificate 2 (NPVC 2). On the other hand, NTVQF levels 1 to 5 will be provided the National Skill Certificate 1 to 5 respectively and NTVQF level 6 will be awarded Diploma in Engineering or equivalent. It also provided the qualification structure for each NTVQF levels including clear job classification, e.g. NTVQF 1 is equivalent to National Skill Standard (NSS) Basic/Basic trade course which develop Medium-skilled worker, NTVQF 2 is equivalent to NSS 3/SSC Voc year 9 which develop the Basic skilled worker, NTVQF 3 is equivalent to NSS 2/SSC Voc year 10 which develop Semi-skilled worker, NTVQF 4 is equivalent to NSS 1/HSC Voc year 11 & 12 which develop skilled worker, NTVQF 5 is equivalent to NSS Master which develop highly skilled worker/supervisor, and NTVQF 6 is equivalent to 4 year Diploma which develop Middle-level manager/sub-assistant, engineer and others (Bangladesh TVET reform project, 2009).

All the public vocational training organizations will review their curriculum to align these with the NTVQF and all private skills training organizations are also encouraged to use the NTVQF standards for getting national recognition of their training programs and initiatives. In addition, NTVQF will also be gradually implemented in the industry sectors to develop new standards and qualifications for occupation and skills in demand (MOE, 2011).

2.4.4.3. Status of the Vocational Skills Development Trainings under NTVQF in Bangladesh

Before initiating the NTVQF in 2008 all the vocational training organizations of Bangladesh were providing traditional vocational courses or short vocational courses of 360 hours. Approximately about 50% of the training organizations are registered with BTEB and are providing traditional vocational courses. But the government recognizes that there are some shortcomings and limitations in delivering the traditional vocational courses which leads to

serious wastage of skills in the economy of the country, like, insufficient quality assurance, lack of autonomy for training centers to adapt courses for local needs, overly rigid traditional school-based curriculum and vocational standards, excessively long course durations, lack of continuing professional teacher training, lack of access to skills for underprivileged groups, lack of regulation and certification of informal apprenticeships, insufficient recognition of existing skills and informal learning, preventing labour mobility (Ministry of Education , 2011).

So, after initiating the NTVQF in 2008 and formulation and implementation of NSDP from 2012 BTEB developed vocational training courses of different trades and introduced CBT &A approach to deliver them. Through a series of consultations, workshops and meetings BTEB developed the vocational training courses under NTVQF involving both national and international consultant groups. In regards to ensuring quality of the NTVQF courses there is a 'National Quality Assurance System' in BTEB for which BTEB is reportable to National Skills Development Council (NSDC). According to the guidance of NSDC, BTEB is the main responsible authority for developing, implementing and periodic review of the vocational training courses under NTVQF.

2.4.4.4. Competency Based Training (CBT) Curriculum Framework

Bangladesh Technical Education Board (BTEB) identified three minimum criteria for a CBT programme, like, content directly related to work, focus on doing and assessment based on industry work standards. In regards to CBT, BTEB defined curriculum as a plan for learning that describes the content of a particular programme and based on this the instructor build the instructional activities such as classroom lessons, workshop/field activities, assignments, assessments, etc.

The purposes of CBT curriculum are stating the expected curriculum of the programme, identifying the degree of performance required for the students to be successful in the occupation, assisting in determining the sequence of the content, providing guidelines for assessment or evaluation, promote uniform terminology throughout the system.

About Competency Based Training and Assessment (CBT & A) Bangladesh National Skill Development Policy 2011 also suggested some principles, like, the skills development system must need to be responsive to the present and future industry needs and for achieving this required to implement a competency based training and assessment, the CBT & A system will support the introduction of demand-driven training which will develop a good understanding between industry sectors and the training providers, progression through a competency based training program will be measured by the students standards not by the time spent in trainings, a close dialogue will be conducted with the industries for specifying the skills and knowledge required to perform different tasks in the workplace, based on these competency standards the performance criteria will be settled and which the trainings organizations will use to assess the participants for issuing nationally recognized qualifications. Performance criteria of competency standards related to the terminal performance objectives which contains three important parts:

Given (condition) which describes any condition or variable that can affect overall performance level of students and it is related to the range of variables in the competency standards.

What (Task/learning outcome) which contains the observable performance noticeable by the end of a specific training course.

How well (performance criteria) contains only the most important performance criteria to be measured in the end of a training.

According to Bangladesh National Skill Development Policy's 2011 suggestions/instruction the CBT curriculum is developed considering some important points, like, CBT curriculum closely linked with national competency standards accepted by the industries, for developing the subsequent detailed competencies, associated methodologies, training and assessment resources the CBT curriculum will be used as guideline, the CBT curriculum will expect the outcomes which are consistent with the requirements of the workplace in consultation with the industries.

The CBT curriculum contains several sections, like, 'course duration' which refer to the nominal duration of course in hours, 'qualification level' refer to the national competency standards, 'unit of competency' refer to the list of unit of competency from the national competency standards, 'course description' include relevance of the present course to the need of industries, enterprises and communities, 'course outcomes' states the expected outcomes from the students in the end of a training course, 'entry requirements' mentioned the education level, age and other pre-requisites to participate in the training course, 'suggestions for course delivery/instruction' includes how the training will be delivered in the classroom and workshop setting, 'course structure' provide sequence of different training modules for each unit of competency mentioning how and where the tasks will be performed, performance criteria, performance guide and enabling objectives, 'Competency Analysis' explain the number of modules developed under each unit of competency, 'assessment methods' explain the assessment approach to determine students' performance standards based on the industry requirements, 'resources' mention the list of required tools, equipment and materials to implement the training course, 'qualification of instructors' specify minimum qualifications for the instructors to facilitate the training course, 'training schedule' consist training modules, duration and training methodologies to be applied for class, workshop and field instructions.

2.4.4.5. Industry Sector Qualifications and Competency Standards Framework

One of the important components of the TVET system of Bangladesh is Competency Based Training and Assessment (CBT & A) which was adapted mainly to address the industry demand of the country. Currently one of the most important concerns of skills development sector is to specify the needs of the labour market clearly so that these can be addressed by different vocational training courses. “The CBT & A system strongly bridges the gap between industrial labour demand and supply of skilled labour from training centres” (BIGD, 2018, pg 35).

The ‘CBT & A’ system also strongly supports the demand-driven trainings and develops an effective partnership between industry sector and the training organizations. From this perspective, CBT & A system is giving more emphasis on the achievement and demonstration of practical skills demanded by particular industry sector instead of focusing on the theoretical practices. The CBT & A system follow two important principles, like, “i) Progression through a competency-based training program will be determined by whether the students has met the set standards, and not by the time spent in training. ii) each learner’s achievement is measured against job -related competency standards rather than against the achievement of other learners” (MOE, 2011, P. 18).

2.4.4.6. National Quality Assurance System

The NSDP-2011 of Bangladesh suggested a ‘National Quality Assurance System’ to ensure the quality of the vocational training programs including the assessment techniques of the training courses. The Quality Assurance System will deal with the registration of both the public and private training providers assuring that they have the minimum standards of facilities, tools equipment, trainers and management system to provide particular vocational training courses

(NSDP-2011). For implementing the Quality Assurance System specific quality standards and criteria will be developed and all the training providers both public and private will be required to be accredited as per the new quality standards including the accreditation of learning and assessment programs. The Quality Assurance System will also be responsible for “auditing the training providers for compliance against quality standards, validation of assessment tools against units of competencies (MOE, 2011, pg. 21).

2.4.4.7. Operational Guideline for the Recognition of Prior Learning Under NTVQF (BTEB, 2012)

The need for the National Technical & Vocational Qualification Framework (NTVQF) system arises mainly from the national objective of moving towards a ‘lifelong society’ where learners will be able to learn throughout their life. A major objective of the NTVQF is to recognize all kinds of learning achievement of the learners and it aims to recognize this by promoting the recognition of prior learning (RPL).

In the recognition of prior learning process prior learning is given a value by identifying, assessing and acknowledging learners prior learning. The National Skill Development Council of Bangladesh set out some purposes of RPL, like, entry to a programme leading to an award, credit to an award from some programme requirements, the RPL can be directly relevant in terms of facilitating employment.

For developing a national approach to the RPL all kinds of prior learning like, formal learning, non-formal learning and informal learning has been considered significantly.

BTEB piloted RPL in November 2013 to March 2014 according to the process specified by the TVET Quality Assurance Manual for Bangladesh. The quality assurance manual specified the RPL process mentioning some considerations, like, interested candidates will apply for

registration for RPL assessment, only registered RPL centres are eligible to organize and conduct RPL, the authority will provide information to the candidates for RPL assessment, assessment can only be conducted by certified assessors, RPL assessment design must be consistent with the formal assessment design, assessment tools and the qualification levels in RPL will be the same as formal assessment and qualification, the evidence on prior learning such as work record, experience certificates, employment contract, skills log book, work sample etc, will be evaluated prior to the assessment eligibility of a candidate.

Development of RPL has some positive impacts on the system or for the target groups, like, RPL can address the the needs of disadvantaged groups, part-time and mature students, it also has a good impact on the retention of students. Apart from these RPL gives opportunities to the training providers and awarding bodies who use the assessment of RPL to up-skill individuals and meet the needs of the workforce at local and national levels. RPL also bring benefits to the workplace by enhancing workers' employability matching skills of demand and supply.

Principles for the Recognition of Prior Learning (RPL)

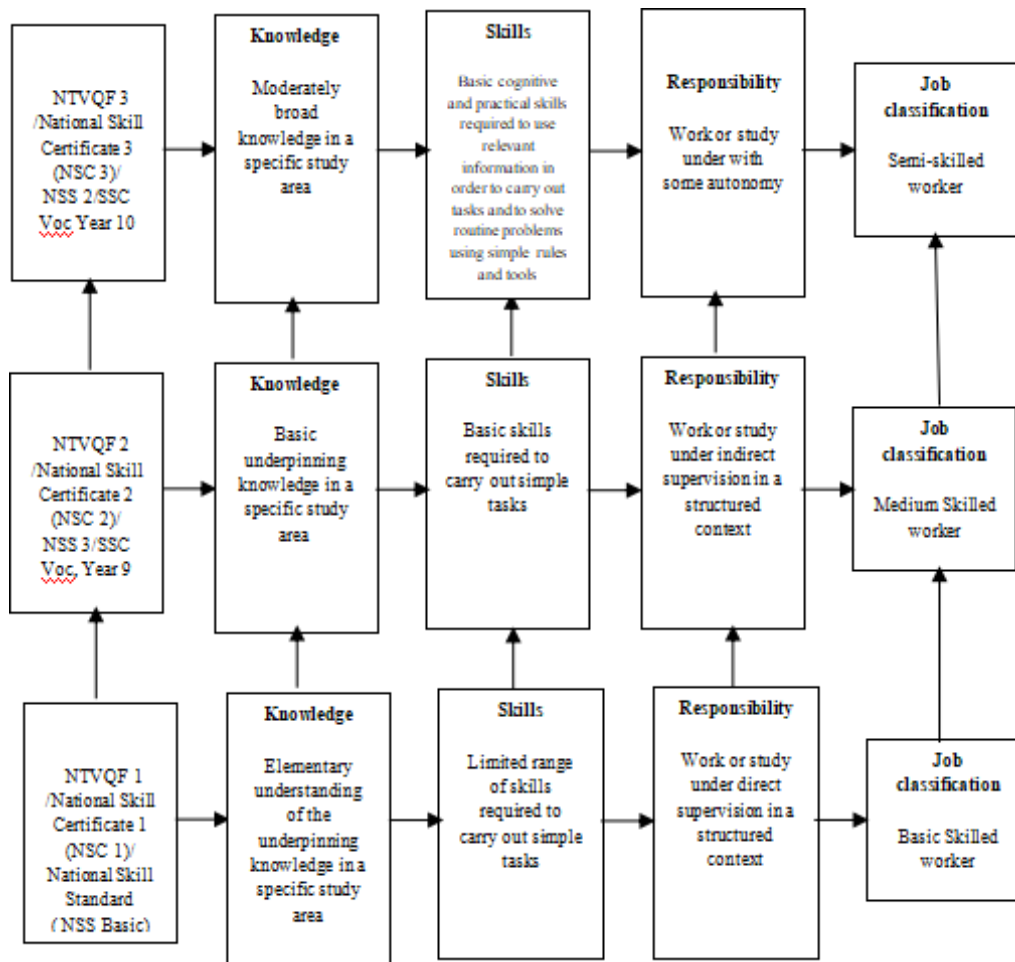
General, Some general principles of the RPL are addressed by the training providers, awarding bodies and the workplace, like, RPL will give value to all learning no matter how that learning is achieved, participation in RPL is volunteer for the individuals, RPL will be part of an inclusive approach to learning the providers and awarding bodies, RPL will provide opportunities to the learners to participate in society within a workplace context actively.

Quality, for ensuring quality RPL also considers some important principles, like, RPL fully embedded within the quality assurance procedures of providers and awarding bodies, RPL maintain the standard of NTVQF and its awards, the process of RPL will be credible to all stakeholders, and RPL will maintain and support the standards associated with NTVQF and its

award. According to the implementation guideline RPL will be implemented in three phases, these are- i) *Preparation and Selection Phase* ii) Orientation Phase iii) Assessment and certification Phase (BTEB, 2012).

2.5. Section 4: Conceptual Framework of the Study

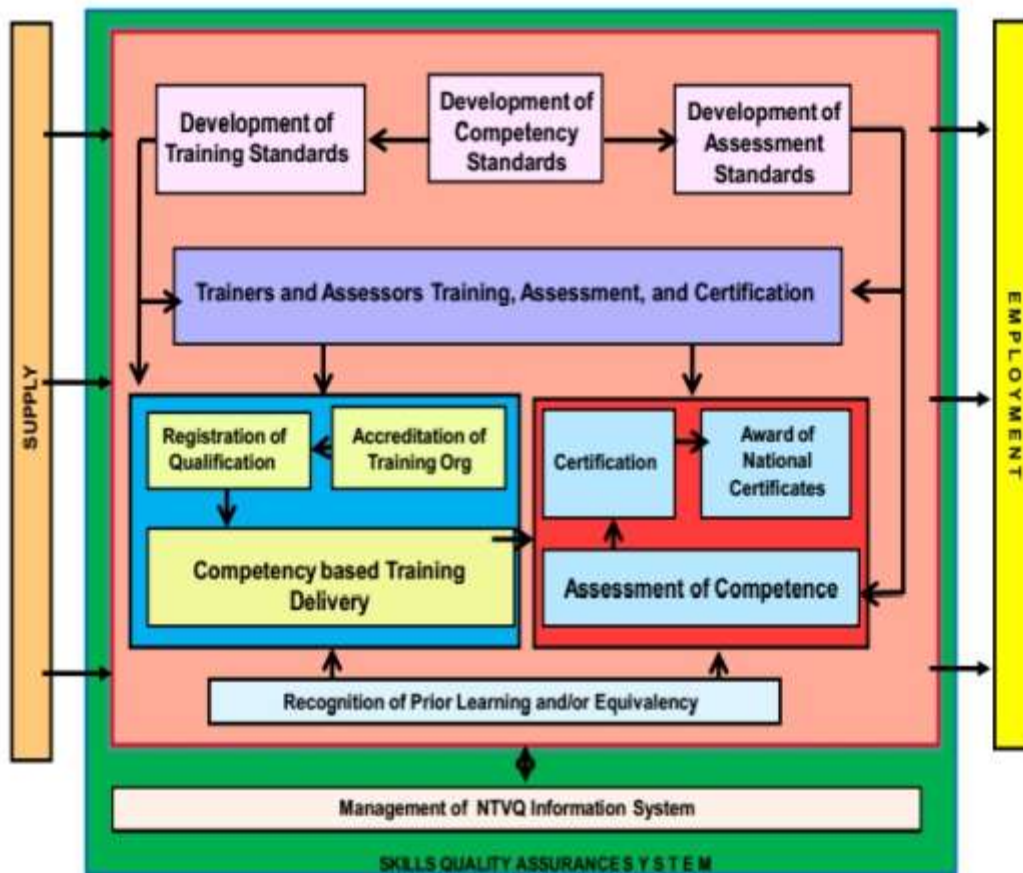
The National Technical and Vocational Qualification Framework (NTVQF) is a nationally consistent and comprehensive framework for all qualifications in the TVET system of Bangladesh. The framework is aimed at reducing duplication of programs and creating a clear system that indicates the trades are being taught for each industry and occupation, enable development of training courses based on the domestic and international labour market needs. The NTVQF has eight levels – two pre-vocational, four skills level for tradesperson, skills level 5 is for a master craftsperson/supervisor level and skills level 6 is the Diploma level-the premier TVET qualification. In the present study the three skills levels (NTVQF 1, NTVQF 2, NTVQF 3) of NTVQF were followed as guideline to explore the practice of selected trade courses both in the public and private organizations as these three skills levels are for trade persons. These three skills levels of NTVQF are framed in the following chart in accordance with Knowledge, skill, responsibility and job classification:



[Source: A National Technical Vocational Qualification Framework for Bangladesh, 2009]

Along with the three skills levels (NTVQF 1, NTVQF 2, NTVQF 3) of NTVQF the present study also followed the “Skills Quality Assurance System” as guideline which focus on the implementation of Competency Standards, Competency-Based Training Delivery System and Competency Assessment and Certification System to ensure a good link between supply-side, i.e., training providers and demand-side i.e., employers’ groups. The skills quality assurance system is presented in the following chart:

Quality Assured, Competency-Based Technical Vocational Education and Training (TVET) System



[Source: ILO, Govt. of Bangladesh & European Union, 2013]

Finally, for answering the Research Questions, the data analysis and interpretation of major findings of the present study is guided by the main concept of NTVQF that development of vocational training courses should be based on the domestic and international job markets' needs and trade courses also should be taught for each industry and occupation as per their required skills as well (ILO, Govt. of BD & European Union, 2013).

CHAPTER III

METHODOLOGY OF THE STUDY

3.1. Overview and Background of the Research Methodology

Chapter three represents the research methodology of the present study in detail, including some of the major sections, e.g. research approach and rationale, research sites, participants of the study, research instruments and design, data collection methods and procedure, triangulation, ethical concern and limitation of the study. Each of these major sections of the research methodology also included some relevant sub-sections.

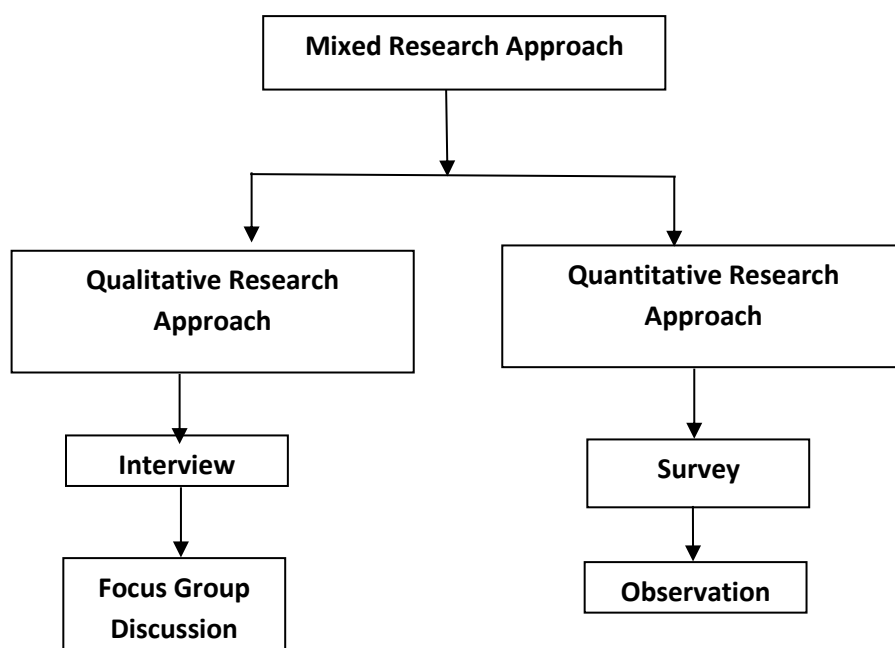
3.2. Research Design of the Study

The main goal of the present study is to explore the current practice of some selected trade courses including the course syllabus design procedure and pedagogical practice of vocational training courses in the real classroom situation. The study also focused on exploring the existing relationship and communication of the industry sectors and vocational training organizations and how far their relationship is ensuring the proper usage of vocational trainings in the industry sector increasing the employability of the target groups. Considering the main goal and focus of the study the research methodology section is designed including the sections, like, research approach and rationale, research sites of the study, qualitative design of the study, quantitative design of the study, data analysis process, validity and reliability, subjectivity, ethical concern of the study and limitation of the study.

3.2.1. Research Approach and Rationale

A mixed method approach is one in which the researcher collects, analyzes, and integrates both quantitative and qualitative data in a single study or in multiple studies in a sustained program of

inquiry (Creswell, 2012). In general, mixed approach represents research that involves collecting, analyzing and interpreting quantitative and qualitative data in a single study or in a series of studies that investigate the same underlying phenomenon. In this study the researcher followed the Mixed Research Approach mixing two major approaches of research, e.g. qualitative approach and quantitative approach which will reveal some mixed and integrated findings for answering the specific research questions of the study.

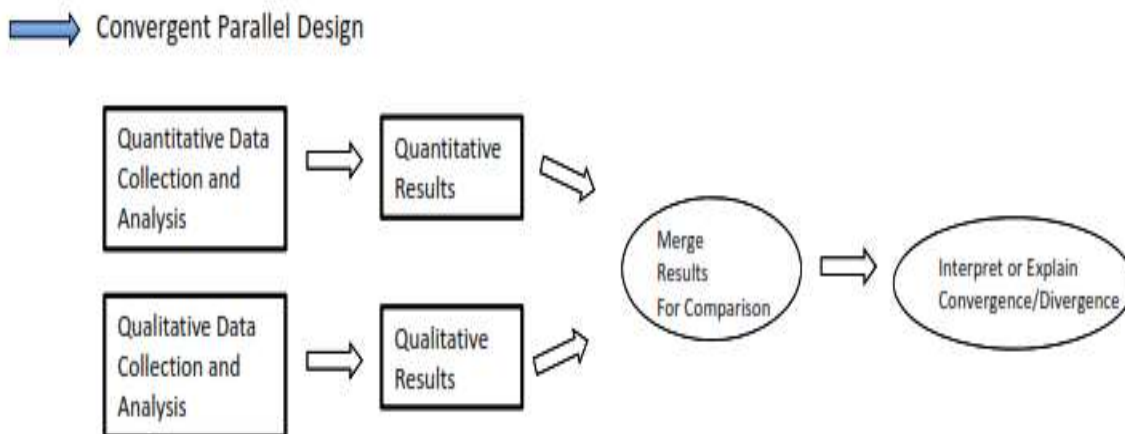


Here the researcher uses words, pictures and narrative to add meaning of the numbers, simultaneously used numbers to add precision to words, pictures and narrative. Along with this the researcher also added some insights and understanding that might be missed if a single approach is used in this study. For example, to explore how the vocational training providers and courses address the needs of the employers the researcher interviewed trainers, higher officials from BTEB and some of the selected officers from relevant industry sectors. At the same time for understanding the same phenomenon and to reveal how the current participants and graduates use the achieved skills and competencies, the researcher also collected data from some current

participants and graduates of different vocational training courses through couple of survey questionnaires. In this way for exploring the other research problems of the study the researcher used both the quantitative and qualitative research approaches that represent the Mixed Research approach.

In the Mixed Methods Research, it is important to merge, connect and embedding the data which is collected through Qualitative and Quantitative approach. In the present study the collected data were interpreted and analyzed merging the concurrent quantitative and qualitative data, so for conducting the study here the researcher followed the Convergent Parallel Design of Mixed Research Method. The Convergent Parallel Design is shown at glance in the following chart:

FIGURE 1: Convergent Parallel Design



Source: John W. Creswell, 2012, p 541.

“A convergent parallel design entails that the researcher concurrently conducts the quantitative and qualitative elements in the same phase of the research process, weighs the methods equally, analyzes the two components independently and interprets the results together” (Creswell & Pablo-Clark, 2011 as cited by Demir & et.al., 2018, pg. 123). Following the convergent parallel

design, in this present study the researcher analyzed the quantitative and qualitative components independently in chapter four, five and six and interpreted the results together in chapter 7.

3.2.2. Research Site of the Study

In the public sector of Bangladesh 23 Ministries are providing skills training program and 18 organizations are involved in TVET program. Among these public organizations **Bangladesh Technical Education Board (BTEB)** is one of the main organizations which provide different trade courses. Basic trade courses under BTEB are popular vocational training courses in Bangladesh. In the skills development system of Bangladesh BTEB is responsible to play the main role in supporting and implementing all types of vocational skills development trainings and programs both in the public and private organizations. So BTEB was selected as one of the main research sites and two higher level officials from BTEB were interviewed for collecting some important data.

Along with BTEB four Technical Training Centers (TTCs) were selected as main research sites of the present study who are directly providing different types of vocational trainings in different trades taking registration from BTEB. Among the four selected TTCs two were public and two were private Technical Training Centers. The selected public TTCs were ‘Bangladesh-German Technical Training Center (BGTTC)’ & ‘Sheikh Fazilatunnesa Mujib Women Technical Training Center’. The BGTTC was established in 1965 and located in Mirpur, Dhaka. The TTC provides training in 11 trades for the SSC Vocational Courses and training in 26 trades for the short-term courses, including a 21-day course in House Keeping. The selected other public TTC Sheikh Fazilatunnesa Mujib Women Technical Training Center is exclusively a technical training center for female trainees. It was established in 2001 to create more opportunities for

female to be employed in technical professions. This TTC also is located in Mirpur, Dhaka and offers SSC vocational training courses and short trade courses range from 21 days to 6 months. The selected two private technical training centers were ‘UCEP Mirpur Technical School’ and ‘Ahsania Mission Vocational Training Institute’ for Working Children. The ‘UCEP Mirpur Technical School’ run by UCEP Bangladesh which offers 37 vocational skills development courses in different trades and 21 National Skills Certificates (level 1&2) including Recognition of Prior Learning (RPL) assessment and certification services. The ‘Ahsania Mission Vocational Training Institute’ was established in 2010 in Pallabi, Dhaka. This vocational training institute has been providing national level basic trainings, short courses as well as need-based courses in different trades.

On the other hand, the most important focus of the present study is to reveal the existing communication between vocational training organizations and relevant industry sector and how far the vocational training courses are addressing the needs of the employers. The study also intended explore how the employers group consider the usage of the vocational trainings in their companies or industries. So, for the purpose of exploring this important perspective of the study two specific industries were selected as research site of the study. One of the selected industries were ‘Concord Pharmaceutical Industries’ situated in Dhanmondi, Dhaka and another one was ‘Masud Apparels’ situated in Uttara, Dhaka.

3.2.3. Selection of the Vocational Trade Courses

In the current practice of vocational trade courses, the training organizations are mainly offering the traditional/short/certificate trade courses along with a very few of the vocational trade courses under NTVQF. BTEB started to develop the vocational trade courses under NTVQF from 2012 but so far BTEB did not develop the syllabus if different vocational trade courses in

all those eight levels. Some of the trade courses are developed up to level 3, some are developed up to level 2 and some are not even started to develop according to NTVQF levels yet. All the training organizations are also not offering those trade courses under NTVQF. So, considering the prevailing situation in regards to offering vocational trade courses under NTVQF total four main courses were selected in the present study including both traditional trade courses and vocational trade courses under NTVQF that were available in the training organizations and offered by the training organizations in that time. Among the selected four trade courses two were developed and available up to NTVQF level 1 and NTVQF level 2 and two other selected courses were traditional trade courses- BTEB did not develop the syllabus of those two courses according to NTVQF levels. The selected four courses are:

- i) *Sewing Machine Operation (SMO)*: There were three categories of courses- one is traditional short trade course - ‘Sewing Machinery Maintenance’ developed by BMET and other two trade courses were ‘Sewing Machine Operation -Level 1 & Sewing Machine Operation -Level 2’ under NTVQF developed by BTEB. The learning outcomes of the traditional trade course were- “...identifying basic tools and equipment used in machinery maintenance and repair, familiarizing with sewing machinery parts and basic machine maintenance techniques, implementing important repairing mechanism, techniques of assembling and installing attachments, demonstrating leadership skills, ethical skills, safety and responsibility (BMET, n.d. pg. 1). On the other hand, level 1 & level 2 of this course under NTVQF very specifically mentioned the generic competencies, sector specific competencies and the occupation specific competencies, like, the generic, sector specific and occupations specific competencies of level 1 were-

...communicating in the workplace, working in a team environment, practicing workplace cleanliness, practicing occupational health and safety. The sector specific competencies were working in RMG sector, using hand tools and power tools for the RMG sector. The occupation specific competencies were- operating single needle lock stitch machine, operating double needle lock stitch machine, operating single needle chain stitch machine, operating double needle chain stitch machine (BTEB, 2013, pg.11).

The sector specific and occupations specific competencies of level 2 were-

...interpret drawing and specifications in manuals for RMG sector, perform measurement and calculation (RMG). The occupations specific competencies were- operate Four Thread Over Lock Machine, Operate Five Thread Over Lock Machine, operate Bottom Covering Chain Stitch Machine, Operate Top and Bottom Covering Chain Stitch Machine, Operate Kansai Special Machine (BTEB, 2013, pg.11).

- ii) *Dress Making and Tailoring:* There were also three categories of courses- one is (basic) trade course - 'Dress Making and Tailoring' developed by BTEB and other two trade courses were 'Tailoring and Dress Making (informal sector) -Level 1 & Tailoring and Dress Making (informal sector) -Level 2' under NTVQF developed by BTEB, too. In the basic trade course, there are some basic competencies, common competencies and core competencies, for example, the basic, common and core competencies are-

...receive and respond, participate and lead to workplace communication, work with others, team environment and lead small teams, demonstrate work values, practice career professionalism and develop & practice negotiation skills, practice workplace Occupational health and safety procedure, use Basic mathematical concepts, use English in work place. The common competencies are: course introductory, measuring practice, fabric & accessories, safe use of hand tools & lock stitch machine, lock stitch machine, thread tension and garments quality, style & hand stitch. The core competencies are: sewing a petticoat, sewing a 3 pcs. set (Salowar + Kamiz & Orna) and sewing a baby frock (BTEB, 2013, pg.3).

On the other hand, level 1 & level 2 of this course under NTVQF very specifically mentioned the generic competencies, sector specific competencies and the occupation specific competencies, like, the generic, sector specific and occupations specific competencies of level 1 were-

...communicating in the workplace, working in a team environment, practicing workplace cleanliness, practicing occupational health and safety (OHS). The sector specific competencies were working in the informal Garments sector, perform measurement and calculations for the informal sector, use hand tools and power tools for the informal sector. The occupation specific competencies were- make easier pant, make petticoat, make kamiz, make shalwar, make nightwear for ladies (BTEB, 2013, pg.10).

The sector specific and occupations specific competencies of level 2 were-

...interpret drawings and specifications in manuals for the garments sector, apply quality standards. The occupation specific competencies are- making baby frock, making blouse, making fatua, making pajama, making skirt (BTEB, 2013, pg.12).

- iii) Certificate Course on Quality Control Management: This is a traditional certificate course, BTEB did not develop this course under NTVQF, the training organizations are offering this trade course under Skill for Employment Investment Program (SEIP) project. The course is specifically designed to provide technical knowledge and skills to the participants to cope with the multifaceted requirements of quality control and quality assurance for Apparel Product in RMG and buying house. The course provided both theoretical and practical issues to make the participants confident to work in the relevant field. (BMET, n.d.).
- iv) Certificate Course on Mid-level Management for Production Supervisor for RMG Industry: This is also a traditional certificate course, BTEB did not develop this course under NTVQF, the training organizations are offering this trade course under Skill for Employment Investment Program (SEIP) project. The course is specifically designed to impart technical knowledge and skills to the participants to cope with the multifaceted requirements of production units in the sewing sections of RMG industry. This course also provides both the theoretical and practical sessions to make the participants confident in the relevant field.

It is to be mentioned here that the skills and competencies of the selected courses were linked with the discussion of the study and with the researcher's own reflection. Considering the availability of the selected course in the training organizations training sessions were observed and the FGDs were conducted.

3.2.4. Qualitative Design of the Study

There are two major perspectives in the whole study, one of the major parts of the study is the practice of vocational trade courses and another major part is the usage of those vocational trade courses, i.e., how different courses of vocational trainings address the needs of the employers and how those trainings help the target groups for increasing their employability. So, considering these two major perspectives of the present study the qualitative part of the study was designed, for example, to explore the practice of vocational training courses the study designed to interview the people involved in designing and developing the syllabus of vocational training courses along with the key people of training organizations, i.e., the principals and trainers of different vocational trade courses. For this purpose, the study also included to conduct Focus Group Discussion (FGD) with the current trainees to explore their perspectives in regards to current practice of vocational training courses in the real classroom situation. On the other hand, to explore the usage of vocational training courses in the relevant industry sector selected number of Human Resource Managers and production related officers were interviewed.

3.2.4.1. Participants of the Qualitative Part of the Study

In the qualitative part of the present study, the study intended to explore the current practice of vocational training courses including the pedagogical practice and the practice of designing and developing of the syllabus of vocational training courses. Simultaneously, the study also intended to reveal the existing communication between the vocational training organizations and

relevant industry sectors to explore how far the vocational training courses are relevant to address the needs of the employers and increase the employability of the target groups. Considering all those major intentions of the study the relevant participants were selected in the qualitative part of the study. In the qualitative part of the study the selected categories of the participants were higher officials from BTEB, participants from the selected training organizations and participants from the selected industries. The brief description about the selected participants is given below:

Higher Officials from BTEB

In the vocational skill development sector of Bangladesh BTEB is the main responsible body for overall management of all categories of vocational trainings including development of the syllabus of the vocational training courses, quality assurance of training delivery and assessment, registration of training organizations and validation of assessment. So, from BTEB two of the higher officials were selected as significant participants of this study. One of them was the key responsible person who oversee and manage all sorts of activities related to designing the vocational training courses (both NTVQF courses and traditional short courses), training delivery and assessment and registration of the training organizations and another one was a Specialist who had vast knowledge on the overall vocational skill development system of Bangladesh and specifically involved to work in the NTVQF cell of BTEB to implement the vocational training courses under NTVQF considering all aspects of National Qualification Framework, competency based industry sector standards and qualifications and Bangladesh skills quality assurance system.

Participants from the Selected Training Organizations

In this study four TTCs were selected as main research sites and from those selected TTCs people who are mostly involved with the vocational training courses were selected as research participants of the present study. For example, *The Principals* of the TTCs were selected as research participants of this study as they are mainly responsible for overall management of the TTCs including looking after all the nitty-gritty of providing the vocational training courses. This study also had a focus to explore the relationship of the relevant industry sectors and vocational training organizations and as the Principals play the vital role to take different initiatives to strengthen the existing communication between the vocational training organizations and employers so the Principals of selected TTCs were considered significant data source in this regard. Similarly, *the trainers* and *trainees* are the core of any kind of training program, this group of participants were significantly considered throughout the study. From each selected TTC three trainers were selected from different trades to explore the teaching-learning practice of available vocational training courses including the assessment and other related things on which the study intended to focus on. In total 12 trainers were selected from the selected four TTCs who are a big group of participants of the study. Along with the trainers the trainees are also significant part of the training program and they also have a different perspective about the overall practice of the program. In fact, they are the main target group of the vocational training programs who will use the skills and competencies of training in their work places, i.e., in the relevant industries. So, to reveal their viewpoints about overall usage of the vocational training courses from each selected TTC a good number of current participants were selected as participants of the Focus Group Discussion (FGD). It is to be mentioned here that one FGD was

conducted in each selected TTC and for each FGD 12 to 15 current trainees were selected as per the criteria of FGD.

Participants from the Selected Industry Sectors

In this study two industries were selected to explore the viewpoints of the employers about usage of the vocational trainings in their industries including how far the vocational training courses are addressing the needs of the employers. From each of those selected industries two officers were selected as participants of this study. One of them was 'Human Resource Manager' who is involved in the recruitment process of the industry and very well informed about all categories of human resources and recruited staff of the industry, especially the recruitment criteria and what types of skilled and trained people they require to manage their inhouse activities. Another one was 'Production related Officer' who specifically know what types of skilled and trained people are working in their organization and how many of them have different types of vocational trainings. So, from the two selected industries two 'Human Resource Managers' and two 'Production related Officers' were selected as participants of this study.

3.2.4.2. Sampling Procedure in the Qualitative Part of the Study

In qualitative research purposive sampling procedure is widely used for identifying and selecting the information rich cases using the limited resources in an effective way (Patton, 2002). Usually the purposive sampling procedure involves identifying and selecting the individuals or groups of individuals who are specially knowledgeable about the phenomenon of particular research (Creswell & Plano Clark, 2011). As the goal of the present study is not to generalize to a population but to obtain insights into a phenomenon, individuals or events, so in the qualitative part of the study the researcher purposefully selected the participants. In the qualitative design of

the study (section: 3.2.3.) it was mentioned that considering the major focus of the study four categories of participants were selected purposefully in this study and they were higher officials from BTEB, participants from the selected training organizations and participants from the selected industries. The purpose and rationale for selecting each category of participants were discussed in detail in the earlier sub-sections of the qualitative design of the study.

3.2.4.3. Data Collection Methods of the Qualitative Part of the Study

It is very important that researchers explain the system and intentions of how data is to be collected (Dana & Yendol-Silva, 2003). A systematic approach to collecting data increases the validity of a research by ensuring a clear and specific purpose of the study. In one of the earlier sections, it was mentioned that Mixed Research approach (Convergent parallel Design) was followed in this study. So, considering the Mixed Research Approach and the research questions of the present study total three types of data collection methods were used for collecting necessary data for the qualitative part of the study and those data collections methods were Observation, Interview and Focus Group Discussion. So, in this study necessary data were collected from multiple sources and collection of data from multiple sources is Triangulation (Merriam, 1998). As such, data from multiple sources provide insight into how a topic of inquiry is viewed by the stakeholders (Nocerino, 2004). Data from multiple sources also create a stronger case for results and recommendations (Dana & Yendol-Silva, 2003). So, by mixing up multiple sources of data collection, the collected data were triangulated in this present study. The three types of data collection methods which were used in the qualitative part of this study are described below including the number of participants where particular data collection method was applied:

i) Interview

Four types of participants were interviewed in this study, e.g. from the selected TTCs four Principals and twelve trainers from different trades (three trainers from each TTC & three trades: Garments, Computer and Electrical), two higher level officials from BTEB and four Human Resource Manager and production related officers from the selected industries were interviewed.

In total 22 (twenty-two) interviews were conducted to collect necessary data of the study. From the Principals of the selected organizations different perspectives, purposes and curriculum/syllabus of the trade courses, existing communication with relevant industries, etc. were explored & reviewed and from the trainers group the implementation strategies of the vocational training courses and different perspectives of teaching-learning practices were explored through interviews.

After looking into the practice of different vocational trade courses, how the target groups of the vocational training courses use the trainings in their work places were explored from the selected employers. Finally, as the selected TTCs are affiliated/under with BTEB, so two higher level officials from BTEB were interviewed to explore the overarching perspectives of practice of vocational trade courses and its implications in the workplaces of the target groups.

ii) Focus Group Discussion

The ultimate beneficiaries of any kind of training programs are the target group or participants of the training courses. The participants of training courses are actually the main group of training programs who will use the skills and competencies of particular trainings in the factory level or in practice. They also know the whole process and all types of practice related to the training courses, for example, they know the syllabus and content as they study the course, they know

and experience the real teaching-learning practice happened in the classroom and ultimately, they will use the trainings in the relevant factories. So, the participants of the training course have different lens to view about the vocational training courses and considering this perspective four FGD (one FGD in each TTC) were conducted in this study with the current participants of available vocational training courses in a particular Garments trade. About 12-15 current participants attended in each FGD and they were the current participants of available vocational training courses in the Garments trade, like, Sewing Machine Operation- Level 2 (NTVQF course) (UCEP), Certificate course of Mid-level Management for Production Supervisor (Sheikh Fazilatunnesa TTC), Dress making and Tailoring Level 1 (NTVQF Course) (DAM) & Certificate Course on Quality Control Management (BGTTC).

iii) Observation

One of the most important focus of the present study was to explore the current practice of vocational training courses, especially the teaching-learning practice in the real classroom scenario including the practice of hands-on practical work in the practical session. For this purpose, both the theoretical and practical training sessions were observed in the selected four TTCs considering the availability of the vocational training course. In this study total 16 (sixteen) training sessions were observed and among these observed training sessions 8 (eight) were theoretical training sessions and 8 (eight) were practical training sessions. In each selected TTC two theoretical and two practical classes were observed and those theoretical and practical classes were in the same course of garments trade. It is to be noted here that the available training courses were differed from TTC to TTC but all the training courses were in Garments trade. The available training courses were Sewing Machine Operation- Level 2 (NTVQF course) (UCEP), Certificate course of Mid-level Management for Production Supervisor (Sheikh

Fazilatunnesa TTC), Dress making and Tailoring Level 1 (NTVQF Course) (DAM) & Certificate Course on Quality Control Management (BGTTTC). However, in this study both the theoretical and practical training sessions were observed mainly to explore what methods and techniques are being used in facilitating the sessions, how the participants are engaged in the session and how the participants are learning the specific skill doing hands on practical activities, how far the training organizations well equipped with necessary tools and machineries for facilitating the practical classes effectively.

3.2.4.4. Research Instruments and Design for the Qualitative Part of the Study

In the qualitative part of the study total three data collection methods were applied to collect necessary data with the intention of triangulating the collected data and these applied data collection methods are: interview, FGD and observation. Interviews were conducted with four categories of participants, like, principals of the selected TTCs, trainers from selected TTCs, higher level officials from BTEB and officials from the selected industries. So, for addressing four categories of participants four different interview guide were designed/developed in this study: i) Interview guide for the principals of the selected TTCs ii) Interview guide for the trainers of the TTCs iii) Interview guide for the officials from BTEB iv) Interview guide for the officials from selected industries. Along with the interviews four FGDs were conducted with the current students available vocational training courses using a same FGD guideline. The FGD guideline was developed focusing on context and background of the participants, reasons to receive the vocational training course, how far the vocational training course is helping the trainees to increase their employability, how the trainees will use the skills and competencies of the vocational training, etc. In addition, for observing the training sessions a ‘training session observation schedule’ was developed using the Likert Scale. The training session observation

schedule included the indicators like, starting the session, greeting the participants/building rapport with the participants, introducing the topic with learning objectives of the session, exploring the prior knowledge of the participants, presentation/explanation of the specific content of the session, providing example of practice relating with the content, provide readings and other relevant materials in accessible formats, provide opportunities to the participants to practice and rehearse new skills, facilitate opportunities to the participants to interact with each other, supporting participants to complete the task, etc. The training session observation schedule also mentioned the rating criteria and following the mentioned indicators and rating criteria the selected training sessions were observed.

3.2.5. Quantitative Design of the Study

The most important part of the study is to explore the usage of the vocational training courses and how far the vocational training courses are contributing to increase the employability of the target groups. To explore this aspect of the study the quantitative part of the study was designed including two surveys. Among the two surveys one was conducted with the current trainees of different vocational training courses and another one was conducted with the graduates of different vocational training courses. Both the surveys focused on the perspectives of the target groups regarding existing vocational training courses and their current practice, contribution of vocational training courses in increasing the employability of the target group, usefulness of vocational training courses in increasing the quality of their lives style, usage of vocational training and its importance to the employers, etc.

3.2.5.1. Participants of the Quantitative Part of the Study

In the quantitative part of the study two surveys were conducted, one was conducted with the current participants of different vocational training courses and another one was conducted with

the graduates of different vocational training courses. The brief description of the selected current participants and graduates for the surveys are given below:

Current Participants/Trainees of Vocational Training Courses

The major focus of the present study was exploring the current practice of vocational training courses including the pedagogical practice in the real classroom situation. Especially, in the pedagogical practice of vocational training courses the current participants/trainees are the main stakeholder groups who experienced the whole process and fully engaged with all categories of activities that happened in the real classroom scenario. The current participants of the vocational training courses are also concern about the usage of those trainings in the relevant industry sectors and attending the training sessions regularly they are getting a real understanding and feeling how far the vocational training courses are contributing to increase their employability. From these perspectives the current participants are considered as significant participants groups of the present study and a survey was conducted with them to collect relevant data in this regard.

For this survey the currents participants of vocational training courses were selected from the four selected TTCs. Based on 5% error of precision and 95% confidence limit and using the particular formula the sample size should be 384. Therefore, for conducting this survey the required number of current participants were selected from the selected TTCs who were attending in the available vocational training courses. The survey was conducted with 386 current participants taking necessary supports from the principals and senior trainers of the selected TTCs. The duration of conducting the particular survey was August 2019 to February 2020 and it took about six months for completing the whole survey.

Graduates of Vocational Training Courses

One of the most important focus of the present study is to explore how far the vocational training courses are addressing the needs of the employers and what is the usage of vocational trainings in the relevant industry sectors for increasing employability of the target groups. After completing the vocational training courses usually, the graduates applied for different jobs and get the opportunities to meet/communicate with employers' groups which helps them to get an overall understanding about how far the skills and competencies of the vocational trainings are matched with employers' needs. Among the graduates there is also another group who already started to work in different relevant industries, they also have a different lens in this regard and also get opportunities to observe how the vocational trainings are used in the relevant industry sectors. Considering these perspectives, a survey was conducted with the graduates of vocational training courses and the number of graduates were 120 (One hundred and twenty) who participated the particular survey. Usually, the graduates of the vocational training courses are not available in the TTCs, they are scattered in different areas even across the country. In the TTCs, there is a 'Job Placement Officer' whose main responsibility is to link the graduates of vocational training courses with the employers for getting a suitable job. For this purpose, sometimes the vocational training organizations jointly arrange the 'Job Fair' where the graduates of vocational training courses attend from different TTCs/areas. As the specific address and location of the graduates were not available in the TTCs, so taking necessary supports from the senior trainers of TTCs the particular survey with the graduates of vocational training courses was conducted in two job fairs held in October 2019. The participants of the survey were selected randomly considering the trades, vocational training courses and TTCs.

3.2.5.2. Research Instruments and Design for the Quantitative Part of the Study

In this present study two types of surveys were conducted; one was conducted with the current participants/trainees of vocational training courses and another one was conducted with the graduates of vocational training courses. For conducting the mentioned two surveys two individual questionnaires were developed which were designed considering the distinct perspectives of current participants and graduates of vocational training courses. In general both the questionnaires addressed the points, like, context and background of target groups, perspectives of the target groups regarding vocational training courses and their current practice, availability of necessary tools and equipment in the vocational training organizations, exposure in the relevant industries during training and its usefulness, opportunity of job placement during or after the vocational training, contribution of vocational training courses in increasing the employability of the target groups, purpose of receiving the vocational trainings, usefulness of vocational trainings and changes happened in the quality of target groups' lives using vocational trainings, types of changes happened in target groups' lives using vocational trainings, usage of vocational trainings' certificates and its importance to the employers, initiatives from vocational training organizations for job placement and arranging suitable jobs for the target groups, existing communication of target groups with the employers, usage of vocational trainings in the relevant industry sectors, etc.

3.2.6. Process of Data Analysis of the Study

As the present study followed the Mixed research approach, so the study applied multiple methods for collecting necessary data, for example, interviews, Focus Group Discussion, Observation and Survey. Accordingly, the collected data of the present study were also analyzed

following specific procedure of particular methods. The data analysis procedure of the study mentioned is in the following sections in detail according to qualitative and quantitative data categories:

3.2.6.1.Data Analysis Process of Qualitative data

In this study the qualitative data were collected through interview, FGD and observation note. Following the procedure of conducting interview and FGD, all the interviews and FGDs were recorded taking proper consent from the participants. All the recorded digital files of FGDs and interviews were preserved in a secure online data storage site. In the beginning phase of data analysis all the recorded FGDs and interviews were transcribed and then a systematic analysis of each interview and FGD were undertaken. Going through all the transcriptions and considering the Research Questions of the study some important major themes were identified for carrying out the overall analysis of collected data. The identified major themes were practice of vocational short courses and implementation of vocational training courses under NTVQF, challenges in the practice of vocational short courses and to implement the vocational training courses under NTVQF, consideration of participants' needs, background, receiving capability and time allocation in designing the syllabus of vocational training course, consideration of employers needs in designing the syllabus of vocational training course, communication between vocational training organizations and relevant industry sectors, usage of vocational training in the relevant industries, target groups of vocational trainings and importance of vocational training in increasing their employability. Then categorizing all the qualitative data these were organized and analyzed under the above major themes mentioning some sub-themes where necessary. For organizing the qualitative data under major themes in the beginning of the

analysis the N-vivo software was used just to categorize the data but later it was done manually since the manual data organization seem more feasible to the researcher.

In the data analysis procedure of the present study the first step was to analyze the individual data set (interview & FGD) using descriptive codes that represented different aspects related to the specific Research Question of the study. Following coding of each interview and FGD the codes were then compared across participants of a particular data set and based on the commonalities within interview and FGD data set the relevant data were analyzed under established themes which were emerged from the same data set. In this way analysis of each interview and FGD data set were done independently and the aim of this analysis involved developing the relationship between different groups of data. In addition, during the analysis of qualitative data collected through interviews, FGD and observation I supplemented the analysis with relevant field notes which I compiled during data collection.

3.2.6.2. Data Analysis Process of Quantitative Data

In this study the quantitative data were collected through two surveys, one survey was conducted with 386 current participants/trainees of vocational training courses and another one was conducted with 120 graduates of different vocational training courses. Both the surveys were conducted using hard copies of the survey questionnaire taking necessary supports from the principals and senior trainers of the TTCs. After completing the full survey, all the fill up questionnaires were labelled in serial numbers. Then data collected from both the surveys were entered into two separate SPSS datasets, one SPSS dataset was prepared for the survey with current participants/trainees and another dataset was prepared for the survey with the graduates of vocational training courses. For two surveys two separate electronic SPSS data sets were preserved and used for analyzing the survey data. Then using the SPSS software and descriptive

statistics, like, frequencies, percentage and crosstabs all the survey data were analyzed under some major themes that were emerged from different aspects of both the survey questionnaires. The major themes of the data analysis were background and context of the target groups, source of information about the vocational training courses, perspectives of target groups regarding vocational training courses and their current practices, purpose of receiving the vocational training courses, usefulness of vocational trainings and changes happened in the quality of target groups' lives using those trainings, usage of vocational trainings' certificate and its importance to the employers, contribution of vocational trainings in increasing employability of the participants and initiatives from vocational training organizations in this regards, communication of participants with the employers. For preparing a comprehensive graph to some extent 'Microsoft Excel' was also used for analyzing particular category of survey data.

In addition, it is to be mentioned here that 16 training sessions (8 theoretical sessions & 8 practical sessions) were observed in this study using the Liker Scale. So, the training session observation data which were collected using the Liker Scale were considered as quantitative data and entered this part of the observation data in two separate SPSS data sets, one data set was prepared for theoretical training sessions observation and another one was prepared for practical training session observations. Using the two-separate data sets, the training session observations data were analyzed in quantitative manner using some comprehensive graphs.

3.3. Validity and Reliability

For ensuring validity and reliability of the collected data necessary methods were considered in the design and data analysis procedure of the present study. As Merriam (1998) states internal validity is a measure of how well research findings capture reality, so for ensuring internal validity researcher must portray particular participants of the study. Merriam also notes that

‘triangulation’ and ‘researchers’ identification of his or her own biases are some of the methods that can be applied to increase the internal validity of the study (p.204 as cited in PhD dissertation by Givens, 2008). For ensuring internal validity of the study the above-mentioned methods are maintained in the present study, for example, in this study data were triangulated using multiple ways of data collection methods, e.g. interviews, FGD and survey and during data analysis multiples examples/data supports were available from different sources to support the emerged themes. Along with this researchers’ biases were also identified very clearly in that study which are explained in the subjectivity statement later in this chapter.

In qualitative research Merriam (1998) notes that reliability can be defined as the level of consistency between the results and the data. She also states that reliability can be enhanced when researcher triangulate the data, explain the context of the research and selections process of research participants. It is mentioned earlier that triangulation was used in this study. In addition, a detail explanation of the context of the study is included in chapter one and context of participants and the rationale to select them is explained in this chapter of the study. All these mentioned perspectives supported to maintain the reliability of the present study.

3.4. Subjectivity

The researcher’s subjectivity is an important concern in qualitative study, Merriam (1998) emphasizing the importance of acknowledging researcher’s biases at the beginning of qualitative studies to enhance the validity of the study. For maintaining the subjectivity, the researcher confirmed the researcher’s role in this study based on experience as a teacher and review of related literature. In order to reduce the effect of researcher’s subjectivity on the participants’ responses and activities of classroom practices the researcher maintained an open mind and never tried to convinced them anyway. Another important consideration which was maintained

regarding subjectivity was the researcher's relationship with the participants was just as a PhD researcher, the researcher never tried to establish herself from her current position/profession rather the researcher involved the participants in the research process to a large degree and values their experience and inputs as required. Therefore, throughout the study the researcher maintained a continuous analysis of her subjectivity occurred in different steps of the study in order to address any personal relationship or experience that might hampered the analysis and interpretation of the data.

3.5. Ethical Concern of the Study

All the necessary ethical concerns have been maintained in all steps of the present study. The data collection of the study completed in a manner where it is not possible to identify the participants. Any kind of information will not be used anywhere that will make it possible to identify the participants. To protect participants' identities the researcher used pseudonyms for individuals and organizations. All the related records data collection will be kept private and confidential, only the researcher will have the access to the data set and identifying information. The researcher assured to the participants that the data will not be used for any other purposes, all the collected data will be used only for this research purpose. The participants will be presented with a consent form to assure them about confidentiality. The consent form included the name and contact information of the researcher, a brief description of the study, the research process and probable benefits associated with the research. Using the consent letter, the researcher ensured proper permission from all the research participants. The researcher explained the consent procedure in detail to each and every participant of the study and to ensure that the study was conducted maintaining an ethical manner the researcher make it clear to all the participants that participation in the study was voluntary and participants were free to withdraw

their participation at any time without any kind of penalty. Moreover, throughout the study time in the field, the researcher tried to be cognizant of all ethical issues relating to the researcher position, authority and privilege as a doctoral candidate. The researcher tried to be honest and respectful throughout the whole research process prioritizing participants' feeling and positions.

3.6. Limitation of the Study

Though as a dedicated researcher, the researcher tried to maintain the proper procedure of research throughout the whole study but still there are few limitations of the study. The potential limitation of the study included researcher's biases and preconceptions may influenced the findings and interpretation of data, though the influence of biases and preconceptions were addressed by the researcher very carefully. Along with this another limitation of the present study is the study was designed including the survey with sufficient number of graduates of vocational training courses which is required to follow the standard sampling procedure. But in reality, it was found that the graduates of the vocational training courses are not available in the TTCs, they are scattered in different areas even across the country. So, the survey with graduates of vocational training courses was limited to 120 participants. Finally, during data analysis of the study there was a feeling like to revisit the research sites to consult a few of the things with the principals and senior trainers but for the emergency situation raised for 'Covid-19' it was not be possible. However, the outcome of the present study could be desirable as the proper procedure of research was maintained throughout the study and specific purposes of the study were achieved answering particular Research Questions of the study.

CHAPTER IV

DATA ANALYSIS AND FINDINGS:

Practice of Vocational Training Courses Including the Vocational Training Courses Under NTVQF

4 .1. Introduction of the chapter

In this study Mixed Research approach was used and in the qualitative part of the study data were collected using the data collection methods, like, Interview, Observation and Focus Group Discussion. Total 22 (twenty-two) interviews were conducted with different participants group of the study, for example, two interviews were conducted with the higher officials and specialists from BTEB, 4 (four) interviews were conducted with the Principals of the selected Technical Training Organizations, 12 (twelve) interviews were conducted with the trainers of different trades and 4 (four) interviews were conducted with senior level managers from selected industries. Along with the interviews in the qualitative part of the present study 4 (four) FGD were conducted with the current trainees of different ongoing courses. Following the qualitative data analysis procedure all the collected data through qualitative data collection methods were analyzed in this chapter according to the following themes:

Theme 1: Practice of Vocational Short Courses and Implementation of Vocational Trade Courses under National Technical Vocational Qualification Framework (NTVQF)

Theme 2: Consideration in designing the syllabuses of both vocational short courses and the vocational training courses under NTVQF

Theme 3: Communication between Training Organizations, Trainees and Industry Sectors

Theme 4: Usage of skills and competencies of vocational trainings in the relevant industry sector of Bangladesh

Theme 5: Target groups of Vocational Trainings in Bangladesh and importance of those trainings in increasing their employability

4.2. Theme 1: Practice of Vocational Short Courses and Implementation of Vocational Trade Courses under NTVQF

At present BTEB is offering two categories of trade courses through different training providers. Some are conventional short training courses which started from 1985 and under NTVQF there are some level-wise vocational training courses which BTEB started from 2012 as per guideline of the NSDP-2011.

From 2012 according to NTVQF and NSDP-2011 BTEB developed the vocational training courses under NTVQF and planned to implement those NTVQF vocational training courses across the country. This section included the analysis of data related to practice of vocational trade courses, the reasons and insights behind developing the vocational training courses under NTVQF and their implementation status. This section also analyzed the challenging issues, like, available tools and equipment in the training organizations, development of qualified trainers to facilitate the vocational training courses under NTVQF following the CBT & A approach and ensuring the quality of the vocational training courses using effective assessment procedure, job

placement and some other initiatives like attachment of participants with relevant industries during training, etc.

4.2.1. Practice of Vocational Short Courses

The practice of vocational short courses is very traditional and backdated, regarding the existing traditional short courses one of the principals said,

...the existing traditional short courses are somehow old and traditional, but basic theories and knowledge are there, like, the courses on ‘Electrical Engineer’ addressing the basic skills and knowledge which are required for an electrical technician. That’s why after completing these types of courses people are doing jobs in different places and they can do their job properly (Interview # 3, July 2019).

However, the vocational training courses need to be upgraded, especially, according to the global changes the skills and competencies need to be included which are appropriate for our country’s context and also can be used in abroad. In this regard one of the principals explained,

...the vocational training courses need to be upgraded so that our students can see or view the new things and can learn the new things to cope with the changing world. Especially the vocational training courses need to be designed including the skills and competencies which are required for our country and abroad as well. If that’s can be done our students will be able to cope with the global workplaces (Interview # 14, 03 February 2020).

In an interview another trainer also shared that it would be better if the vocational training courses can be updated more. The existing syllabus of the vocational training courses are fine, the courses which are offered under SEIP project these are also nice but as the things are changing day by day, technologies are also changing so it would be better if the course syllabuses are being updated according to the global and technological changes (Interview # 17, 17 February 2020). Another trainer said, “...the existing vocational training courses are not

sophisticated, all these training courses need to be revised sophisticatedly otherwise if these courses are not aligned with the global age, after completing and receiving the training courses the trainees will not get good job” (Interview 18, 18 February 2020).

The content of the short courses is not sufficient too, if necessary, increasing the allotted time of the courses rich and essential contents need to be included in the short courses, in this regard one of the trainers suggested,

...essential content needs to be included in the short courses. As students will learn one subject they should learn properly so increasing the time if essential contents can be included in the short courses students will be able to get the opportunity to learn the particular subject properly and they will be able to apply this in the relevant sector (Interview # 5, 4 July 2019).

In Bangladesh there are diverse types of Vocational training courses but Government wants to bring all types of training courses under one umbrella NTVQF. For this purpose, the existing trade and short training courses will be reviewed in line with the NTVQF, the higher official from BTEB explained, “ ... the trade/short vocational training courses which are still offered by different training centers, these need to be reviewed in line with NTVQF and better to frame Competency Standards in these courses addressing the requirements of the industries (Interview # 1, 24 June 2019).”

BTEB will review all the vocational short courses (360 hours) which BTEB is offering since 1985 and instead of those short courses BTEB will expand offering the vocational training courses under NTVQF across the country. One specialist from BTEB explained,

...the short courses which BTEB is offering, all these short courses need to be revised considering the context of the industries because many requirements of the industries are changed over the time and as the requirements of the industries are changed, so we also need to review the conventional trade courses as per NTVQF (Interview # 1, 24 June 2019).

4.2.2. Implementation Status of Vocational Trade Courses Under NTVQF

BTEB started to implement different levels of vocational trade courses under National Qualification Framework from 2013. The delivery approach of the NTVQF vocational training courses is CBT & A which giving more emphasis on the achievement and demonstration of practical skills demanded by industries. According to the different levels of the national qualification framework the vocational training courses are also designed following the sections, like, the qualification, national competency standards, the generic competencies, the sector specific competencies, etc. People from industries were also involved in developing the competency standards of vocational training courses under national qualification framework. One of the higher officials from BTEB said "... as the people from industries were involved in the development process of Competency Standards (CS), so I think the competency standards of the vocational training courses under NTVQF are occupation based and up to dated" (Interview #1, June 2019). But still now among 350 registered training organizations very small amount of training organizations started to offer these training courses, for example,

...only about 100 training organizations are offering the vocational training courses under National Qualification Framework, there are so many challenging issues has been emerged in that new system. The training centers have to overcome all those challenging issues for offering /providing the vocational training course under NTVQF. But in our country the training providers are not ready enough to overcome or address all those types of challenging issues (Interview # 1, June 2019).

So currently the training organizations are mostly offering the traditional training courses, they are not offering the vocational training courses under NTVQF, in many cases they are just offering the Recognition of Prior Learning (RPL) courses. In the RPL courses the training organizations are just assessing the participants' prior learning and based on the skills and knowledge of the participants they certify them a level in line with the NTVQF. In this regard,

one of the Principals said, "...at present the courses which are designed under NTVQF, we did not get these yet, we don't know about these NTVQF course more, we just listen about these courses. However, we offer the RPL courses where we provide levels to the participants as per NTVQF" (Interview # 3, 9 July 2019).

On the contrary, one of the trainers shared that mainly BTEB has 360 hours short courses and NTVQF level courses. In the NTVQF courses there are 6 levels but so far, all types of vocational training courses are not implemented up to level 6. Actually for this the course curriculum need to be designed and according to different sectors of the courses there are many occupational issues and considering these occupational issues only up to level 4 is being implemented (Interview # 16, 17 February 2020).

For different kinds of limitations, especially for lack of qualified trainers and sufficient tools and equipment in the training centers it will take more time to execute these vocational training courses in the whole country. In this regard one Principal said,

...it will take time to execute the NTVQF vocational training courses across the country but it is 100% good, if it is possible to implement the NTVQF training courses in the whole country, then Bangladesh will be the develop country by 2030, it will not take up to 2041. As soon as it is possible to implement the NTVQF courses in the whole country, Bangladesh will be the rich country soon (Interview # 3, 9 July 2019).

At present the vocational training courses under NTVQF are being implemented in smaller scale, Government's plan and willing is to implement these NTVQF vocational training courses in the whole country quickly/ in a short time. It will take time because for implementing the vocational training courses under NTVQF it is essential to develop the capacity of each and every training organization. All the training organizations are not in that level to implement all the levels of vocational training courses under NTVQF. One of the principals said,

...there is infrastructural problems, improved tools and equipment is essential, need to have a good connectivity with the employers, trainers should be upgraded by receiving required quality trainings- as soon as possible to manage and improve all those things, the vocational training courses under NTVQF will be possible to implement soon (Interview # 3, 9 July 2019).

The Principals, trainers and training centers all are aware to implement the training courses under NTVQF following the CBT &A approach. They even 100% appreciate the NTVQF courses and understand that without NTVQF courses and CBT & A approach it is not possible to go ahead, to some extent they also committed that if we want to keep our country going ahead we must need to implement the vocational training courses under NTVQF using the CBT & A approach. For example, one principal said,

...now we are thinking about only CBT &A approach, never think otherwise, not thinking to continue the previous training courses, as we are thinking to implement the NTVQF courses if we go for both (previous training courses and CBT & A) then we will be lagging behind to implement the NTVQF courses in CBT& A approach (Interview # 4, 19 June 2019).

BTEB is maintaining and controlling the whole process regarding implementing different levels of NTVQF vocational training courses. If there is any gap then the training centers provide their opinions to minimize the gaps. One Principal mentioned, “BTEB is controlling the system, they are providing us the syllabuses, modules and sending the external assessors to assess the participants, it is BTEB’s responsibility, so BTEB is providing us specific instructions if offer different levels of NTVQF” (Interview #3, 19 July 2019).

4.2.3. Challenges both in the Practice of Vocational Short Courses and to Implement the Vocational Trade Courses Under NTVQF

Most of the training organizations of our country are providing diverse types of vocational short courses and very few of them are providing the vocational training courses under NTVQF (level

courses). But for some of the major challenges the quality of the vocational short courses are not up to the level and the training organizations are not providing the vocational trade courses under NTVQF in a large scale. In the practice of vocational short courses and for proper implementation of the vocational training courses under National Qualification Framework the major challenges are i) availability of necessary tools and equipment in the training organizations ii) development of quality trainers to facilitate the training courses under NTVQF iii) assessment techniques applied in the vocational trade courses iv) availability of Government's supports both for public and private training providers v) role of BTEB in ensuring the implementation of vocational trade courses under NTVQF vi) opportunity of job placement and attachment of participants with relevant industries during training. In this regard the higher officials from BTEB noted,

...without instrumental supports, institutional and organizational supports, developing the capacity of the trainers, we will not be able to implement the NTVQF courses, the expansion of the NTVQF course will not be possible. Hence the Institutional supports means to establish the rules and regulations for offering and providing training programs- it should be mandatory for the training providers that for providing a vocational training course under NTVQF specific policy must need to be followed. If we can not settle down this types of institutional supports or can not develop the institutes in this way then all the scattered training centers will not come under one umbrella and the efforts of those training institutes, like the vocational training courses under National Qualification Framework will not be useful (Interview # 2, June 2019).

Similarly, another higher official and specialist from BTEB also supported this, he said,

...for implementing the vocational training courses under NTVQF the training centers should be ready with teachers training, infrastructure and tools and equipment, from the Government supports can be provided in three points, like, i) ensure availability of necessary tools and equipment ii) certifying the teachers providing the training under NTVQF iii) in special cases providing the infrastructural supports (Interview # 1, 24 June 2019).

Another trainer added that

...in the global age nothing is stuck in one point, So I think according to the changes of the global age we need to develop our trainers and training institutes more, because when we produce a product if this product cannot fulfill the needs of the current market, ultimately it becomes useless and profitless. So, we need to know and address the current needs and requirements and for implementing this properly need to identify and arrange all the necessities, rules and regulations and approach properly. If we can do this properly our country will be developed soon (Interview # 6, 4 July 2019).

However, relevant data were analyzed in the following sections according to the major challenges faced in the practice of vocational short courses and implementation of vocational trade courses under NTVQF.

i) Availability of Necessary Tools and Equipment in the Training Organizations

For providing any kind of vocational training courses whatever the conventional or vocational training courses under NTVQF, the training organizations need to be registered in BTEB ensuring infrastructural facilities, sufficient tools equipment, training materials, qualified trainers, furniture, consumable materials, etc. (NSDP, 2011).

At present there are 350 Registered Training Organizations (RTOs) in Bangladesh and all of them are providing different kinds of vocational training courses. But most of the training organizations are not well equipped with necessary tools and equipment required for practical classes. Whereas CBT & A approach suggested to ensure the achievement of competencies in different level completing required practical works. Regarding existing tools and equipment of Technical Training Centers one of the principals shared, "...we don't have the tools and equipment which are required for facilitating the practical classes properly following the CBT & A approach" (Interview # 3, 9 July 2019). She also said,

...during inception of the TTC the tools and equipment were modern and it was 58 years ago, but the technology is advancing very swiftly and with that pace our tools and

equipment are not up to dated, we can realize this. The tools and equipment which are required for the international job market, we the government organizations cannot afford these as government fund is limited.

The higher official and specialist from BTEB also supported the principal's viewpoint, one of the higher officials and specialists from BTEB said that most of the time the practical examinations of the training courses are not held for insufficient tools and equipment of training organizations, he said,

...no one give emphasis on the practical work....a group assessment of the practical work just happened for formalities, for example, usually there are 700 trainees in a training center and if the trainers take the practical examination of those 700 trainees in two days with 10/20 computers or with a very small number of tools and machineries.... this cannot be considered as a proper assessment of the practical work. (Interview # 1, 24/06/2019).

Regarding the quality practical work of the vocational training courses one of the trainers shared that for taking the practical classes properly sufficient number of tools and equipment are essential. Similarly, the tools and machineries need to be up-to-dated. For example, we have very few numbers of 'Auto Sewing Machines' and the trainees sometimes do the bad competition to sit on the 'Auto Sewing Machines' during the practical class (Interview # 18, 18 February 2020). Similarly, the training centers are not well organized for facilitating the vocational training courses and practical works through CBT & A pedagogic approach, i.e., to provide the vocational training courses under NTVQF. In this regard in an interview in July 2019 the principal of a technical training center said, "...the facilities which are required for providing training as per CBT & A approach, we have a few of these but need to arrange or bring all the facilities properly, especially better-quality tools and equipment is essential". She also said, "...for providing vocational training courses under NTVQF, the training centers are 60% ready, different projects can support us providing necessary tools and equipment."

In the training centers there are gaps and lacking of tools and equipment which are required for implementing the vocational training courses under NTVQF, as soon as it is possible to equip the training center with necessary tools and equipment, it will be possible to 100% implement the training courses under NTVQF.

All the TTCs are not accredited to provide vocational training courses under NTVQF following the CBT& A approach rather most of them are affiliated with BTEB just to provide the traditional short courses as they are not well organized with necessary tools and equipment. According to the specialist's opinion, "...without the presence of required equipment, without qualified trainers and external assessors all types of related activities are going on in the traditional technical training system" (Interview # 1, 24/06/2019).

He also said,

...the training centers are not well equipped to offer the vocational training courses under NTVQF, with the present equipment they are just continuing traditional short courses because in the short courses they are facilitating the practical work in groups but NTVQF training courses require individual performance (Interview # 1, 24 June 2019).

However, at present different types of government projects are starting on vocational skill developments which are supporting the training organizations by providing modern and up to dated tools and equipment. For example, there was Skill and Training Enhancement Project (STEP), currently started Skills for Employment Investment Program (SEIP) under the Ministry of Finance which will continue for 10 years. In this regard the Principal said,

...the projects which are coming on skill development, like, SEIP, through this project we bought a good number of latest models tools and equipment, now the SEIP project is coming under Finance Ministry, we got some tools and equipment through them, too, they gave us some tools (Interview # 3, 9 July 2019).

But these are not sufficient, at present the skills which are required in the international job market, linking these skills with relevant industry sector if we can arrange necessary tools and equipment, then the vocational trainings will be able to fulfill the demand of the employers. Though people from private sector have very positive perception about the facilities available in the public training organizations. They have one kind of perception that government has huge fund, for example, the head of a private organization shared that in case of the implementation of the vocational training programs if it is a public organization, they have huge fund. Now a days Government is spending a huge amount of money, through different projects government is providing lots of tools and equipment and so on (Interview # 22, 23 February 2020).

Government is also giving emphasis that the vocational skills development training should be industry linkage and the industries also can contribute in this regard. In an interview one of the principals said,

...in our TTC we form an employer's committee, we have an employer's committee consist of 11 members, we call a meeting in this committee quarterly, in the meeting we try to know their demand, what kind of skills they need, but the matter of sorrow that the skills which they are requiring we cannot develop those skilled people properly for lack of modern tools and equipment. Then we offer them to provide us relevant tools and equipment for developing the skilled people whom they require (Interview # 3, 9 July 2019)

The principal also added that the industry will provide tools and equipment to the training organizations and the training organizations will develop the skilled people as per the requirement of the industries. Then the industry will also provide the job opportunities to the trained people. These types of thoughts are initiating among the employers and training organizations.

In some cases, the government projects which are supporting the training organizations providing different tools and equipment, there are some limitations in their approach. One of the principals explained,

I bought a projector under a project but if the projector does not work the project does not have any budget and plan to repair this. On the other hand, the machineries are always changing and up-dating, so I think the project should have the flexibility regarding buying the necessary machineries and tools and equipment, the project should not be fixed on buying particular types of machineries (Interview # 13, 3 February 2020).

On the other hand, regarding the necessary tools and equipment, the scenario of the private training centers is to some extent different. The private technical training centers have sufficient tools and equipment, for example, one of the Principals from private training centers shared, “...actually we have everything which are essential, if we don’t have we will not get the accreditation from BTEB, we have sufficient and huge materials” (Interview # 21, 23 February 2020).

ii) Development of Quality Trainers to Facilitate the Vocational Training Courses under NTVQF

It is widely acknowledged that quality of any kind of a training program depends on the quality of its teachers and trainers. In the current scenario of vocational trainings, the existing trainers of the training organizations are ready to facilitate the traditional short trainings courses, the current participants who are attending those training courses they expressed satisfactory opinions about the existing trainers group, for example, in an FGD on 11 July 2019 they said,

...of course, we would say our trainers both male and female trainers are experienced and they took very good decision about facilitating the training sessions. Our trainers are very cordial and they are teaching us through the training as much as possible with them (FGD #1, 11 July 2019).

Similarly, one of the Principals supported the current trainees' opinions, in an interview in July 2019 she mentioned,

...80% of our trainers are trained from abroad and very few numbers of the trainers who are not trained from abroad, they are getting opportunity to receive trainings from Bangladesh Korean Technical Training Center (BKTTTC). There is a project under BMET which BKTTTC is implementing establishing a teacher training institute name 'Dhaka Teachers Training Institute'. Under this training institute BKTTTC started to provide training on pedagogy and skills development and the trainers of our TTC are attending those training (Interview # 3, July 2019).

Taking those training the trainers are ready/skilled to facilitate the traditional training courses but they are not ready to facilitate the vocational training courses under NTVQF. For facilitating the vocational training courses under NTVQF the trainers need to be trained, especially, to facilitate the courses in CBT & A approach and they also need to complete all the levels of a particular training course according to the NTVQF. Sometimes for facilitating the traditional vocational training courses the trainers also need to use the CBT & A approach. One of the trainers explained that when a trainer teaches a concept of a machine or a purse and if he/ she does not know what types of machine is this, what types of things are there inside the machine, what is the mechanism of this machine then the trainer will not be able to facilitate the training properly and will not be able to help participants to learn well. So, at first the trainers need to be trained well, they need to be very punctual and skilled to facilitate the vocational trainings (Interview # 7, 4 July 2019). Especially, the trainers of the NTVQF training courses need to have the certificate on particular trade and technology and only this is not sufficient they need to have the certificate on teaching methodology and occupation-based skill certificate. For example, one specialist explained,

...after having the certificate of technical education the NTVQF trainers required to appear in the occupation-based skill-test and achieve the occupation-based skill certificate, not only this for qualifying as a trainer of NTVQF training courses they also

need to have the training certificate on pedagogy. For this reason, the training delivery of NTVQF courses is better than the traditional short courses. (Interview # 1, 24 June 2019).

Regarding trainers' readiness in facilitating the vocational training courses under NTVQF one of the principals also said,

...trainers are not 100% ready for facilitating the training courses following CBT & A approach. Currently BMET asked us to complete all the levels of NTVQF and it is mandatory for all the trainers. A few of our teachers already completed a few available levels of NTVQF, as per BMET's instruction we are asking them to complete all the levels of NTVQF vocational training courses (Interview # 4, 19 June 2019).

In the existing situation the trainers are mainly using the traditional training methods as they are not trained in facilitating the courses in CBT & A approach. The trainers of the traditional training system only have the academic background they don't have any kind of pedagogic training, one of the specialists from BTEB shared,

...after passing Diploma Engineering or BSC Engineering if anyone become a trainer, I personally don't treat them as trainers, they might have the academic qualifications, they might know handsome practical work but they don't know how to teach, how to deliver a session, how to deliver a practical session that is not known to them, they only practice and apply the traditional teaching methods which they have learnt from their teachers (Interview # 2, 24 June 2019).

So, one of the big challenges in the existing practice of vocational training system is the trainers are not trained in the new CBT & A pedagogic approach. As a result, in spite of completing the development of the curricula of the vocational training courses under national qualification framework, the training organizations are not ready to offer those training courses mainly for lacking of qualified and well-trained trainers. For example, one of the specialists from BTEB mentioned "...for implementing the vocational training courses under National Qualification Framework the important thing is to develop the trainers, the people who will facilitate the vocational training courses under NTVQF, we need to develop their capacity (Interview #2, June 2019)". He also mentioned,

...if anyone wants to be the trainer of the vocational training courses under NTVQF which are currently offering/running by BTEB, he/she has to have the NTVQF level-wise skill certification as well as the pedagogy certification in CBT & A. In the certification system of CBT & A there are 12 competency standards and if anyone does not achieve those 12 competencies, he or she will not be able to work as a trainer of the NTVQF courses, facilitate the training sessions (Interview #2, June 2019).

In this regard one of the trainers also added,

...whatever the training course is, whatever we are required to facilitate in the training session, at first the trainers need to know this. He/she also need to be interested and willingness that I have known/learnt this, so from one other ten will learn this (Interview # 6, 4 July 2019).

The employers also expressed similar type of opinion in this regard, like, the vocational training courses should maintain a quality to compete in the age of competition and globalization. Firstly, the training organizations need to have good quality trainers, one of the employer's suggestions was like this:

...if the training organizations recruit and use skilled trainers to provide trainings, then skilled manpower will be produced. But if they trained with the non-technical people then outcome will not be skilled manpower. So, they must need to recruit skilled trainers and should provide quality trainings (Interview# 10, 10 December 2019).

He also added, there are many training centers in different places of our country, they trained people in different areas, like, merchandizing, supervision, production managers, etc. but if there are good teachers, good trainers who will facilitate the trainings, if there are skilled people only then they will be able to produce skilled manpower.

But at present the main problem is the training centers cannot produce skilled manpower through different types of trainings. There is commercial handling both from the training organizations and trainees' perspectives, as result, there is no fruitful outcome (Interview# 10, 10 December 2019).

Actually, in case of all categories of vocational training courses both the traditional and NTVQF courses the foremost priority is to develop the appropriate trainers otherwise it is not possible to maintain the expected quality of the vocational training courses. In this point one of the principals explained that the quantity of the training programs is increasing but we are seriously lagging behind in ensuring the quality of the trainings. The first reason of this situation is the lacking of skilled resource persons to ensure the quality, the people who will develop the skilled human resource we have lack of those people. If we say directly we don't have qualified trainers or teachers or instructors both in the public and private training organizations (Interview # 22, 23 February 2020).

There are many RTOs which have proper infrastructure, machineries and tools equipment but they cannot offer vocational training courses under NTVQF as they don't have qualified trainers.

In this regard the specialist from BTEB mentioned,

...many of the training organizations cannot develop qualified trainers yet, so they cannot offer the vocational training courses under NTVQF. They become RTOs in condition that when they will have qualified trainers for facilitating the vocational training courses under NTVQF –they will be able to offer the vocational training courses under NTVQF (Interview # 1, 24/06/2019).

But in many cases, it is true and acknowledged that the quality of the vocational training courses under NTVQF are much better and these NTVQF courses need to be implemented in the whole country. For example, one of the trainers explained that the vocational training courses under NTVQF are very good but it would be much better if these can be implemented in the whole country. But it is not a good practice to offer a few of the vocational training courses under NTVQF, all the vocational training courses should be uniform across the country under NTVQF, then we will get good output. For implementing the NTVQF courses across the country at first the trainers need to be developed otherwise they will not be able to facilitate the training sessions

as per NTVQF and secondly the essential tools, equipment and machineries need to make available for the practical classes (Interview # 18, 18 February 2020).

However, BTEB started to train the trainers for facilitating the training courses under NTVQF using the CBT & A approach, in supporting this point the specialist from BTEB mentioned,

...we are providing training to the trainers to facilitate the training courses under NTVQF. According to the training they (trainers) prepare session plan/lesson plan and following the lesson plan they facilitate the training. All the NTVQF trainers have to prepare lesson plan before going to the class (Interview # 1, 24 June 2019).

The training organizations are also preparing their trainers to facilitate the trainings in that approach, like, one principal said, "...this year as per BTEB's CBT & A standard we are preparing the lesson plan and session plan, the batch which will start from July 2019, the training will be provided to them as per CBT & A manual" (Interview # 3, July 2019).

The NTVQF trainers are also specially trained to facilitate the practical classes of the training course. In the practical classes of NTVQF training courses, the trainers and trainees have to perform individually and for this reason the vocational training courses under NTVQF are more effective and the people who are trained in these courses they can achieve more practical skills. One higher official mentioned, "...in the practical demonstration class of NTVQF courses at first our trainers show the demonstration and then the students demonstrate the practical work individually" (Interview # 1, 24 June 2019).

iii) Assessment Techniques Applied in the Vocational Trade Courses

Though very small numbers of training organizations are offering the vocational training courses under national qualification framework but these vocational training courses follow a standard curriculum and internationally recognized Competency Standards in their practice. Based on the Competency Standard, assessment tools of particular courses are developed and knowledge of

the particular occupation is assessed through a written test. Regarding ensuring quality of the vocational training courses and practice of rigorous assessment procedure of these courses, one of the trainers said,

...not only this required generic, sector specific and occupation specific knowledge for a particular unit of competency standard are assessed, if the participants can proof the required knowledge then the participants have to show the performance and proof the practical skills demonstrating a complete work using a sufficient time, might be for 4/5 hours (Interview # 4, 4 July 2019).

In her interview in July 2019 she also said,

...the important point of the assessment procedure of NTVQF courses is the trainers who facilitate the training sessions do not do the assessment, BTEB's recruited third party assessors and complete the assessment in the presence of the representative from BTEB, and all of them are responsible to ensure the quality of the training and assessment.

Many of the training organizations are not offering the vocational training courses under NTVQF but are doing the assessment of training courses following CBT & A approach as per BTEB's guideline. Even for doing the assessment of the traditional courses they are following that approach. Regarding assessment of the training courses one Principal said, "...in the end of a training course we take a written test, a practical test and final assessment is done in presence of an external assessor who is nominated by BTEB" (Interview # 3, July 2019).

From BTEB there is a guideline for the assessors who are recruited or nominated by BTEB and according to the guideline the external assessors assess the participants asking some selected questions. But the trainers who teach the training course they don't have positive impression about this assessment procedure. For example, one of the trainers explained that before conducting the assessment the external assessors learnt/study some specific set of questions and if the students can not answer these specific set of questions they evaluate the student as 'not yet completed', to some extent the assessor exercise power as they are nominated as external assessor by BTEB, they thought that the training organizations are doing nothing, showed very

negative attitude towards the training organizations. But the trainers are teaching so many things according to the syllabus sometimes beyond the syllabus (Interview #4, 4 July 2019). In that case BTEB can play a significant role providing proper guidance to the trainers. Though BTEB provides a guideline to the external assessors but this should be explained to them properly, should help them to make a holistic understanding about the whole syllabus (Field note, 5 July 2019). In this regard one of the trainers also added that there is a specific questions package in BTEB, just going through this package anyone can be an assessor, in some cases their academic qualification is also in other discipline, they don't have sufficient knowledge in this particular subject which they are assessing, sometimes it is happened that some of the assessors know a specific answer from the package and if a student answer a question in other way they thought it is wrong (Interview # 4, 4 July 2019).

iv) Availability of Government's supports both for public and private training providers

As the implementation modality of the vocational training courses under NTVQF is different in terms of their delivery mood, practical work and assessment strategies and as these courses are job and practical oriented, the Government should support the TTC for implementing these training courses. Similarly, as there are so many private technical training centers in Bangladesh, so a support system should be developed for these private organizations too and in that case supports can be given to them in providing teachers' training, equipping the training centers with necessary tools and equipment, awaring the industry sector to evaluate the NTVQF certificates properly, etc. In this regard one of the specialists shared,

I think for expanding the implementation of vocational training courses under NTVQF, trainers of both public and private training centers should be trained properly, sufficient awareness activities should be undertaken to make the industries understand that the certificate of the NTVQF vocational training courses are very significant and

internationally recognized as they know the practical work well, even Government can provide the tools and equipment supports to all training organizations including the private training centers (Interview # 1, 24 June 2019).

On the other hand, it was pointed out that it is mainly Government responsibility to implement the vocational training courses under NTVQF across the country, so to make this initiative a successful one Government should support both public and private organizations. To clarify this point he explained,

...in this regard necessary supports can be provided to the private training organizations from Government side, because it is difficult to think that with own initiatives and investments the private training organizations will the support government to complete its responsibility to implement the vocational training courses under NTVQF (Interview # 1, 24 June 2019).

But in the existing practice of vocational trainings in our country only the public training centers are affiliated with Government both for management and other necessary supports and facilities. Private training organizations are completely self-directed and depend on their own funding and available facilities. In many private training organizations are reluctant in offering the vocational training courses under NTVQF spending their own fund. So, Government can provide necessary support to both the public and private organizations for implementing the vocational training courses under NTVQF across the country.

v) Role of BTEB in Ensuring the Implementation of Vocational Trade Courses under NTVQF

For offering any kind of trade and vocational training courses there are some rules and regulations provided by BTEB, for example, there are some criteria for admission, there are some entry requirements, etc. In BTEB there is also an academic regulation where there is instruction about class hours, assessment procedure and training delivery mood, etc. For maintaining the standard quality of the training programs the training organizations should

follow all those types of rules and regulations. But in the practice of training organizations there are some gaps, especially, the instructions regarding assessment and training delivery mood are not followed properly (100%) by the training organizations. In this regard one of the specialists from BTEB shared,

...the training organizations are not following the ‘Academic Regulations’ of BTEB accurately, there is some gap, it may be observed that 3 hours scheduled class is done by 2 hours. In regards to content level it might happened that all the contents are not covered/taught (Interview # 1, 24 June 2019).

As BTEB is playing a key role within the skills development system of Bangladesh, the training organizations should follow the instructions of BTEB properly. Based on some competency standards BTEB designed the training courses, but when the training organizations don’t teach some contents then along with the missing contents the participants also missed some competency standards to achieve. These types of gap should not be happened, to resolve and address these types of gap BTEB started the CBT & A approach under NTVQF where a record book is maintained. The higher official and specialists from BTEB said,

...in practice of CBT & A approach the training organizations maintained a ‘Trainees’ Record Book’, after completing one unit of the training course, the trainees signed this record book agreeing that I have achieved these competencies, on the other hand trainers also signed acknowledging that the trainees achieved these competencies after completing a specific activity (Interview # 1, 24 June 2019).

While the officials from BTEB monitor a training program, they also look at this record book and in many cases for ensuring the proper implementation of the training courses the record book is helpful for the officials. In this regard one of the specialists shared,

...when we go to monitor a training program in the training centre we look at that record book and ensure that this record book is maintained by trainers and trainees. This record book helps us to verify trainees’ achievement, like, looking at the record book we can ask a question to one trainee, if he can’t answer, we can complaint him that as you have signed in the record book you are supposed to be able to answer this question. For this

reason, we follow the record book in the practice of CBT & A and vocational training courses under NTVQF (Interview # 1, 24 June 2019).

However, for the improvement of the quality of the vocational training courses the rules and regulations and academic regulations of BTEB might require to review, especially in line with the NTVQF. In this regard one of the specialists said, "...the rules and regulations of BTEB which are not working in the real situation, these need to be renew for ensuring the quality of the vocational training courses" (Interview # 1, 24 June 2019).

Especially for following the CBT & A approach in facilitating the NTVQF training courses BTEB need to play a significant role, in this regards BTEB can develop some policies and rules regulations to make the use of CBT & A approach for the trainers. For example, one of the principals shared,

...if Government sends instruction to all training organizations that all of you will use CBT & A approach as a compulsory pedagogy, if it becomes a government policy and disseminate across the country, then all training organizations will follow CBT & A approach for facilitating the vocational training courses. Similarly, the training NTVQF level 4 also need to be made compulsory for all the trainers which is pedagogy 4 -the trainers' part (Interview # 21, 23 February 2020).

Finally for ensuring the quality of the trainings, use of CBT & A approach BTEB needs to create a separate monitoring cell, whose main responsibility would be ensuring the use of CBT & A approach in the training facilitation, in this regard one of the principals shared that mainly we need to have an approve monitoring cell whose main responsibility will be to monitor the training centers whether they are using the CBT & A approach. In that case the Head of the training organizations will not be involved to follow up or supervise rather BTEB will have an individual monitoring team. The team will have a target to follow up all the training organizations and these will be surprised visit- the training organizations will not know about their visit- they will visit and monitor the organizations suddenly- then all the training

organizations will be compelled to use the CBT & A approach in facilitating the training courses (Interview # 21, 23 February 2020).

In addition, one of the specialists from BTEB suggested that to overcome all those limitations need to develop the ‘strategic work plan’. In the vocational skills development system of our country, we have a ‘strategic work plan’, but it is a matter of sorrow that the people of our country don’t know about this ‘strategic work plan’. In this regard the specialist explained,

...there are six steps in the ‘strategic work plan’, for proper implementation of NTVQF courses we need to work in all those six steps, but the people who are working in developing and implementing the NTVQF vocational courses, they are not using the ‘strategic work plan’, they are taking ad. hoc based initiatives, different events are arranged and skills are developed in a scattered way, as a result we are not getting productive output (Interview # 2, 24 June 2019).

For successful implementation of the vocational training courses under NTVQF, it is also essential to develop human resources of BTEB, especially for developing the assessment tools and increasing the numbers of assessors and quality trainers who will be able to work in the NTVQF vocational training system. The specialist from BTEB said, “...if human resource of BTEB has been increased for providing trainings, developing the assessment tools and for conducting the required assessment, I think the implementation of vocational training courses under NTVQF will be successful rapidly” (Interview # 2, 24 June 2019).

On the other hand, the people of the whole country, especially, the people from the remote areas don’t know about the activities of BTEB, even the policy makers of our country also don’t know about BTEB’s activities and the vocational training courses which are designed under NTVQF. So all those things should be disseminated across the whole country, one specialist from BTEB said, “...all the people of the country should be informed that a quality and competency based

training system has been developed in our country under NTVQF, so all should avail this opportunity” (Interview # 2, 24 June 2019).

vi) Opportunity of Job Placement and Attachment of Participants with Relevant Industries during Training

In the recent global age, it is well recognized that the attachment with the relevant companies during vocational training courses is an effective way to help the trainees/graduates to start their profession achieving required work experience (Ministry of Education, 2011). Even during the training course if there are some opportunities to send the participants to the relevant industries for practical work as part of their training course, this will help the participants/trainees to learn the skills and competencies accurately using the materials used in the industries. In the FGD the current participants shared,

...it would be much helpful for us if the industrial training part can be increased during the training, in our training program we don't have the opportunity to be attached with industries, we are starting the training program in the training centers and we also finished this in the training centers but it would be more useful for us if for sometimes, may be for 3 weeks we get the opportunity to work in the industry as part of our training program (FGD # 1, 11 July 2019).

In another FGD another group of current trainees also shared that during the training course the facilities need to be increased. They placed their logic that in the vocational training courses they are learning hands on practical work, so if they get the opportunity to visit relevant factory or can work in the factory for short time as part of the training course, this will be a great help for them. They also added during training course if they can see the real environment of the factory, what is happening there, how people are working there facing the reality then from this course they will be able to learn more hands-on practical activities properly (FGD # 3, 11 Feb 2020).

The participants/ trainees are satisfied which are being taught in the training centers through different vocational training courses but they gave emphasis to have the opportunity to work in the industry during the training course. For example, they said,

...the skills and competencies which are being taught in the training course are up to dated, perfect and very good but it is very essential to have the opportunity to go and work in the relevant industries during the training course. If we could go and work in the industry/garments practically that would be much better, 100% better for us (FGD # 1, 11 July 2019).

The current situation and practice of the training organizations and the internal practice and situation of industries is completely different. One is teaching the theoretical things from books and another one is practicing practical work, so there are huge differences between the nature of the industries and training organizations. But in our country, there is very less opportunity to work in the industries during the training courses as part of the course. In the FGD the current participants explained,

...during the training course though we work in the machine but the position in which we are working and sewing in the training organizations that is different from the internal environment of a garment, in the practical work of training organizations the cloths or cloths of knitwear which we use is comparatively thick but inside the garments different types of cloths are used. If similar types of materials are used both in the practical work of training centers and inside the industries/garments that would be better for us (FGD # 1, 11 July 2019).

So, the training organizations should use similar types of materials in their practical work which is used inside the industries. For this purpose, apprenticeship can be included in the training courses and during the training course the trainees can be sent to the relevant industries for few weeks to work in the real environment of an industry. In this regard the current participants shared,

... during the training course if we get the exposure to work in the internal environment of the industries, then during starting of our own job or profession we will be introduced with this kind of environment and our performance will be better in our workplaces (FGD # 1, 11 July 2019).

Both job placement after completing a training course and exposure in relevant factories during training courses depend on the good relation and understanding between training organizations and employers. In the existing system of vocational training courses there is lack of communication between the training organizations and employers, for example, the principal of the selected TTC explained,

...the industries of our country need to be involved with the vocational training system, but the industries of our country do not response when we (the TTCs) call them, they do not come if we call them in a meeting or event, as they are rich and big industrialists, they do not response and come in our invitation (Interview # 3, 9 July 2019).

On the other hand, the industrialists also agreed with this situation, one of the employers said, "...we don't have any communication with the training organizations of our country, we don't know what kind of trainings they provide, even while we interview people for recruitment none showed us vocational training certificates" (Interview # 12, 01 Dec 2019). Another owner of an industry said, "...during recruitment we do not consider the vocational skills, if anyone can run our machineries and fulfill our industry's need, we recruit him or her. We don't have any information what kind of vocational trainings the vocational training organizations are providing in our country" (Interview #10, 10 December 2019).

As a result, in the existing situation of vocational skills developments training in Bangladesh the training organizations don't have the opportunities to attach the trainees in the relevant factories as part of the training.

4.3. Theme 2: Consideration in Designing the Syllabus of Both Vocational Short Courses and the Training Courses under NTVQF

During designing any kind of a course syllabus a few things need to keep under consideration, like, participants needs and background, participants' level of understanding and receiving capability, time allocation to teach identified content, etc. and in case of designing the syllabus of vocational training courses employers' needs and requirements should be considered significantly. So, in this section the collected data of the present study is analyzed according to the following two sub-sections, e.g. i) consideration of participants needs, background, receiving capability and time allocation in designing the syllabus vocational courses ii) consideration of employers needs in designing the syllabus the vocational courses.

4.3.1. Consideration of Participants' Needs, Background, Receiving Capability and Time Allocation in Designing the Syllabus of Vocational Course

Generally, the vocational training courses should be designed considering the participants' background, context and need. But in practice during designing the syllabus of the vocational training courses the perspective of the trainees are not considered. One specialist said,

...during developing the vocational training courses the need of the target groups and participants were not considered and analyzed, only for starting the SSC vocational courses the need of the job market was analyzed (Interview # 2, 24 June 2019).

But it is very important to consider the needs, contexts and background of the trainees and target groups during designing the vocational training courses. One of the trainers said that ...during designing the training courses the course designers should consider the need and context of the young group who are not getting a job after completing a Master's degree, the course designers also need to think about the under-privileged group who are poor, thinking about all categories of

target groups the course should be designed. Then all categories of target groups will be skilled, will get the job opportunities and will work enthusiastically and willingly. In that case they will be happy and will be able to use the skills and competencies learnt from different vocational training courses and overall, the production will also be increased (Interview # 14, 03 February 2020).

Mainly the courses are job oriented, during designing the course syllabus it is considered that this is the need of jobs, not trainees, so the course syllabus address the requirements of a particular job not the needs of the trainees, for example, one of the specialists from BTEB explained,

...the vocational training courses are designed mainly considering the requirements of particular job, like, during designing the vocational course syllabus of plumber it is considered that what are the things a plumber needs to know but it is not considered what are the needs of the trainees (Interview # 1, 24 June 2019).

But for proper use of the trainings the trainees group also need to be very conscious and careful, in this regard one of the employers shared that government and the planners of the vocational skills development sector should focus on the trainees so that they can do advocacy for proper use of the vocational trainings. The training organizations should make the trainees careful and skilled to use the skills and competencies of the trainings properly, the trainees should be conscious to disseminate their trainings (Interview # 12, 01 December 2019).

Similarly, the content level of the course should not be over-packed, in that case the participants' understanding level and receiving capacity should be considered during selecting the content of the course. In this point one of the trainers explained,

...the content of the vocational training courses needs to be reshaped considering the receiving capacity of the participants because all the participants can not cope with this. Increasing the time duration of the course the contents need to be detailed out, considering the time allocation the current content of the course is very much packed. So, the vocational training courses need to be designed considering the needs and receiving capability of the target groups (Interview # 5, 4 July 2019).

In many cases the contents which are included in the vocational training courses are very essential to achieve particular skills and competencies of the courses. But comparing with the allocated contents of many courses the time allocation of the courses is very less. In this regard one of the trainers shared that it would be better if the time/duration of the courses can be increased. For example, for the 'Pattern Making' course 'six weeks' is very short time. It became very tight and packed to cover the important content and practical activities (Interview # 19, 18 February 2020).

Only with general education it is very difficult to get a good job, so along with general education people also need to be skilled taking different kinds of vocational education. In the vocational training courses comparatively little theories and concepts need to be included increasing the practical part and hands-on activities. One will get a good job or will be very skilled and efficient professional if he or she is trained and has a certain level of general education. One of the trainers explained it is true that Bangla, English, Science and Social Science etc. are important and essential but in the training courses these should not be focused rather practical activities should be expanded in the vocational training courses. So, the existing courses required radical changes, it is essential to changes the practical work in the syllabus lessening the theories and different conceptual subjects (Interview # 7, 4 July 2019).

However, though the syllabus of the vocational training courses designed considering the skills requirement of a particular job, but the educational qualification of the participants is open during enrollment of the vocational training courses. In this regard one specialist mentioned,

...though the vocational training courses are job oriented but for enrolment there is options for educational qualifications, for example, a master degree holder person can be enrolled in the training of 'computer operation course', similarly in the same course people with only HSC and SSC education level can also be enrolled (Interview # 1. 24 June 2019).

4.3.2. Consideration of Employers need in Designing the Syllabus of the Vocational Courses

In designing the traditional short courses mainly the academicians were involved, the employers were not involved in this process, but in designing the courses the employers' requirements were considered so that the targeted young people can get a suitable job using their skills and competencies achieved from the vocational training. One specialist and higher official from BTEB said, "...in designing phase the syllabus of traditional vocational training courses was not sent to the employers for their inputs but their requirements were considered so that the trained people can get a relevant job" (Interview # 1, 24 June 2019).

But on the contrary one of the employers said, "...the industries and employers are not involved in designing the vocational training courses, the training organization themselves design the courses, we don't know about these, we work as per our buyers' requirement" (Interview# 10, 10 December 2019).

On the other hand, the vocational training courses under NTVQF are different from the traditional short courses. Both types of training courses 360 hours course but the vocational training courses under NTVQF are designed differently from the traditional courses, in terms of their presentation styles, training delivery mood and assessment strategies. One specialist said, "...the duration of traditional short courses are 360 hours, the vocational training courses under NTVQF also similar but the design, delivery mood and assessment strategies of the NTVQF courses are different from traditional courses" (Interview # 1, 24 June 2019).

During developing the short traditional training courses the requirement of the industries were not reviewed but in designing the vocational training courses under NTVQF the industries' requirement was given priority. One of the higher officials and specialists from BTEB said,

...the competency standards which we are now developing under NTVQF, we are developing these according to the requirements of the industries and current trends. The people from industries are involved in developing the competency standards (Interview # 1, 24 June 2019).

Another specialist from BTEB said,

...during redesigning the traditional short courses, the employers were called to be involved but, in many cases, they don't want to come, sometimes though they come but they can't contribute much as they are not orient with the vocational training system sufficiently (Interview # 2, 24 June 2019).

He also said,

...in the conventional training courses the employers are called in a scattered way, but sometimes even they don't know why they have come here and as a result it become useless. It is also a matter of great sorrow that the employers don't understand their own need, sometimes they don't understand what types of skills they do require (Interview # 2, 24 June 2019).

But in the NTVQF courses, at first the employers are being oriented with the system and mainly they are being involved with the process through the ISC, as a result the employers feel themselves to contribute in the system anyway. One of the specialists explained,

...in the NTVQF courses the ISC is responsible to involve the employers in designing and developing the training courses, as they are being involved through the ISC, so they feel an accountability to contribute some way, within a system they compelled to know and learn about the vocational training system which help them to contribute and involve significantly (Interview # 2, 24 June 2019).

So, the content of the NTVQF training course was selected according to the demand and requirement of the industries, which was not addressed in the content of the short training courses. For example, one of the specialists said, "...just the academicians set the standards of the short courses according to their concepts but the experts of the relevant industries informed

their requirements and inserted these in the curriculum of NTVQF vocational training courses” (Interview # 1, 24 June 2019).

In terms of the industrial changes actually the current time and the near future is considered as ‘Industrial Revolution’ and we know that in each and every stage of ‘Industrial Revolution’ different types of changes happened. For this reason, radical changes are happened in the NTVQF vocational training courses but the previous traditional short courses are not aligned with the recent industrial changes. One of the trainers shared that the vocational training courses should be redesigned based on the industrial changes, i.e., ‘Industrial Revolution’. In that case the traditional short courses which we have these should be aligned with the demand of ‘Industrial Revolution Four Point Zero (IR4.0)’ (Interview # 16, 17 February 2020). Though in our country the needs and machineries of the industries are changing but if we consider the global perspective these changes are very less, in terms of ‘Industrial Revolution’ we are not in line with the global changes, might be for that reason the existing vocational courses of our country serving the purposes to some extent but these are not up to the level to fulfil the international demands. One of the principals also explained this point in this way,

I would not say that existing vocational training courses are up-to-the-level, in our country’s context these are very average level, in fact comparing with other develop countries these courses are not up-to-the-level. At present many of our industries are not up-to-the-level to use high technology that’s why somehow the existing vocational training courses are serving the purposes but these will not serve the international purposes- all the vocational training courses need to be up-dated considering the global industrial changes (Interview # 21, 23 February 2020).

In this perspective the recent technological changes also another crucial issue. All categories of vocational training courses need to be changes based on the global technological changes, in that case the use of new technologies and computers need to be included along with the current

practice where the trainers and trainees used to do different task and practical work manually.

For example, one of the trainers shared,

...the existing vocational training courses need to be changed as now-a-days is the age of 'Information Communication and Technology (ICT)'. In regards to garments trade at present we are doing the practical task manually, it would be better if there are computer facilities for doing the task using different software or the auto machines can be provided to support the students to achieve the updated skills and competencies. For example, if the 'Pattern' could be taught through computer, then the trainees will understand this within a short time. So, the vocational training courses need to be updated considering the new technological changes (Interview # 19, 18 February 2020).

4.4. Section 3: Communication between Training Organizations, Trainees and Industry Sectors

In the whole vocational training procedure, there are three important main parties, e.g. i) the training organizations who are facilitating and providing the trainings to the target groups ii) the industry sector who are applying the trainings in the real workplaces and iii) the participants or trainees who are receiving the trainings. All of them, i.e., the training organizations, the industry sector and the trainees are interrelated, each other should have a very good relationship and communication. So, in this section 3 the relevant collected data of the study analyzed in the following two subsections:

- i) Communication between Training Organizations, Trainees and Industry Sectors
- ii) There is gap between the supply-side and demand- side of vocational trainings and relevant skills

4.4.1. Communication between Training Organizations and Industry Sectors

It is obviously true that the participants who come to attend a vocational training course they have their own purpose and future plan to use the particular training in their profession. In many cases most of the participants have positive impression about the training courses, like, in an FGD a group of participants shared,

...mainly we are attending this training course because we are thinking that when we will find out a job, the employers will require some training experiences and, in that case, while we will show a training certificate from a prominent training organization, of course they will evaluate us with high value (FGD # 1, 11 July 2019).

But the industry sectors don't have any kind of communication and connection with the vocational training organizations. Even for recruitment also they don't communicate with any kind of a training organization. One of the interviewees from garments sector mentioned,

... during recruitment we give the advertisement and based on the advertisement people come and communicate us, then proper assessment and taking an interview we recruit the people as our needs, if we need one staff, we recruit one based on our advertisement, we don't have any kind of communication with Training Organizations (Interview# 10, 10 December 2019).

Trainers also expressed similar types of opinion regarding relationship between the employers and training organizations, for example, one of the trainers agreed that the course designers should communicate with the employers. Though in our country there is very less communication between the vocational training course designers and the employers. In some cases, the employers are called during designing the courses, in the meeting of NSDA I have seen this but this is very limited. The communication and linkage with the employers are not enough compared with the number of vocational training courses we are offering in our country (Interview # 14, 03 February 2020).

But it is very essential to have a very good connection between the employers/industries and the training organizations because ultimate place of using the skills and competencies of the training

courses is industries. If the skills and competencies of the training program don't match with industries demand and requirements, the output of the training programs will be useless. So, there should have a good connection between the training organizations and industries/employers. In this regard one of the specialists from BTEB explained with concern that "...if we don't consider the requirements of the main demand-side, for whom we produce our products through different training programs, then the produced products (trained people) will be meaningless" (Interview # 1, 24 June 2019).

Currently BTEB is giving emphasis on this point and planning to review all types of traditional short courses in line with NTVQF which is giving a clear instruction to the TTCs to build a strong connection/linkage with the employers and industries. The specialist said,

...in the vocational training system of NTVQF we are telling to have a 'employers' committee' so that the employers can communicate with the training centers and can provide feedback on the training courses according to their demand (Interview # 1, 24 June 2019).

For this purpose, the training centers are initiating different kinds of activities in co-operation with BTEB. The specialist shared,

...for increasing the linkage with employers, now we are practicing to have employers committee, to arrange job fair, skill fair and we invite the employers sincerely to attend there so that they can see what is happening in the vocational skill development sector (Interview # 1. 24 June 2019).

Similarly, the people from the training organizations agreed with this viewpoint, they shared, in the existing practice there is good communication between the employers and training organizations. In some cases, there is no direct communication between the employers and trainers but there is a good communication between the management of the training organizations and the employers. One Principal shared,

...we have an employer's committee, we meet with them in each four months, in that meeting the trainers of different trade also attend and at that time the employers also get the opportunity to meet and discuss with the trainers. The trainers also should know about the employers need otherwise the training will not be effective and will not be able to address the employers' needs (Interview # 3, 9 July 2019).

In support to this one of the trainers also added,

...the standards and syllabus of the training courses build on employers' need, according to the employers' need we develop the training standard and syllabus and we provide the training following these standards. Actually, employers and employees are two sides but there is good connection between these two sides. The training organization organizes meeting with the employers in each four months and as per meeting discussion and employers need the trainers prepare themselves to facilitate/ provide trainings (Interview # 8, 9 July 2019).

On the contrary the trainers also pointed out that in our country there is gap between the employers and training organizations though they are telling that they have the communication with the employers (Field note, 5 July 2019). One of the trainers shared that we have good communication with the employers, we communicate with them and discuss with them, for example, a few days ago an Italian company asked me to send 4 trainees to them, then I sent 4 boys and 2 of them got a job there. But this is the gap in our country; very few trainers do these types of things. For example, in China there are 'Industry Technical College' and these are fully linked with industries, in the vocational training courses they teach those skills and competencies which are directly required by particular industries. But in our country, there is a big gap, we don't have these categories of technical colleges. If we can improve this part of the vocational training system, we will be developed soon and for the development of this area we need to improve our mindset and higher authority of the vocational skills development system, like, BTEB, NSDA should maintain the liaison with industries regularly (Interview # 5, 4 July 2019).

But both the industries and training organizations should play significant role for using different kinds of vocational training properly and for this purpose they should have good relation with each other. In this regard, the industries, training organizations and trainees all are inter-related. For example, during recruitment the industries should inform the training organizations that they need these types of people, then the fresh and trained people will be developed through different kinds of training. Similarly, based on the skills and competencies achieved from vocational trainings they should be promoted in their professions. But in our country this kind of practice are not available, manpower of the industries developed through work experience, they go ahead by doing and learning. For example, one of the employers mentioned, “if we see the quality of the worker is good then we make him supervisor or ask him to work in the line, looking at the activities in the line he gathered rich experience and he promoted to upper level” (Interview# 10, 10 December 2019).

During training it is important to attach the trainees with relevant industries or factories. The attachment of the trainees with relevant factory also good for the industries because then the trainees will learn the practical work which the factories really require. Finally, if he starts his profession in this particular factory, this will be good for the participants as well.

In that case industry can provide supports to the training organizations in different ways; they can do Memorandum of Understanding with each other finding out what kinds of supports they can provide to each other.

Especially, industries should play the significant role in this regard; they can support BTEB in developing the competency standards considering their requirements. Mainly the employers know what are their requirements, what are the changes happened in their machineries and

production process, people of the training organization might not know their real requirements and the recent changes in the industries. The specialist from BTEB explained this fact telling that

...the employers know about their real requirements and recent changes, if it is happened that the industries are using the CNC machines, electronic machines but the training centers are providing training on manual machines, the trainings will not be fruitful (Interview # 1, 24 June 2019).

So, the employers should inform their requirements and changes to the training organizations and the group of people who are designing and developing the curriculum of the vocational training courses. This should be the employers' main and prime responsibility. If BTEB, the designers and developers of training course and the training centers know about their requirements and changes in the use of machineries, then the training providers will be able to provide training addressing their requirements and demand properly (Field note, 25 June 2019).

In addition, based on the recent changes in the machineries of the industries, the employers can provide tools and machineries support to the training organizations to provide require trainings on these tools and machineries. One of the specialists from BTEB gave a real example in regards to this,

Samsung developed a practical lab in Dhaka bulletin, the mobile phone company Philips developed a practical lab in Bangladesh Korean Technical Training Centre (BKTTTC) and they asked the training centers to provide training on that practical lab and they will provide relevant job to those trained people (Interview # 1, 24 June 2019).

On the other hand, the one of the employers and owners of industries also preferred to get the supports from training organizations to recruit the required employees in the industry. If training organizations asked them about their requirement of the skilled people and ensured them that they would provide the trained and skilled people as their requirement they would be happy and that would be great support for them (field note, 5 December 2019). Usually the employers have some contacts and request them to send people according to their requirements and they request

them repeatedly, in that case if the training organizations can give them this kind of supports the industries/employers will be able to follow a very smooth recruitment procedure. The employers will not be required to be depend on few contacts for recruiting necessary staff. In this regard one of the owners of industries explained that for recruiting our necessary staff frequently we need to request few contacts but if training organizations assure us to provide people as per our requirements that's will be great help for us, if so, we don't need to bother few of our contacts repeatedly. So as factory if we have a good relation with the training organizations, if we can inform our needs to the training organizations and if the training organizations can provide us skilled people as per our requirements, then that's would be better from all perspectives, without any kind of hassle we could recruit our required staff (Interview # 12, 01 December 2019).

The collaboration between the Technical Training Centers and industries can be stronger in many ways, like, the industry can say the TTCs that we are using these machines for production, so we are giving you few number of this categories of machine, you train people on using these machine and after the training send those people to us, we will give them relevant job. In many countries, like, in China the collaboration between the industries and training centers are that much stronger, there is available practice like this. In this way the employers should have a social responsibility, in another way if there is any potential trainer among the employers, they can support the training centers facilitating relevant training sessions as guest lecturer. So in this regard the employers can be responsible and supportive in three areas, like, i) informing their requirements to BTEB, the training courses designers and training centers ii) can provide tools and machineries supports to the training organizations relating with particular jobs iii) can support to the training organizations facilitating training sessions as guest professors (Field note, 25 June 2019).

In addition, in all sorts of vocational training the main target group is the trainees and the main goal of the training courses is also to serve them. So along with the training organizations the trainees also might have a good communication with the employers. But in the current practice of vocational training courses this part is absent, the trainees' role is just to receive the training and if there is any opportunity to use the training in the workplace, they will do this otherwise there is no use of trainings, the graduates of the training program will work/do job whatever they get. In the FGD the current participants shared, "...we don't have any kind of opportunity to communicate with the employers, there might have some personal level communication through friends, uncle or any other relatives but there is no any kind of formal communication" (FGD # 1, 11 July 2019).

They also said in the same FGD that "... if there is scope for formal communication between the employers and the trainees that's would be great because in that case participants will be able to choose their job types and workplace consulting with the employers" (FGD # 1, 11 July 2019).

4.4.2. Skills gap between the supply-side and demand- side of vocational trainings and relevant skills

In Bangladesh one of the key reasons behind unemployment and inefficiency on the labour market is mismatch between the demand and supply of relevant skills. There are so many trainings in the vocational skills development sector but these training are not target oriented; the trainees are not confirmed about the use of the trainings. One of the employers said that there are so many vocational trainings in our country but all those kinds of training don't reach to the industries. The main reason of this situation is there is huge gap between two parties, i.e. between the industries and the training organizations, there is no linkage between them. I never get any kind of phone that we are providing training and any of your employees need training

you can send to us or you can come to our organization and see what kind of skills we are developing. We are not getting any kind of message in regards to this and the trainees also don't come to us (Interview # 12, 01 December 2019).

The main reason behind the gap between supply-side and demand-side is the requirements of the employers are not considered in designing and offering the trade courses. In this regard one of the specialists from BTEB said "...we are not offering the trade courses according to the requirement of the employers. As a result, there is mismatch between the skills which we offer through trade courses and the skills which the employers require for increasing their products" (Interview # 1, 24/06/2019).

The specialist also explained,

...as we are not offering the traditional training courses as per the requirements of the employers so the skills and competencies which we taught in the training courses the employers don't want these and as a result there is a gap exists between these two points (Interview # 1, 24 June 2019).

On the other hand, according to the policy instruction and under National and Technical Vocational Qualification Framework (NTVQF) BTEB is developing the Competency Standards considering the requirements of the industries, i.e., people from industries are being involved in developing the Competency Standards of the NTVQF trade courses. So, the Competency Standards of the NTVQF trade courses are occupation based, up-to-dated and lessening the gaps between the supply-side and demand-side of VSD. In this regard one of the participants reflected that

...as the people from industries were involved in the development process of Competency Standards of NTVQF trade courses, so I think the Competency Standards under NTVQF are occupation based and up to dated. But the Conventional Basic Trade courses will require a revision and I think these basic trade courses need to be developed and fine-tuned like the NTVQF courses (Interview # 1, 24/06/2019).

However, if we involve the employers in the designing phase of the all kinds of vocational training courses the gap between the supply-side and demand-side will be minimized. There is no way to disagree with this that ‘the academician’ and the ‘industry people’ are completely two separate categories/groups of people who exists and work in two separate world or perspectives. Similarly, the ‘training organizations’ and ‘industries’ are completely two separate categories of organizations. So of course, there will have huge gaps between ‘the academician’ and the ‘industry people’ and between ‘training organizations’ and ‘industries’. One of the higher officials and specialists from BTEB shared,

...whatever we would like to say there must have a clear difference between ‘the academician’ and the ‘industry people’. It might happen that the academicians/trainers of the training centers even don’t know that the machineries of the industries have been changed. On the other hand, the ‘industry people also may not know about the training courses which the training organizations are offering (Interview # 1, 24 January 2019).

In the existing practice of our country ‘the academician’ designed and developed the vocational training courses who don’t know what are the changes happened in the industry sector. On the other hand, the industry people who don’t know what kind of vocational training courses are being offered by the vocational training organizations and what sorts of skills are being developed through these vocational training courses use the skilled human resources in different production related activities of industry sector. As a result, huge gap remained in the existing practice of vocational skill development sector and industry sector (Field note, 27 April 2020).

For example, in an interview one of the employers shared,

“...the people of different industries and factories don’t know enough about the vocational training courses, these vocational trainings are not relevant with the activities of the industry, these don’t go with the industry’s needs, so we don’t recruit the people giving priority on vocational trainings (Interview# 10, 10 December 2019)”.

In addition, regarding NTVQF vocational training courses there is another important issue, i.e. specific time duration for the validity of the training certificates. According to NTVQF the training certificates are valid up to five years which means the demand of the industries will be changed day by day and according to the changes the curriculum of the vocational training courses and the competency standards need to be up-dated. Similarly, according to the changed curriculum and CS the instruments, course materials, necessary tools and equipment also need to be up-dated. So, the person who received training on the NTVQF courses he/she also need to update his/her skills and competencies as per the changes happened in the specific sector and occupation. One of the trainers explained the fact that the validity of the NTVQF certificate is five years but in the global age five years is a long time, in this technological age so many changes will be happened in the industries by five years. The ultimate purpose of the vocational trainings is the trained people will work in the industries as output of the trainings, so they should be skilled as per industries' requirements and should be updated according to the changes happened in the industry sectors. If we can't adjust ourselves with the changes, the skills gap will be happened and remain in this sector which is one of the biggest problems in our country. (Interview # 16, 17 February 2020).

He also said, "...in our country the current needs of the industries are not addressed by the existing vocational training courses and the main reason of this situation is the product of the vocational training courses are not matched with the current demand of the industry sectors" (Interview # 16, 17 February 2020).

So for ensuring quality and successful implementation of vocational training courses these two categories/group of people (academicians & industry people) and organizations (training centers & industries) should work together increasing the communication in many ways, like, increasing

the communication between ‘the academicians’ and ‘industry people’, arranging frequent visit and exposure visit of the employers to the training organizations through employers’ committee meeting, job fair, etc. There is no way to disagree that the garments and the training organizations should have a good relation and positive co-operation, the training organizations need the industries supports and on the other hand the industries need the supports from the training organizations. Otherwise the current situation of the vocational trainings will not be improved. For this purpose, during training the training organizations can hire people from the industries for facilitating a few sessions, giving some incentives to them, then the relationship between industries and organizations will be improved and overall situation will be improved as well. As the employers agreed that these vocational trainings are essential, in supporting to this one of the employers said, “...if well trained people come and join in our factory, our factory will be developed. Trainings are good for the factory and good for the workers as well. If trained people work in the factory then the tasks will be completed quickly which will lessen our stress or pain” (Interview # 16, 17 February 2020).

However, to make the collaboration between industry sector, training centers and trainees the Government also can be involved, Government can regulate some rules to pressurize the industry people that for the development of the country, especially in the vocational skills development sector you have to contribute, you have to be involved with the technical training system, you inform the training centers about your skills demand and support them to provide the training addressing your demand. In this way if Government can develop some strategies the whole vocational technical training system will be developed. In this regard one of the Principal said,

...if we want to make a strong networking and collaboration between higher organizations, TTCs, participants and employers, we need to develop a strategic regulation which will very clearly mention different aspects, like, about industry’s

demand, how the TTCs will address industry's demand, etc. (Interview # 3, 9 July 2019).

In this regard the Government should play the main role otherwise individual bodies will not proceed about this taking own responsibility. So, it is very essential to run the whole vocational training system under a regulation otherwise nobody will be responsible and accountable for this. If there will have a settle regulation in practice then it will be structured that these people are responsible for this part of the vocational training system.

4.5. Section 4: Usage of Skills and Competencies of Vocational Trainings in the Relevant Industry Sector of Bangladesh

During recruitment the industry sectors don't give priority on the people who received different kinds of vocational training rather they give priority to the people who are skilled in processing, measurement, cutting etc., the people who has good work experience in renowned factories or the people who can run the machine properly. One of the employers shared, "...we ask to sit on a machine, to run the machine then we assess his skills to run the machine and if one is good in this point then we recruit him/her" (Interview# 10, 10 December 2019). The current participants of the vocational training courses also expressed with sorrow that the employers do not find out this kind of vocational training certificates, they don't need the training certificates, vocational training certificate is not the issue to them, for them the main issue is how far one can do or perform a particular activity. Even during interview of a recruitment, they just assess and verify how far I can do the task or run the machine, if I can do a task running their machines then they will recruit me (FGD # 3, 11 February 2020).

The trainers also supported this scenario of the industry sector, one of the trainers shared that the vocational trainings, skills and competencies are of course very significant, especially, the skills, competencies and handicrafts are invaluable. If one becomes skilled and competent in any area at least he will be able to lead his/her life by doing something. But vocational skills and competencies are important if one learns these very well, otherwise if one can not do/learn the task, only the certificate is not valuable anywhere (Interview # 19, 18 February 2020).

Apart from this the senior and experienced people in the factory informed about the people who can be recruited, as they are experienced and worked in different kind of industries and factories, so they know the people well who can be recruited and the factory also recruit the people based on their references and information. One of the employers said,

...we don't have any kind of communication with any of the organizations for getting human resource as our needs, different kinds of training organizations also don't send the trained people to us for recruitment, and rather we recruit the people taking information from our experienced staffs (Interview # 10, 10 December 2019).

He also said,

.. in our factory we need our own developed people, the people from training center will not be able to fulfil our purpose, they will not be able to complete the task properly rather they will misuse and waste our cloths. So, through gathering work experience our sample man become the master, pattern master, cutting master, etc. (Interview# 10, 10 December 2019).

Whereas one of the trainers expressed completely different views regarding the usefulness of the vocational trainings, for example, she shared that the vocational trainings are very useful because now-a-days garments are not recruiting anyone without this kind of training. Previous time anyone got job in the garments sector but now the scenario is changed, now the garments sector takes a complete interview and then recruit if qualify (Interview # 18, 18 February 2020).

During recruitment the industries mainly give priority on the work experience of the people, in case of higher-level position they also give priority on the educational background. According to their needs and nature of the production as they develop the newly recruited staff through in-house trainings, they do not consider any kind of vocational training during recruitment. In regards to recruitment criteria one of the employers shared that for recruitment one of the important matters is experience, how much experience do they have and in addition for higher level recruitment educational background is also another fact, however job experience is the first priority rather than any training. So, in the recruitment criteria there is no vocational trainings and something like this (Interview # 12, 01 December 2019).

In case of higher management of the industry sector vocational trainings did not get priority, usually the higher educated, specialized and experienced people are being recruited in the higher levels of the industry. For example, in case of technology the people from Engineering background get priority who studies in different Engineering Universities, like, BUET, RUET, KUET, etc. In case of Human Resource department or Administration department people from Business department get priority. The vocational training organizations also provide trainings in those area but these training are not up to that academic level. In this regard one of the higher level senior managers shared that if we see that we need to recruit a staff in the technology section then we give priority to those people who studied Engineering from the universities, it is matter of higher education and the training organizations can not serve this purpose. Training and Education are two different things. We actually need the applied education, so it depends on specialized degrees also depends on experience. There is no scope of short or vocational trainings (Interview # 9, 13 Oct 2019).

In case of production section of the industries the same fact is true. In the production department they recruit the specialized people who will be able to complete the whole process of the production of a particular product. One of the higher-level managers explained that when an industry required to recruit a specialized staff for a particular production, in that case the industry choose that kind of a person for recruitment who know the whole process of the particular production and skilled to complete all types of activities for getting a quality production (Interview # 9, 13 October 2019). Usually, these categories of people are not available for recruitment in that case the industries develop the specialized people as per their requirement. For example, in the interview on 13 October 2019 the higher-level manager of an industry shared that the universities help the people to learn necessary concepts and theories along with necessary practical works and we help them to achieve specialized skills by regular practice which is required in our industries. So, there is no use of trade or vocational courses in the industries.

All the relevant stakeholders like, the trainers, trainees all know about this practical situation. In an FGD on 11 July one of the current participants shared his personal experiences, he said,

...in a factory I worked for seven months and so far I know about the factories that the higher level employees of the factories develop a link up with their own people and recruit the required people even in a whole sector with this link up and references (FGD # 1, 11 July 2019).

But when one trainee will complete a training course and get a training certificate, the employers should consider that he/she knows something and they should give them high value as they deserve. It is also true that the people who completed a training course and have a certificate they have better knowledge and skills than the others who don't have any kind of training course. So,

in that case the employers should recruit those trained and certified people instead of giving priority to the references from higher level (field note, 15 July 2019).

In this regard in an FGD the current participants of a training course shared,

... sometimes or in many cases the training certificate does not work, the reference from higher level or a good link is must for getting a relevant job. Apart from this, there is another fact that in spite of having a good training certificate for getting a good job needs to have relevant experiences. So along with a training certificate one needs to have a good link/reference from higher level and relevant work experience for getting a good job, can do nothing with only a training certificate. In many cases we can see that one has a certificate with a good result but lagging behind in getting a good job in terms of his/her relevant experiences and good references (FGD # 1, 11 July 2019).

So, in the existing situation of vocational training programs it is apparent that the employers don't give much value on different certificates of vocational training courses rather they give priority on fulfilling their own industry's needs, if one can fulfill their specific needs then they recruit them. As a result, there are so many training programs in our country but those training are not utilized properly in the industry sector (Field note 15 July, 2019). In this regard the trainees of the vocational training program said,

...in reality the employers don't value much the certificate of a training course, they give more value if there are good and higher references. In fact, the employers prefer their own people and references from higher level and from these types of linkage they used to recruit the people (FGD # 1, 11 July 2019).

One of the employers also shared the following opinion which indirectly supported the above-mentioned situation regarding staff recruitment in the industry sector. For example, he shared, "...the current situation of the vocational training is not up to the level, at present there is high demand of workers in the garments in abroad and there the performance of an experienced people from a factory will be better than a trained people from a training center" (Interview# 10, 10 December 2019).

Another employer also agreed on this point without any hesitation, for example, very clearly, he shared that we got sufficient number of qualified people for recruitment through our important contacts. Suppose in our factory our Factory Director sir has very good contact with other Factory Director or HR managers, then through the contact with these kinds of people we got the people for recruitment (Interview # 12, 01 December 2019).

So, on the contrary the participants of the vocational training courses are very hopeful about usage of the skills and competencies of the training courses which is completely different from the employers' viewpoints. They shared,

...after completing the training program while we will go for a job with this certificate, the certificate is very much valuable there, of course our skills, competencies and certificates will be highly evaluated by them and based on our skills and competencies the employer will assign us relevant activities (FGD # 1, 11 July 2019).

In the training organization in one batch of a training course usually 25/30 trainees attend the course. From them the trainees who will perform well and learn the skills and competencies of a particular task in the training course they will get a job, there is no guarantee for all that all of them will get a job. The SEIP project gave the commitment to provide a job to the 60% of the trainees but what about other 40%, this issue is a great concern among the current participants of the vocational training programs. In an FGD conducted in July 2019 they expressed strong opinion that

...from the training organizations we are informed that they will give job to the 60 % of the participants in that case we want the industries to take an interview or follow an assessment procedure to select for a job, we want the industries to assess our knowledge, skills and competencies. Because in many cases the certificates are not evaluated properly, recruitments are done based on link up or references, or based on industries work demand people are recruited by the employers. But we have learnt in this training course and we will be able to show this if there is an opportunity to attend an interview, in the exam/ interview we will be able to proof our skills and competencies (FGD # 1, 11 July 2019).

In this process the industries will also be able to know about the skills and competencies which is taught in different training courses. Not only this according to the skills and competencies of the graduates of different training courses the industries will also be able to create and expand their job opportunities. This will be useful both for the industries and trainees, the malpractice of recruitment procedure will be removed as well (Field note, 15 July, 2019). So the current participants of vocational training programs strongly expressed, "...so we want the industries to assess and evaluate us and if they do this more than 60%, even 80% of the participants will get jobs, then according to our qualification the job opportunities will be expanded" (FGD # 1, 11 July 2019).

For getting such an expected environment in the vocational education system all the relevant stakeholders should be careful including the trainees of the training programs. Many of the trainees are not sincere during receiving the training and very reluctant to learn the necessary practical skills and competencies. Some of their purpose is just to get the money from the training course; these types of tendency should completely be avoided. In this regard the current participants shared,

...for getting a transparent environment in the vocational training system, we the trainees should be careful much, we should be sincere in attending the training sessions and receiving the training course, if we become careful ourselves, try to do our own work 100% cordially then there will not be any problem in our workplace, our performance will be better in our workplace and we will get more facilities there (FGD # 1, 11 July 2019).

Apart from this there is a small number of the participants are receiving the course to start their own business, for example, in the same FGD one of the participants shared,

...after taking the vocational training from here I would like to start my own business, it might be happened that with my general education I did not get a good job, the salary of

the job also not satisfactory, in that case I will plan to do my own business and I will try my best to shine in that business using the skills and competencies learnt from this vocational training course (FGD # 3, 11 February 2020).

Sometimes it's also happened that the training certificates are not used for any purpose. For example, one of the participants of that FGD shared

I am attending this training as back up, at first I will try to find out a good job with my general education and if I didn't get any then I will try to get a relevant job using this training. In that case if I get a good and satisfactory job with my general educational qualification then the certificate of this training will be left without any use. He also argued that if I get a good government job then of course I will not choose my profession in this sector (FGD # 3, 11 February 2020).

4.6. Section 5: Target groups of Vocational Trainings in Bangladesh and Importance of those Trainings in Increasing Their Employability

In this section the collected data of the present study were analyzed in two sub-sections. Firstly, the target groups and their socio-economic and educational background were analyzed and then linking with the current practice how far the real target groups are being addressed by the available vocational training courses were analyzed from the perspectives of current trainees' background and their purposes to receive the vocational training courses. Secondly, through relevant data support the importance of vocational training courses were analyzed especially importance of vocational training courses in increasing the employability of the target groups.

The two sub-sections of this section are as follows:

- i) Target groups of vocational trainings and how far they are being addressed through these vocational trainings.
- ii) Importance of vocational trainings in increasing the employability of the target groups and getting a suitable and relevant job

4.6.1. Target Groups of Vocational Trainings and How far They are Being Addressed through these Vocational Trainings

Usually the people who need a job urgently enrolled in the vocational training courses. The students who dropped from the general education system or have not the ability to continue their formal general education they also come to receive the vocational training courses. In this regard one of the trainers shared,

...during the interview of the admission we are informed by the participants that most of the participants of the vocational training courses are those who need any kind of a job urgently, most of them are unemployed and have not the ability to study in the general mainstream education system. They come from those types of families whose financial condition is not good and need to start an income generating work as early as possible (Interview # 18, 18 February 2020).

Government is initiating different kinds of projects and programs in the Vocational Skill Development Sector and all of these have some specific targets. For example, the target people of the SEIP project are the ‘unemployment people of the society whose age level is not over 40 years’. One of the principals said, “...the target of the SEIP project is to train the unemployment people of the society and prepare them for the job market, giving them a suitable job opportunity. One of the mile stone of the business plan of this SEIP project is after completing a particular training giving them a relevant job” (Interview #3, 9 July 2019).

The current participants of the vocational training courses which are offered under the SEIP project also supported the information provided by the principal. In a Focus Group Discussion (FGD) they shared,

...the course is free for us and we are getting a good amount of money, about 9000 BDT for attending this training program. This course is offered under the SEIP project and we are learning a lot of things in this course. The speciality of this course is after completing the training course, they will arrange a job for us, and so in this course we are achieving all the relevant skills so that in the interview we can do well and join the job (FGD # 1, 11 July 2019).

But in the existing system there is a malpractice, in the vocational training courses under this SEIP project the targeted unemployment people are not enrolled rather different types of young groups and current students of different education institutions are enrolling in the training programs. In this regard one principal of a TTC explained,

...when we circulate the advertisement of the admission test, at that time the message did not reach to the targeted unemployment groups, rather group who got the message and response to our advertisement they are students of different under graduate programs of different non-government colleges (Interview# 3, 9 July 2019).

In an FGD conducted on 11 February 2020 it was also found that almost all the participants of the vocational training programs are current students of different universities and colleges, during the gap of their classes and examinations they planned to receive a vocational training course so that they can use this trainings for getting any kind of a suitable job. They are studying important subjects there, for example, in that FGD the current participants of the vocational training courses shared that they are studying in Masters 1st year in Management, doing Diploma in Textile, Degree final year, Degree 1st year, Degree 2nd year, etc.

This kind of malpractice happened for different reasons and one of the main reasons behind this malpractice is the socio-economic background of the enrolled trainees. The students who are studying in different under graduate programs of different colleges and universities, they came from comparatively insolvent socio-economic background of the rural areas, so they face economic problems to lead their regular lives and for availing the facilities from the vocational skill development project (SEIP) they enrolled in the training program (Field note, 9 July 2019).

One of the principals explained this unexpected situation very clearly, she said,

...the SEIP project is giving 100 BDT per students as daily transport allowance and whose family annual income is lower than the minimum level, they are getting a lump

sum amount 10,000 BDT at a time as scholarship. The students who are studying in different non-government colleges being enrolled in the training programs hiding their real information and acquaintance, for getting the transport allowance and scholarship fund 10,000 BDT (Interview# 3, 9 July 2019).

Indirectly the current participants also gave positive statement in supporting this important fact, like, they said,

...actually, the fact is the trainees who already have a job or need a job urgently, they are learning in this training program from their own curiosity or interestingly, attending the training sessions sincerely but there is a good number of trainees who are learning very less. After completing the training, they are getting the fixed money and taking the money they go for another kind of job, they don't have any kind of intention to use those training in their profession (FGD # 1, 11 July 2019).

Actually, they want the money, so they come and enrolled in the training program. But the training is not for them, they do not receive the training attentively, they don't have any purpose to use the training, the main target people of the training is unemployment people of the society, as a result the purpose of the training is not fulfilled, the training is not considered as an effective one.

Not only this for this malpractice, there are some other negative impact on the practice of training courses too, like, students drop out, irregularity, absenteeism, not appearing in the final assessment, etc. One of the principals mentioned,

...though very few participants are dropped out from the training courses but the students of different non-government colleges who took admission hiding their real acquaintance, as a result during their academic final examination they can not attend the training classes and during our final assessment they become absent because they give priority to their academic examination (Interview # 3, July 2019).

She also added, "...the students of different non-government colleges who are participating in the training program they can not use the training anywhere."

Regarding drop out of the participants from vocational training courses the higher official and specialist from BTEB also added,

...for many reasons few students are dropped out from the training courses, like, some participants are dropped out because they become engaged in other way, some are dropped out because they think the training course will not be useful for them anyway and those who think that they need a certificate for getting a good job, they mainly complete the training course (Interview # 1, 24 June 2019).

One of the trainers also mentioned that very few students are dropped out from the vocational training courses and we maintained a record system regarding the dropped out students, like, all the course trainers have a list of dropped out students and by the side of the names of the dropped out students they keep record why they dropped out. Usually for an emergency reason 2/3 students dropped out from a course, like, in case of sudden marriage or transfer of the parents. Without any emergency reason students don't dropped out because after enrolling in a vocational training course they become registered in the whole system and once they are being registered in the system, they will not be able to re-enrolled in the course from anywhere of the country (Interview # 17, 17 February 2020).

In this regard the training organizations can play a significant role to lessen this kind of malpractice, especially, by maintaining a rigorous and transparent system in the admission procedure of the training programs. They should address the right target groups of the project. The students who are enrolled in the training programs, it is apparent that they are students, the training organizations should identify them and they should be strict in the position that they are targeting the unemployed people of the society and should not allow the students to be enrolled just for getting the project money (field note, July 2019). Though one Principal mentioned, "...before online registration if we can find out that he/she is a student of college the we do not

enroll them and instead of him/her we enroll a participant who really need this training course” (Interview # 3, July 2019).

The advertisement process of the admission test also should be efficient to get the proper target group; it should be circulated in that manner so that the main targeted people can get the message.

Here one of the important fact is that might be the sources of information, like, phone or advertisement from the training centers, newspapers, TV or other kind of information is not available to the main target group, the unemployed people of the society, in that case for reaching the message to the main targeted unemployed people the training organizations can take some initiatives. For example, they can initiate to conduct household survey to find out those types of target groups.

The impression of the higher officials from BTEB also was not much positive about the participants of the vocational training courses. The participants who enrolled in the vocational training courses they are not target oriented, they are not specific about their learning achievements, even to some extent they don't know specifically what types of skills actually they want to learn from the particular training. The fact is like this that they need a certificate to apply anywhere so they attend the training course to get any kind of a certificate; the higher officials from BTEB explained this in the following way,

...at present the participants who attend the vocational training courses, they mainly need a certificate to apply for any kind of job, so they attend the vocational training course. The purpose of their enrolling in the trade/vocational training course is one and that is to get a certificate for applying a job (Interview # 1, 24 June 2019).

In this regard the specialist also added, "...the participants who usually enrolled in the vocational training courses, they think that for finding out a job need a certificate so attending any kind of a training it is better to collect a certificate" (Interview # 1, 24 June 2019).

In an FGD conducted on 11 July 2019 a group of current participants expressed very clearly that

...for getting a job the certificate is very essential, if we have training experience or other skills and if we placed these orally -this will not be accepted by an employer, so when we apply for a job, we need to show a written document, i.e. a certificate. In that case if we can show a certificate, based on the certificate the employers will assess me and give us relevant job (FGD # 1, 11 July 2019).

This types of tendency of the participants actually hampered the quality the vocational training programs and make the training courses ineffective. Mainly the certificate should not be given the priority rather the trainers should be focused what types of skills they really need to achieve for a particular job or profession. In many cases the employers of Bangladesh don't see the certificate, mainly during recruitment they assess the people whether they know particular work and perform better to deliver a particular production (Field reflection, 24 June 2019). So, to some extent the 'certificate' will not be used in the industry for production rather the main resource is the skills and competencies which the trainees achieve from the training program. One specialist shared,

...the participants who attend a training program to get a 'certificate' they don't understand that the 'certificate' will not help them in their work/activities rather they require standards skills and competencies' to perform better in their workplace and for productive output (Interview # 2, 24 June 2019).

The participants who are enrolled in the training courses just to achieve a certificate they are also irregular in attending the training classes. In case of CBT & A and NTVQF courses this can be observed/ found in the record book which is maintained by the training organizations. For example, one of the specialists from BTEB shared,

...in the CBT & A system the organization maintain a record book and during monitoring we can understand how far it is maintained by the trainees, sometimes it is found that in the end of the month they signed for the whole month at a time. It is also found that one of the trainees signed in one month but not signed in the next few months, in that case we can understand that the trainee is irregular and the trainers are not maintaining the record book properly (Interview # 1, 24 June 2019).

However, most of the participants who are attending the vocational training courses like, ‘Mid-Level Management and Supervisor’ ‘Sewing Machine Operation’ are HSC pass; a few of them also completed their graduation.

Opposing the BETB’s Specialists’ opinion a few of the current participants of the vocational training courses also mentioned, “...the main reason of attending this vocational training course is to be skilled increasing the employability and use these skills in the relevant profession” (FGD # 1, 11 July 2019).

In that FGD they also said,

...we are attending this course because it is relevant with our academic subject, like Textile, we have to work in that department, so we want to increase our skill in this area and after completing the training course will find out a relevant job in this sector. The main purpose of this vocational training is to learn the work/activity in the relevant sector (FGD # 1, 11 July 2019).

They also said, “...the practical training is very valuable, so the vocational training will help us in many ways, this type of trainings also has high demand in the relevant job sector” (FGD # 1, 11 July 2019).

4.6.2. Importance of Vocational Trainings in Increasing Employability of the Target Groups and Getting a Suitable and Relevant Job

Considering a few of the important facts, like, vocational training courses versus employers’ needs, content of the vocational training courses versus global changes, communication between

training organizations and employers, availability of suitable and relevant job after completing the vocational training courses and the most important fact vocational short courses versus vocational training courses under NTVQF- in this section data were analyzed according to the following sections:

- i) Importance of vocational Trainings in increasing employability of the target groups
- ii) Availability of suitable and relevant job after completing vocational trainings
- iii) Salary packages of the workers and necessary steps to make them stable in particular job
- iv) Importance of vocational trainings in Human Resource Development and making them self-reliance and confident in their profession

4.6.2.1. Importance of Vocational Trainings in Increasing Employability of the Target Groups

For increasing the employability of the trainees through the training courses, the training courses should address those skills which the employers require. One Principal said, "...for increasing the employability, if we want to develop the skills as per employers' requirements, we need the essential tools and equipment and need to increase the linkage with the relevant industries" (Interview # 4, 19 June 2019). One of the trainers also added with this that for increasing the employability of the trainees the content of the vocational training courses should be updated, considering the global changes new contents need to be included and considering the volume of content sufficient amount of time also need to be allocated in the training courses so that the content of the courses can be discussed and taught properly (Interview # 5, 4 July 2019).

The vocational skills development training will contribute more for increasing the employability of the participants if the communication between the training organizations and employers has

been increased. The Principal said, "...the vocational training courses would be 100% helpful to increase the employability of the graduates if the TTCs trained the people as per industry's need using the updated machineries relevant with the industries" (Interview # 3, 9 July 2019).

So, it is very important to offer different trade courses as per industries requirement because we need to develop the skilled workers which the industries required. For this reason, we also need to offer the vocational training courses in different trades considering the current context of the industries. In this regard one of the specialists from BTEB also explained,

...through different trade courses if we don't develop the skilled people whom the industries require, then the people will not get job and the industries will also not be benefited. There should have a good connection, we should train the people in this way so that the industries can use them (Interview #1, 24 June 2019).

The vocational training is very useful for them who got a job after completing the training. In the workplace they can use the knowledge and skills learnt from the training. The participants expressed highly satisfactory opinions about contribution of the vocational training course in increasing their employability, for example, they said,

...for increasing the employability, the vocational training course is 100% helpful, because while we were in the general line, we don't have any kind of skills and competencies regards to this, but now as we are taking training here, we understand about the nature of garments sector's activities. The nature of skills and competencies of this training course is relevant with the garments sectors, the environment of this training program is totally different from the general line, so we hope the learning of the vocational training program is/will be very much helpful for our employability (FGD # 1, 11 July 2019).

In this regard in FGD 4 one of the current participants also added that though I completed the 'Diploma Engineering in the Garments Sector' but I have learnt lots of hands on activities in this vocational course which I could not learn in that Diploma Engineering course by four years. I become self-confident through attending this course. Earlier I went to garments, I talked with those people and worked there but I was scared about the work, by attending this vocational

training course, by 15 days I am not scared now rather I feel interest to speak and to do the practical task (FGD # 4, 18 February 2020).

From the viewpoints of the training organizations, it was also found that the vocational training courses help the participants to increase their employability. One Principal said,

...the vocational training courses are much more helpful to increase the employability of the participants because we are giving job opportunities to 60% of the trainees, so I would say vocational skills developments trainings are 60% helpful for increasing the employability of the participants (Interview # 3, 9 July 2019).

For using the knowledge and skills of the training in the workplace the training organizations also provide necessary support and consultation to the graduates of the training. For example, one of the trainers shared,

...we ask our students to communicate with us if they face any problem in their workplace, we ask them to communicate with the trainers of particular trade, they can make phone call to the trainers and consulting with the trainers they can solve their problem or apply the skills in the workplace (Interview # 4, 4 July 2019).

In some cases, the current participants of the training programs are not much confident about the usage of the trainings in the workplace and whether these are helpful for increasing their employability or not. In the FGD they shared,

...we will understand whether the training course is helping us in our employability when we will start our work/profession, when we will work in the field then we will understand whether we learnt those things in the training or not, whether the skills and competencies which we learnt from the trainings these are relevant or not or we should learn more, before going to the field and starting to work in the industries it is difficult to realize how the training course will help us in our workplace and in increasing our employability (FGD # 1, 11 July 2019).

Though the current participants of the vocational training programs also think the training certificate will help them to get a better job and should be evaluated significantly by the employer's groups. They are thinking in this way because they enrolled in a training course of 4/6 months and during this time of course they learnt a lot of practical and theoretical things.

Side by side they also have a training certificate, so they should be evaluated highly by the employers for their training certificate and for their achieved skills and competencies from the training. In an FGD the current participants explained this issue telling that

...before enrolling the training course whatever skills and competencies we had, by attending and participating the training course we are learning many things, after completing the training course we will also get a certificate. So, we would say the employers should value our skills and competencies learnt from the training courses and the training certificate as well instead of recruiting people by their own link up and references. If they become transparent showing our training certificate and learning from the training course, we can get better opportunity and priority for job (FGD # 1, 11 July 2019).

On the other hand, as these traditional short and trade courses are not contributing anyway so the NSDP-2011 of Bangladesh also recommended to fine-tune these according to NTVQF. It suggested to refine all the courses, like, the national skills development courses, SSC Vocational courses, Diploma courses, etc. should be converted in line with NTVQF (Field note, 25 June 2019).

The Vocational training courses under NTVQF are international standards, the trainees who completed the training courses under NTVQF they will get the international recognition but those who completed the traditional training courses they will not get that international recognition. This fact also has an important impact on the graduates' profession and income. For example, one of the Principals explained,

...while a trainee completes level 1 & 2 of NTVQF courses in Bangladesh, then anywhere in the world he goes for job, he will get the equal levels. His salary also will be structured in that level, it is not possible to pay him lower salary structure. But those who did not complete different levels of NTVQF they will not get the similar salary structure (Interview # 4, 19 June 2019).

So, the people who are completing the vocational courses under NTVQF, they are getting more salary than the people who completed the traditional vocational courses. As a result, the people

who completed traditional training courses are facing problems in leading their lives because their personal income is low and for this the improvement of their family also slower.

Considering overall implications of the traditional vocational courses BTEB planned to review all the traditional short courses in line with NTVQF, if it is possible to review the traditional short courses as per NTVQF, then it will be refined according to the requirements of the industries and it will also be able to increase the employability of the participants/trainees. In this regard one of the specialists commented,

...if we can convert the traditional short courses in line with NTVQF, then the courses will be designed considering the requirements of the industries and will be able to enhance the employability of the trainees. But with the currently existing traditional short and trade courses it is not possible to increase the employability because through these short and trade courses we can not support the participants to achieve proper skills and competencies (Interview # 1, 24 June 2019).

4.6.2.2. Availability of Suitable and Relevant Job after Completing Vocational Trainings

Usually new and upgraded skills support to improve the employability of the workers, help them for a better career paths and higher income (Ministry of Education, 2011). But in the context of Bangladesh it is a big question how far the vocational training courses are helping the trainees or graduates of the training programs for increasing their employability and for getting a relevant job. Though there was a strong support from different research participants that vocational trainings are very much helpful for the participants to get a good job, for example, one of the trainers said, "...vocational trainings are important because technical vocational means trainees learn hands on activities during training and through the vocational trainings people become employed very quickly" (Interview # 18, 18 February 2020). Another trainer explained that mainly the people come to receive the vocational training for getting a job, especially, the

evening courses under SEIP project, there is job guarantee for 60% trainees. After completing those vocational courses, the participants get job in the relevant factories (Interview # 19, 18 February 2020).

The vocational training courses which are being offered under different government projects there are support for getting a relevant job after completing a training course. Under the project one job placement officer works for this purpose. According to one of the trainers there are many people who are not getting a job after completing their graduation or intermediate level of education but after completing the vocational training under SEIP project majority of them get a relevant job, so people are very interested to do this types of trainings but in these training courses the seat capacity is very limited, for 30 seats 200/300 applicants appeared to be enrolled (Interview # 7, 4 July 2019). Mainly the people who need a job urgently they enroll in the vocational training courses under SEIP. One of the trainers said that the main purpose of the trainees is to get a job. After completing the training, they should get a job so they come and enrolled in these trainings (Interview # 21, 23 February 2020).

In this regard one of the principals mentioned,

...the vocational trainings should be target oriented and the target should be clear that after completing the training I will do these types of job, if the target is not clear then a gap remains in all spaces/points of the whole process (Interview # 3, July 2019).

In the same survey people also suggested that "...it is essential to increase the quality of our Technical Vocational Education and Training so that we can use our achieved skill in all kinds of organizations and can contribute for the development of our country." They also mentioned, "...there is no job after completing the vocational training, one does not get a suitable and relevant job after completing vocational training". Only those who go abroad for a job they can use the training, the training becomes very useful for them.

Regarding this point one of the trainers also added that after completing a master's degree along with different kinds of vocational training course, the young group are not getting a job to some consideration they are very much deprived because by 23/24 years they did their masters but not getting any kind of a job, very unexpected situation, at that situation it is very unfortunate to take money from parents for daily and regular expenses (Interview # 14, 3 February 2020).

Even the people who completed the vocational training courses under NTVQF, they also face a difficult situation in getting a suitable job, because the people of our country including the employers don't know about these courses. In this regard another dilemma is the information of NTVQF courses are not mentioned in the recruitment procedure or in the advertisement system as criteria. As a result, the people who completed the training courses under NTVQF, they are not getting proper value during recruitment, even to some extent the employers don't want to see their certificate in the recruitment board as these are not required in the advertisement. In this regard one of the specialists explained,

...another matter is in the advertisement and recruitment system of Bangladesh, require the traditional vocational certificate, there is nothing about vocational certificate under NTVQF, it is also not included in the recruitment criteria and recruitment rules because they don't know about these NTVQF courses (Interview # 2, 24 June 2019).

Not only the NTVQF courses this fact is also true for all kinds of vocational trainings during recruitment the employers do not consider and value the vocational training certificates for proper dissemination and advertisement of the job. One of the trainers mentioned

...more people could come to receive this vocational training but there is nothing in the recruitment policy that after completing a vocational training what kind of job people will do. The advertisements of job recruitments also do not mention about vocational trainings in detail. As a result, the people of the industries and employers do not understand who should be recruited in a particular position rather they recruit anyone whoever they want (Interview # 4, 4 July 2019).

Though there are good number of examples that the people who completed the vocational training courses under NTVQF they are more skilled than the people who completed the conventional vocational courses. The industries also preferred the people who have NTVQF certificates, one of the specialists mentioned,

... if one industry once gets a person who completed the vocational training courses under NTVQF, they evaluate them separately and become attractive to them because they are completely different from the traditional certificate holders in terms of knowledge, skills, attitude, behaviour and productivity (Interview # 2, 24 June 2019).

However, it is very important to disseminate the information of the NTVQF courses across the country, especially to the employer's groups so that they can include the NTVQF vocational training courses in the advertisement and recruitment system as criteria (Field note, 25 June, 2019). NSDC or National Skills Development and Authority (NSDA) is the main responsible body to disseminate these things across the country including all categories of employers. One of the specialists said,

NSDA is responsible to disseminate the information about NTVQF courses and NSDP-2011, to bring all diverse types of vocational training under one umbrella, to standardize all the vocational training courses as per settled competency standards and to oversee all those things, it is impossible to do all those things successfully only by BTEB (Interview # 2, 24 June 2019).

However, at present the Government of the country initiated some projects where the participants of a particular training program get job opportunities, for example, in an interview on 9 July 2019 one of the Principals of training organizations shared, "..... one of the milestones of the business plan of the Skills for Employment Investment Program (SEIP) is to provide job to the 70% of the participants who completed particular trainings".

So, the training organizations are ensuring jobs for 70% of the participants who are completing the vocational training courses under SEIP project. The current participants of those categories of training programs also supported this fact, they agreed,

...those who are comparatively doing well in the training course and better in skills and competencies get the job opportunity organized by the training centres. There is the opportunity that the training centres link the participants with a job here, after completing particular training program (FGD # 1, 11 July, 2019).

For getting the job opportunity the participants are very much satisfied with the training program even they don't want any other facilities if there is a job opportunity after completing a training course. They said, "...we are happy if there is a job opportunity, we don't need more than this or any other facilities. As many of the participants or trainees are unemployed if there is a job opportunity that's enough, any more facilities and supports are not necessary" (FGD # 1, 11 July 2019).

The graduates of different vocational training programs also put emphasis on this point, as an overall suggestions regarding vocational training programs of Bangladesh they suggested "...it is very important to arrange jobs for all the trainees after completing the training, if this can be done then our country will go ahead, will be developed quickly" (Survey with graduates, 22& 23 Oct 2019).

4.6.2.3. Salary Packages of the Workers and Necessary Steps to Make them Stable in Particular Job

In the vocational skills development sector one of the crucial problems is the wages of the workers is very low. After completing a six months or four months vocational training, one become ready to work in a relevant industry and accordingly as per his/her qualifications joins an industry but unfortunately after working a few days they leave the job, the main reason is that the

salary is very low as a result they try to find other other jobs or other training or any other better opportunity. In this regard, one of the principals said,

... the industries provide very low salary to the workers, as a result they left the job and find out other better option because the salary which the industries are giving to the workers with this small amount of salary none will do a job, now a day's none will do a job with the salary of only 8000/9000/10000 BDT, the rickshaw puller even can earn more than this, at present this is one of the major problems (Interview # 4, 19 June 2019).

The expectation of the trainees or fresh people is also much more ambitious. They usually try to explore the market value and demand to prepare themselves so that they can get a good job with high salary. In FGD 4 conducted on 18 February 2020 one of the female participants shared in an interview I saw the private sectors seek skilled persons for recruitment, but as I am fresh, I am not skilled so I need to receive relevant vocational trainings to be skilled. My friends who are working in 'Fashion Design' & 'Textile' also said that the private sector does not recruit fresh people, if you can receive a training on 'Mid-level Management' or 'Quality Control' and achieve necessary skills and competencies you will get a good job with better salary. So, I have got enrolled in this course (FGD # 4, 18 February 2020).

In the garments sector there is a Government regulation that the wages of the garments sector's workers' can not be lower than 5300 BDT. If anyone has the vocational trainings under NTVQF then he or she will get more salary according to NTVQF levels. But in the advertisements of recruitments so far, the criteria about different levels of NTVQF are not included yet, as a result the people who completed different levels of NTVQF vocational training courses are not getting salary structure as per NTVQF levels. BTEB has started to work on this issue, one of the principals mentioned,

...few days ago there was a workshop with BTEB and there it was discussed that in the advertisement of the new recruitment and even in the promotion criteria it will be mentioned about different levels of NTVQF vocational training courses, there it will also

be mentioned for which post which level of NTVQF is required (Interview # 3, 19 July 2019).

It is very important to revise the advertisement of new recruitment and promotion according to the different levels of NTVQF course as criteria. If this can be implemented soon which was discussed in the workshop of BTEB, all people (trainees of vocational training courses) will be interested to do different levels of NTVQF vocational training courses. On the other hand, all the training centers will also be compelled to offer only NTVQF training courses instead of offering the traditional short courses.

Participants are also conscious enough in this regard, as per their level of skills and qualification if they get a smart salary they will do and continue the job. People never get interested to continue a job with a low salary rather based on their qualifications they start to find out better options. One of the Principals explained,

... at present the employers are telling they are not getting workers according their demand, but it is possible to supply people as per their demand if they provide satisfactory salary to the workers. In that case the employees also will continue their jobs in the same company instead of changing frequently (Interview # 3, 19 July 2019).

As Government is planning to implement the vocational training courses under NTVQF across the country, so all the traditional short courses will be closed soon. Instead of offering the traditional short courses all the training organization will offer the vocational training courses under NTVQF. Different levels of NTVQF also cover the SSC vocational level, so the two years SSC vocational course will also be under NTVQF and after completing SSC Vocational students will get the NTVQF level certificate. Using the NTVQF level certificate some students will go for higher education and some will go in the job market and in the job market students will be able to use the NTVQF level certificate. One of the Principals mentioned,

...we will not continue with the two years traditional short courses, instead of the traditional short courses we will offer the vocational training courses under NTVQF including the SSS voc level. After completing the SSC voc level the students who will go to the job market, they will be able to use the certificate in the job market and they will be able to fulfill the demand of the job market (Interview # 3, 19 July 2019).

However, it is apparent that the vocational training courses are helping the participants to increase their employability. In this regard, from the perspective of employer's it is important to increase workers' salary and Government should develop a standard rules and regulation regarding salary structure of the workers like the garments sector of Bangladesh. Government should fix the salary structure of the other industries too, one principal explained,

...government should develop a salary structure for other industries also, otherwise for the same qualification some industry will pay 5000 BDT, some will pay 10000 BDT, some will pay 12000 BDT and this will create a mal practice and will not be possible to maintain a standard (Interview # 3. 19 July 2019).

On the other hand, if Government fix a salary structure the employers will also be responsible in some cases, like, they will also feel that as I am giving good amount of salary to the workers, so the workers whom I am recruiting I will use his/her (workers) skills properly, if necessary I will train him/her to fulfill my need. To explain this situation clearly one of the principals gave a nice real-life example,

...if we keep a maid servant for our household work giving 5000 BDT and if the maid servant is from village and can not do anything as your need, in that case it is our responsibility is our to help him/her to learn necessary tasks, otherwise our paid money will not get appropriate return. To fulfill our need, we will teach him/her each and every task, like how to wash and iron clothes, etc. (Interview # 3, 9 July 2019).

In the factory also there are many small tasks and manners, each and every employer should be responsible in that cases. One of the principals said,

...the main gap is the training centers are sending the trained people in the job market but they are not getting satisfactory salary, as a result they are not concentrating on their work rather they left the job and finding out better option. It is not true that the people are not skilled, people are skilled but they are not getting satisfactory salary (Interview # 3, 9 July 2019).

4.6.2.4. Importance of Vocational Trainings in Human Resource Development and Making Them Self-reliance and Confident in their Profession

In our country usually people prefer general education, the mindset of the society is not positive towards vocational trainings. So, in practice students also focused on the general subjects, like, Bangla, English, Social Science and so on (Field note, 5 July 2019). One of the trainers shared, "...in our country students focus on Bangla, English, and Social Science very much, they practice more on those general subjects. As a result, they can not learn the skills and competencies very well, for mindset they don't want to learn skills and competencies and don't come to receive vocational training courses. But vocational trainings, i.e. skills and competencies are very important, our and Government's objectives is to help them to learn skills and competencies (Interview # 7, 4 July 2019). In this regard another trainer added that in the job sector and in the industry sector technical vocational education is being evaluated more than the general education. Especially, in the industry sector a skilled and vocationally skilled person is highly evaluated than a person with general education. A skilled person whatever his/her general educational qualification- eight pass or even five pass- if he/she is skilled and knows hands on practical works - he is being evaluated highly in the industry sector and job market. Even one master's degree holder person from general education sector can not get access in the industry sector or does not get a good job. But if the person is skilled with vocational training get a good job easily (Interview # 20, 23 February 2020).

For development and quality work in any area vocational skills development is very important, without required skills good performance is not possible. One of the principals said,

... professionalism is very important in all types of work/profession and for this training is necessary, in abroad we can see that for all categories of profession there is a certificate, like, even for cleaning profession one need to be trained and certified on this (Interview # 13, 03 Feb 2020).

In the real situation of daily/regular life we have to face so many problems, vocational skills help a man to resolve different problems of the regular life. For example, at home if the fridge does not work a vocationally trained person can resolve this himself/herself; similarly, if the light or fan does not work a vocationally trained person can resolve this. In this regard one of the trainers said, "...of course vocational skills trainings are very important in our regular life because if we want to prosper in our real life there is no alternative of vocational skills development trainings" (Interview # 6, 4 July 2019). Different kinds of trade trainings not only useful to use in the real work of trades, sometimes the trainings can be used in real life situation, too, for example, the knowledge and practice of management can be useful to manage any kinds of things in the real-life situation. Relating the 'Mid-level Management' course with real life situation one of the trainers explained that it is not true that management training course will be used only for the activities of garments trade rather this knowledge can be used during cooking, during reading, at any kind of work this skills and competencies can be applied. For example, for working with the Sewing Machine students learnt how to sit in front of the machine, how to sit to work for long time. This learning and skills not only useful to work with the machine while we sit in office or at home this sitting habit will be useful (Interview # 8, 9 July 2019).

Vocational Skills development training is very important to make the people self-reliance and self-independent. After receiving a vocational training people become involved with different kinds of small initiatives and then become engaged with significant professional jobs. In this regard one of the principals said, "...people enrolled in the vocational training to be self-reliance and many of them start to work on different orders of Block & Butik during the training, speak

with the employers, Butik shops or garments and start to work” (Interview # 13, 03 Feb 2020). One of the participants in FGD 4 added that though I have studied in General Education but for establishing myself I joined the vocational technical sector. Achieving necessary skills and competencies at first, I will try for a good job, i.e. at first, I will establish myself and then I will start my own business as a female entrepreneur, like Butik house or Fashion house (FGD # 4, 18 February 2020). Another participant in the same FGD also added,

...I have been enrolled in this vocational training course for getting a good job, I will learn different hands on activities for the purpose of getting a good job. On the other hand, if I don't get a good job, I will open a 'Tailor' and will try to run/continue this myself (FGD # 4, 18 February 2020).

In addition, from the gender perspective, for the female participants the vocational training courses are very important for solvency and self-reliance. Many of the female from under-privileged families enrolled in the vocational training courses and ultimately, they become benefited using the skills and competencies achieved from the training. About the female participants of the vocational training courses one of the trainers from a female TTC said that almost all the female participants are helpless, some of them are widow woman, some of them are divorcee or from a very insolvent family. After receiving the training, they use this in many ways- some of them go abroad, some start their own business, etc. and help their family to be solvent. For example, one of the graduates went to Jordan and now working in the Classic company with 60000 BDT per month. By working 3/4 months she sent 350000 BDT for her mother to renovate their house. There is another girl who stated her own business using skills and competencies of the vocational training and at present she has one thousand and five hundred workers in her own business. There are many other girls like her who become self-reliance receiving the vocational trainings from this institute (Interview # 15, 17 February 2020).

People use the vocational training for many other purposes, some of them do job, some of them start their own shops, and some of them use their skills to fulfill their own needs. Sometimes people who are staying in abroad enrolled in the training to be skilled and to do something there, for example one of the principals shared, "...few days ago one lady came from America and receive a vocational training for the purpose of using this training in America in an income generating task" (Interview # 13, 3 Feb 2020). One of the trainers also said that vocational and technical education is very significant in our country's context, it is important not only in our country but also in abroad. Both in the country and in abroad vocational education is important because there is huge opportunity to use the vocational and technical skills, especially in the industry sector both nationally and internationally. So, if we think in this point vocational education is very significant (Interview # 21, 23 February 2020).

In practice the general concept is that 'the general education' is memorization based and people can not use this general education in real life situation. For example, in an FGD one of the participants shared,

...in case of agricultural education, we memorize what is agricultural education but we are not taught in detail how a plant is produced, as a result most of us remain unemployed. But after completing general education if we can receive any kind of a vocational training, then combining the general education and vocational training we will get good employment opportunities in future (FGD # 2, 11 July 2019).

For developing human resources to work in the field and factory level of the industries the vocational training and trade courses are very essential. One of the trainers shared,

... for developing the field level workers and human resources vocational trainings are very important, especially for developing the industry based and factory based workers the vocational trade courses are very necessary because they will work in the field and for working in field level they need to be skilled in different trades (Interview # 4, 4 July 2019).

So, for developing the human resources the vocational trade courses are very important in our country. One of the trainers said, "...there is no alternatives of skills, we all know that one skilled person is a human resource of the country, so the trade courses are very essential and important to develop the human resources of a country" (Interview # 8, 9 July 2019). Another trainer added with this point that the vocational trainings are necessary for us and of course very significant because these vocational training courses are developing the skilled people. For example, the people who are receiving the vocational training course they are learning hands on activities, after completing a vocational training course they become skilled in specific area and in future they use these skills and competencies to build their career (Interview # 17, 17 February 2020).

In fact, for the overall economic growth of the country human resource development is very important and it is only possible by providing different kinds of vocational trainings. So the Government of the country also is giving importance on the vocational skills trainings, initiating different kinds of projects to strengthen the vocational skills development training system. One of the trainers shared, "...in the last parliament of the country the Prime Minister asked the ministries to keep more fund allocation for the Technical Vocational Education and Training" (Interview # 15, 17 February 2020). He also explained that few years ago the vocational trainings were neglected in our country, the wayward, disobedient children of the parents who are irregular in their studies usually were enrolled in vocational trainings but now a days the situation is changed through different kind of research activities many specialists proved that to change the country into middle income and a developed one the vocational trainings should be mandatory for all (Interview # 15, 17 February 2020).

It is also important and essential to increase both the training facilities and industrial facilities to address the large number of people of our country. The total number of people of our country is more than 18 crore and very less amount of people of our country know about the industry sectors and different available vocational training programs of different trades. So, in this regard initiatives can be undertaken to inform the mass people about nature of different industry sectors, their requirements and the available vocational training programs which are required in the industry sectors. Then the people will know about those sectors, they will know about the job and training opportunities and will be interested to work and be involved in those sectors (Field note, 15 July 2019). In an FGD on 11 July the current participants shared about this point that

...it would be better if the vocational training facilities and job facilities has been increased, we think if we have more training centers and relevant industries in our country, then the educated young people who are still unemployed, they will get the employment opportunities in this sector (FGD # 1, 11 July 2019).

These types of increased facilities will also help to resolve the unemployment problem of our country and in this case our whole country will be developed soon (field note, 15 July, 2019).

The current participants of the vocational training programs also gave emphasis to increase the vocational training facilities of our country, they specifically suggested that it is very important to increase the seat numbers of the vocational training programs, in this regard they said,

...for example, in this particular training program we total 30 participants are enrolled because in this session total 30 seats are available in this training program and there is no scope for more enrolment. But if there is, i.e. in this vocational training program 50/60 seats were available, and then more trainees will get the opportunity for enrollment (FGD # 1, 11 July 2019).

Especially, the vocational training courses under NTVQF levelling the skills of trained people according to an internationally recognized frame. As a result, through proper documentation of the vocational training courses under NTVQF, we can get the number and level of skilled

workers a factory requires and currently has. These types of information are useful for giving the salary to the workers and productivity as well. One of the specialists and higher officials mentioned,

...we should promote the vocational training courses under NTVQF because they are leveling the skills as per internationally recognized frame which are useful for giving the salary to the workers of a factory and also useful for increasing the productivity (Interview # 1, 24 June 2019).

One of the higher level managers also said that of course the vocational skills trainings are important but the people of that vocational training sector need to find out where the vocational trainings will be applied or used, for whom the trainings are developed and ultimately after receiving the vocational training where they will go for work/job. I think keeping all these points in mind the vocational training courses need to be designed and facilitated (Interview # 9, 13 October 2019).

CHAPTER V

DATA ANALYSIS AND FINDINGS:

Pedagogical Practice of Vocational Training Courses

5.1. Introduction

In this study necessary data about pedagogical practice of vocational training courses were collected both in qualitative and quantitative approaches. For example, in the qualitative data collection tools, especially in the interview tools of the principals, trainers and specialists from BTEB a few questions were included focusing on the pedagogical practice of vocational training courses, e.g. opinion about the teaching methods which are used by the trainers in facilitating the training sessions, opinion about the effectiveness of the used pedagogical approaches in the training sessions, opinion about the Competency Based Training (CBT) approach and how far this CBT approach is used by the trainers, available facilities to apply the trainers' session plan in the session, etc. On the other hand, through training session observation necessary data about pedagogical approach were collected in a quantitative manner using Likert Scale. So based on the collected data through qualitative and quantitative methods in this chapter data were analyzed in two major sections, in one section pedagogical practice of the vocational training courses were analyzed based on qualitative data and in another section practice of theoretical and practical classes were analyzed based on quantitative data where data were collected through training sessions observations. The two major sections of this chapter are as follows:

- i) Section 1: Pedagogical practice of theoretical and practical sessions of vocational training courses based on qualitative data
- ii) Section 2: Pedagogical practice of vocational training courses based on quantitative data

5.2. Section 1: Pedagogical Practice of Theoretical and Practical Sessions of Vocational Training Courses Based on Qualitative Data

In practice there are separate theoretical and practical class for each of the specific content. The allocated time of a specific session is 4 hours and from this 4-hour class time two hours is for theoretical class and another two hours is allocated for practical class. Usually the pedagogical practices of theoretical and practical classes are different from each other. In the theoretical sessions the trainers make the participants understand different concepts and narrative descriptions, techniques and ways of a practical work and in the practical sessions the trainees practice the task individually using relevant tools and machineries. So, the delivery mood of the theoretical and practical sessions differs from each other. In this regard one of the trainers explained that practical classes and theoretical classes two are different in terms of delivery mood. Usually, we start the theoretical sessions using a warm-up activity or asking them how they are then we explained the particular content of the session. In the practical classes at first, we the trainers demonstrate the practical task of the particular class and after demonstration of the trainers each individual trainee demonstrate in front of the trainers. At that time the trainers helped the participants to complete the task properly maintaining its quality and correct measurement. The job-sheet have been provided to them before the practical session and participants do the practical task following the job-sheet (Interview # 8, 9 July 2019).

Regarding the practical classes one of the trainers explained that there are four stages in the practical classes- in the first stage the trainers demonstrate the task, i.e. the trainers demonstrate do the task and then the trainees will see the task. In the 2nd stage the trainers will do the task again and then the trainees will ask questions to the trainers and the trainers will give answers to the trainees' questions. So, in this 2nd stage an analysis has been done by the trainers and

trainees. In the 3rd stage the trainers and trainees do the task together. These three stages are teaching part in the practical classes of the vocational training courses and in the 4th stage the trainees practice the task themselves which is called ‘of your goals’ where the participants will do the task themselves. If the trainers can facilitate the practical classes in that way following the four stages then there is no scope to exist any kind of gaps in acquiring the specific skills and competencies (Interview # 16, 17 February 2020).

In this regard another trainer also shared,

...at first, I gave lecture to make the participants understand the theories or relevant concept of the session whether it is theory class or practical class, then I demonstrate the practical task in front of the students and gave them group based practical task based on discussion. These types of various teaching methods we use for facilitating the training sessions (Interview # 17, 17 February 2020).

In the pedagogic practice of vocational training courses at first the trainers used to take the theory class and then based the theoretical and conceptual discussion of the theoretical session they take the practical class. In the practical class mainly, the participants do the hands-on activities based on their learning and knowledge from the theoretical class. In some cases, in the theoretical class the trainers explained the ways of the practical task, they help the trainees to learn how to do the practical class and then ask the participants to do the task. Regarding teaching-learning practice one of the trainers described,

...at first, we teach the theoretical part then go to the practical class. For example, the hands-on task which participants will do in the practical class, we take a theoretical class on this specific practical work- how to do the task, what types of materials and machineries need to use to do the task, what types of safety is required to complete the task safely, etc. Then we go to the practical task and do the specific hands-on activity which was discussed in the theoretical session (Interview # 20, 23 February 2020).

For each of the vocational training courses BTEB developed specific Competency Standards (CS) and BTEB provides these CS to the training organizations to follow during facilitating the trainings. One of the trainers explained that the CS which BTEB has provided us- these are up-

to-dated and we facilitate the training sessions following these CS. According to the CS we have lesson plan, session plan, job list and how the job will be done and we have the plan which job will be done on which day. Before starting the training session, we write the job number, activities for the job, how the activities need to be done on board and accordingly following the CS we provide the handouts to the participants and all necessary materials required for the practical work (Interview # 15, 17 February 2020).

In addition, in many cases the theoretical and practical sessions are held in the same classroom/venue. The classrooms are organized with tools and machineries, in case of the classrooms of garments trade there are sewing machines on the tables and the trainees are sitting on the chairs attending the theoretical sessions. Sometimes participants attend the theoretical class in the corner of the classroom sitting on chairs in rows. In case of the classrooms of other trades the scenario is almost similar, like in the computer trade the computers are kept around the classroom and the participants are attending the theoretical classes sitting on row of chairs in the middle of the classroom. In this regard one of the trainers said, "...we take the theoretical and practical classes in the same classroom but separate classrooms can be used for the two categories of classes" (Interview # 8, 9 July 2019).

However, it was found that in the current practice of vocational training courses the theoretical part of the training courses is given more emphasis than the practical part of the course. For example, one of the specialists from BTEB commented,

...in the current practice of vocational training courses, we are giving priority in the theoretical concepts and examinations and giving less emphasis on the practical work. Here we are mainly providing certificates based on the theoretical assessment. I don't find any difference between Vocational Skills Development Trainings and a general subject under Social Science discipline (Interview #1, 24/06/2019).

Similar types of phenomenon were also found through training sessions observations. The trainers were giving more time to teach and explain the theoretical concepts of the course rather than providing opportunities to practice and rehearse new skills. In the current practice of vocational training courses, it was observed that the trainers presented and explained the specific content of the session very clearly and in an interesting and enjoyable way but in case of practice of the new skills, the trainers did not provide opportunities to practice and rehearse the new skills rather the session was mostly theory/content based (Training session Observation # 3, 09/07/2019 & 11/07/2019).

Though in the written syllabus of the traditional short courses there are 80% practical part and 20% theoretical part but in practice it differs. In this regard one of the trainers also shared,

...in the vocational training courses there are more theories, especially the syllabus of the Voc 9 & 10 are very dangerous, there are so many contents that they can not go for the practical work but in the vocational training courses practical work should be the main priority. Similar things happened in case of the vocational training courses which are developed by BTEB, after completing the concepts and theories of the syllabus they can not do the practical tasks. Though theories are important to know but there are too many theories in the vocational training courses (Interview # 4, 4 July 2019).

About learning the practical work during vocational trainings one of the employers also said, it is essential to learn the practical work during training otherwise the trainings will not be effective.

Very specifically he mentioned that,

... the trained people from the training center do not understand like our companies' people, they do not understand like them because there is difference between theories and practical. Only theoretical knowledge is not useful, an operator must need to know how to run a machine, he should be able to explain the things to the supervisor, even if the machine does not function well he should be able to manage the situation in absence of the mechanics (Interview# 10, 10 December 2019).

The assessment system of the practical work of vocational training courses also needs to be conducted rigorously. CBT & A system should be applied for the assessment of all kinds of trainings ensuring each individual's skills in a particular practical task. But in our country only

for the NTVQF courses this assessment system is applied, for the traditional vocational trainings it is not applied whereas majority of the training organizations are offering the traditional vocational courses in large scale. For explaining this fact one of the trainers shared that in our country some of the vocational training courses are up-to-dated but some are very old and traditional. In the old traditional training courses the assessment system need to be changed because the assessment which is held in those vocational and technical trainings this is just like formalities, for example, in our country who are attending the SSC-Vocational examination they are not even asked to go to the laboratory for practical work but they are getting full marks in the practical examinations, there is no fail because none of them are actually doing the practical tasks. So, to some extent the courses are fine but assessment system of the practical work needs to be up-to-dated and this should be held transparently (Interview # 7, 4 July 2019).

In the practice of traditional short courses sometimes the scheduled practical classes are not held properly, like the CBT &A and NTVQF courses the trainers are not also maintained any record book for documentation. As a result, it is difficult to understand whether the practical class has been held or not, one of the specialists from BTEB shared,

...in the conventional trade courses it is difficult to understand whether the practical class is held or not, there is no any kind of record book, just based on the trainers oral word it is assumed that the practical class has been held and the attendance sheet helps to get idea about trainees attendance only in the theoretical class (Interview # 1, 24 June 2019).

5.3. Section 2: Pedagogical Practice of Vocational Training Courses Based on Quantitative Data

In the training organizations the training sessions are held in two parts, firstly, took the theoretical class and then based on the theoretical discussion they used some job sheets for the practical classes. In this study using a 'training session observation schedule' both the theoretical and practical training sessions were observed. The collected data through training session observation were divided into two major themes and using basic descriptive statistical analysis all the relevant data were analyzed in the following sections of this chapter. In regards to pedagogical practice the major two themes are:

1. Practice of Teaching-Learning Process and Activities in the Theoretical Class
2. Practice of Teaching-Learning Process and Activities in the Practical Class

5.3.1. Practice of Teaching-Learning Process and Activities in the Theoretical Classes of the Vocational Courses

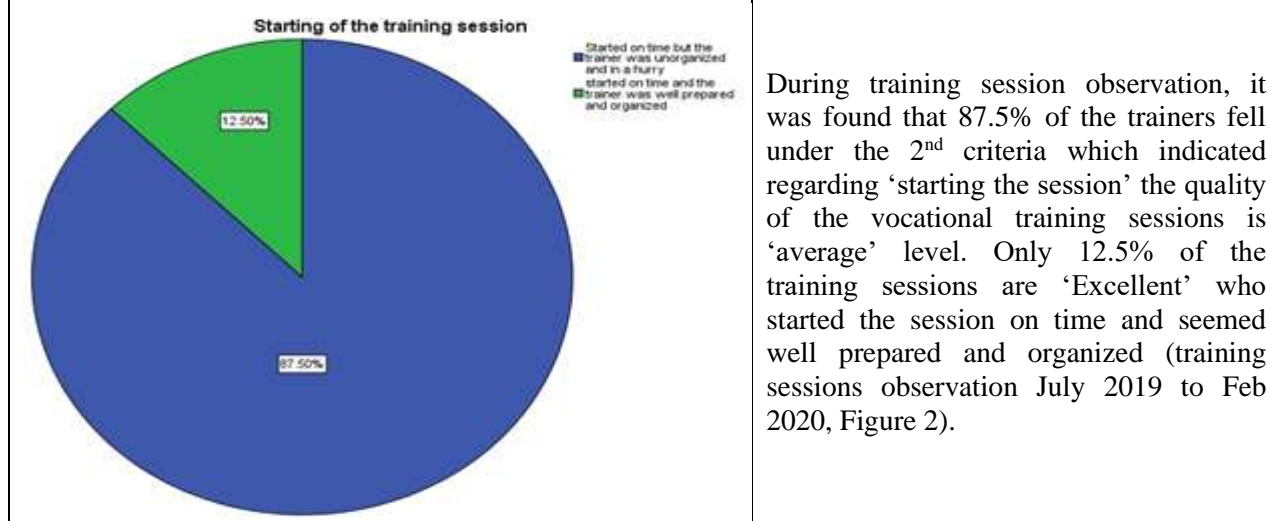
Usually in the theoretical part of the session the trainers used to teach the concepts and knowledge-based things of the particular training course. After the theoretical class based on the achieved knowledge and concepts, they asked the students to practice a specific task or job in the practical class. For example, if the content of the theoretical class is like- 'to know how to take measurement from garment and human body' the linking with this the content of the practical class will be like this- 'practicing by students how to take measurement from garment and human body'.

In the theoretical class the trainers followed a course outline provided by the training organization. In this study the theoretical classes were observed using a ‘training session observation schedule’ and in the observation schedule there were some important indicators to observe. Data collected through training session observation were analyzed following the indicators mentioned in the ‘training session observation schedule’.

5.3.1.1. Starting of the Theoretical Session

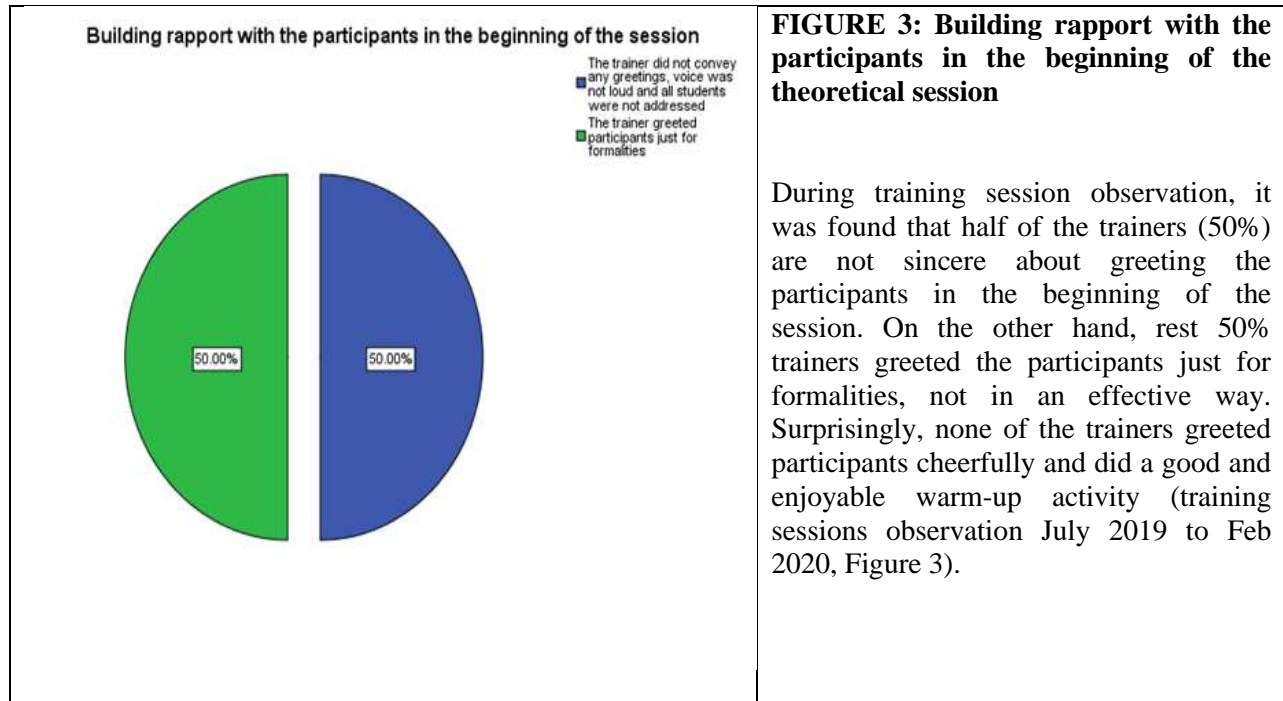
In practice usually the duration of the total class is 4 hours (both theoretical and practical) and from this four hours, 2 hours is theoretical class and another 2 hours is practical class. For example, in the evening time the duration of the total class is from 2:00 pm to 6:00 pm, 2:00 pm to 4:00 pm is theoretical class and 4:00 pm to 6:00 pm is practical class. In the morning time the duration of the total class is from 9:00 am to 1:00 pm, 9:00 am to 11:00 am is theoretical class and from 11:00 am to 1:00 pm is practical class. Sometime in the duration of the class is differed from organization to organization or according to the trades. For example, in a private organization total duration of the class is 5 hours and from this 5 hours first 50 minutes is the theoretical class, half an hour break and the rest 3 hours and forty minutes is the practical class (Observation note, 24 February 2020). However, using a training session observation schedule this indicator ‘starting of the session’ was observed under three criteria and using a three point scale: ‘trainer started the training session on time and he/she seemed well prepared’- “Excellent”, ‘trainer started the session on time but he/she seemed organized and she was in a hurry’- “Average” & ‘Trainer started the session few minutes late and he/she seemed not sincere about the session’- “Poor”.

FIGURE 2: Starting of the theoretical training session



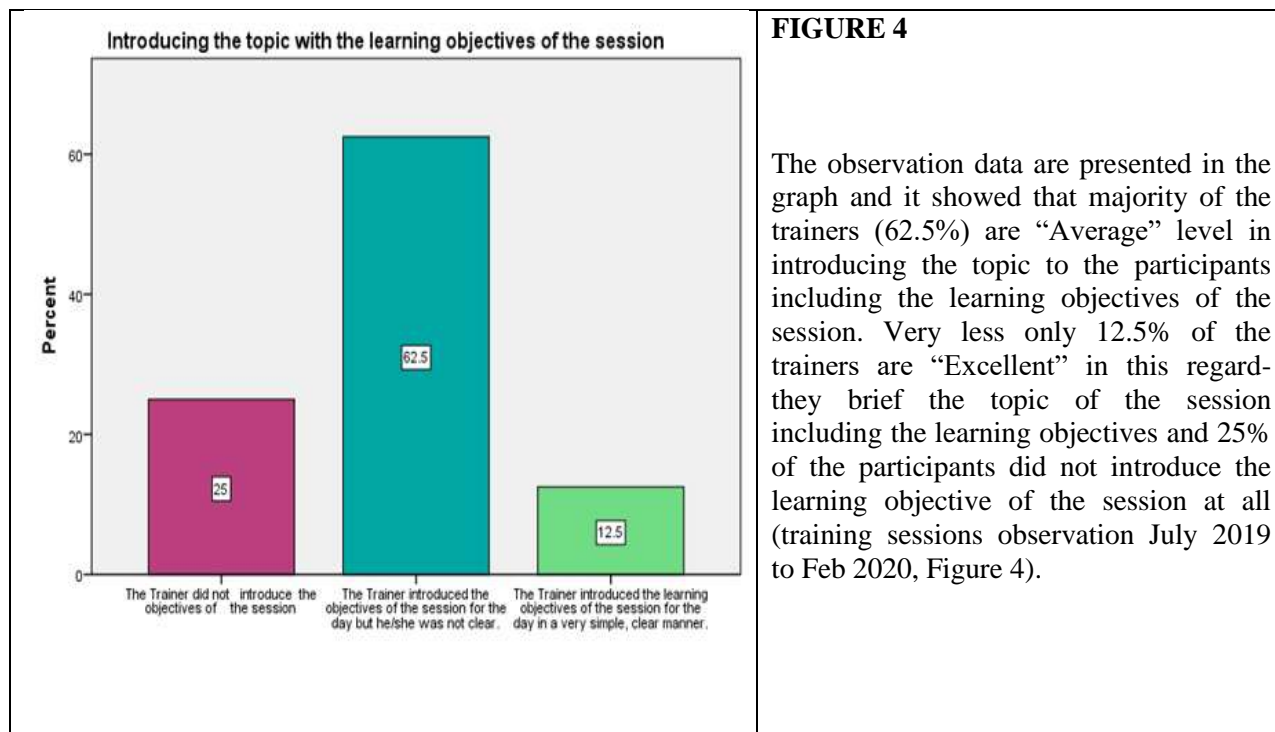
5.3.1.2. Greeting the Participants/Building Rapport with the Participants in the Beginning of the Theoretical Session

Usually in the interactive pedagogical approach the teacher/trainer used to convey greetings with the students and do an interactive warm-up activity to build a good rapport with the participants or to make the participants interested to learn. So in regards to vocational training session observation it was also observed that how the trainers convey greeting with the trainees in the beginning of the training session bases on three criteria: 'the trainer greeted participants cheerfully and did a good and enjoyable warm-up' - "Excellent", 'the trainer greeted participants just for formalities' - "Average" & 'the trainer did not convey any greetings, voice was not loud and all students were not addressed' - "Poor".



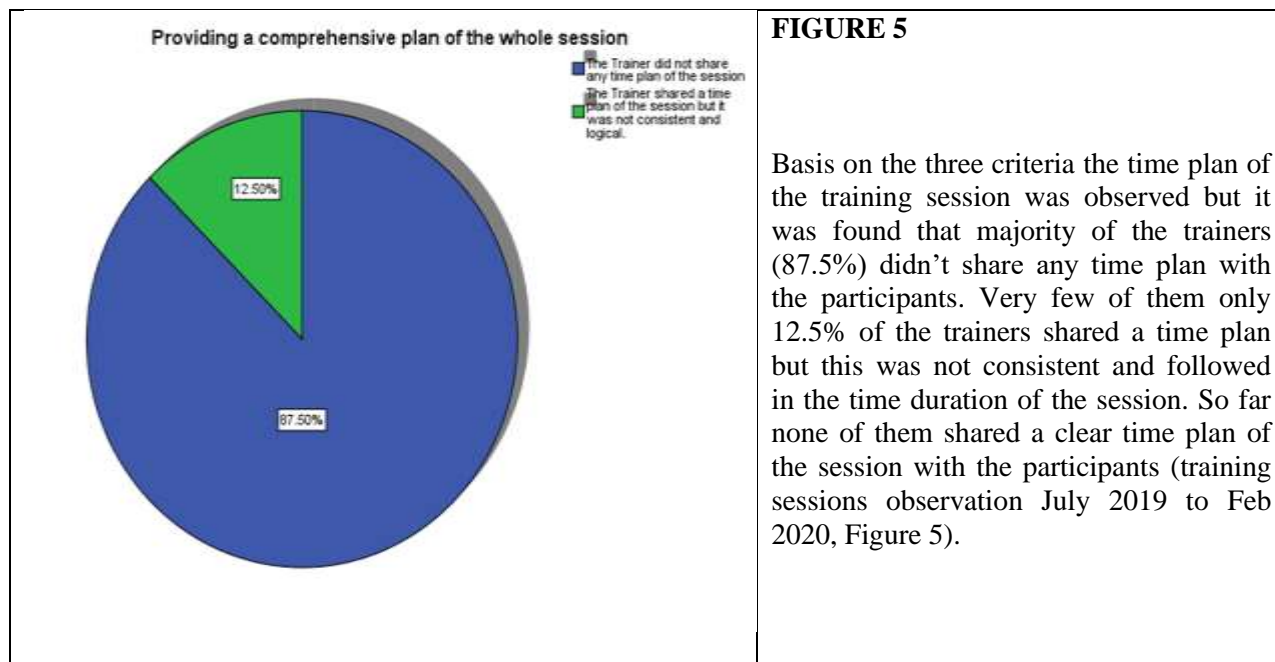
5.3.1.3. Introducing the Topic with Learning Objectives of the Theoretical Session

The first responsibility of the trainer is to introduce the topic of the session to the participants including brief description of the learning objectives which the participants are supposed to achieve after the session. In the practice of vocational training system, it is a very common tradition that the trainer wrote the topic of the session on board just after entering the class. But they did not brief any learning objectives of the session.



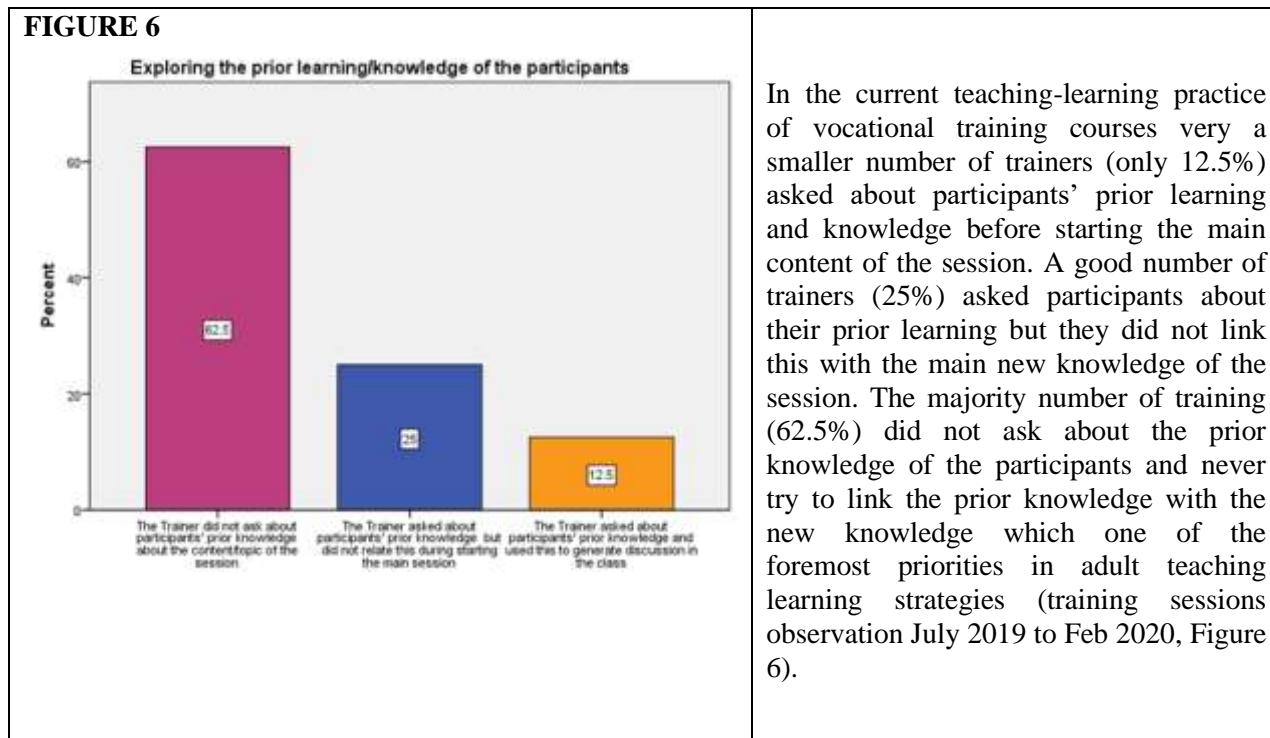
5.3.1.4. Providing a Comprehensive Plan of the Whole Theoretical Session after Briefing the Topic Shortly

Both for teaching and learning ‘time sense’ is very important. So, the teacher/trainer should have a time plan of the whole session and considering the length of time the trainer should specify the content level. Similarly, for a ‘two hours session’ if the participants can know what are the things will be discussed/covered in the particular session, they can prepare themselves to receive and absorb the important learning from the session. In fact, this is a great support for the participants to be attentive and prepared mentally. But in the practice of teaching-learning process of the vocational training system sharing the time plan of the session is almost absent, the trainers are not used to share a comprehensive time plan of the the session with the participants. In the beginning of the session they just used to write the topic of the session on the board.



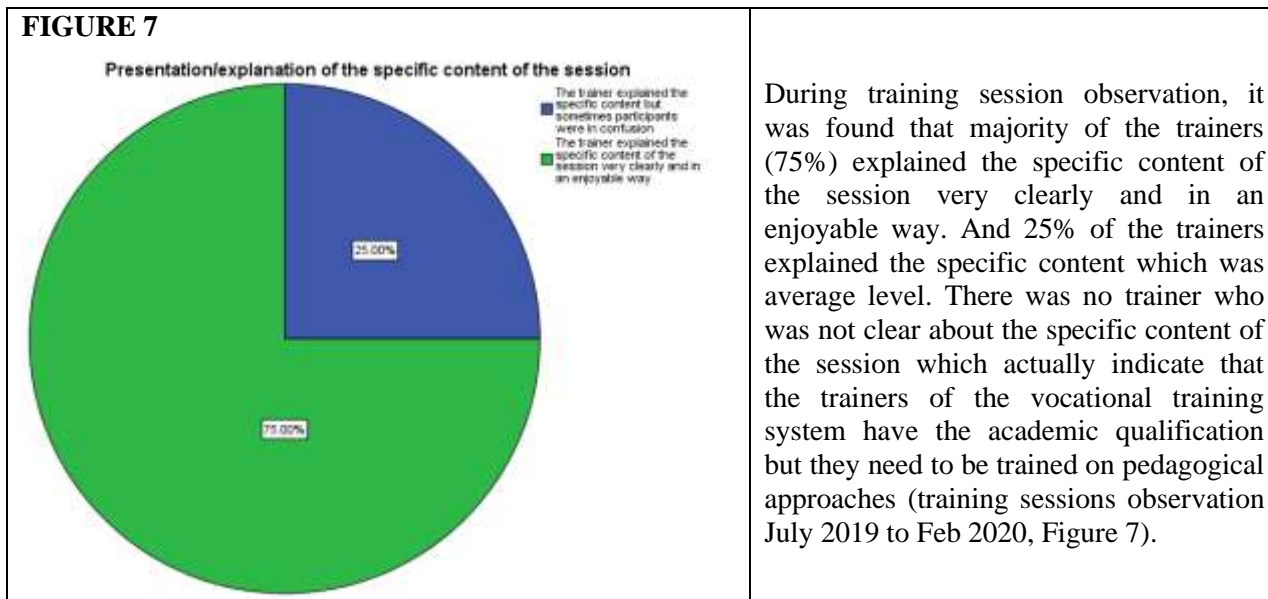
5.3.1.5. Exploring the Prior Learning/Knowledge of the Participants in the Beginning of the Theoretical Session

The participants of the vocational training courses are adult groups and in adult teaching strategies 'students prior learning and background' is one of the most important considerations. Adult people learn very well when their prior learning and experience is linked with the new learning. From this perspective in the vocational training sessions the trainers should give emphasis on exploring the prior learning and knowledge of the participants.

FIGURE 6

5.3.1.6. Presentation/explanation of the Specific Content of the Theoretical Session

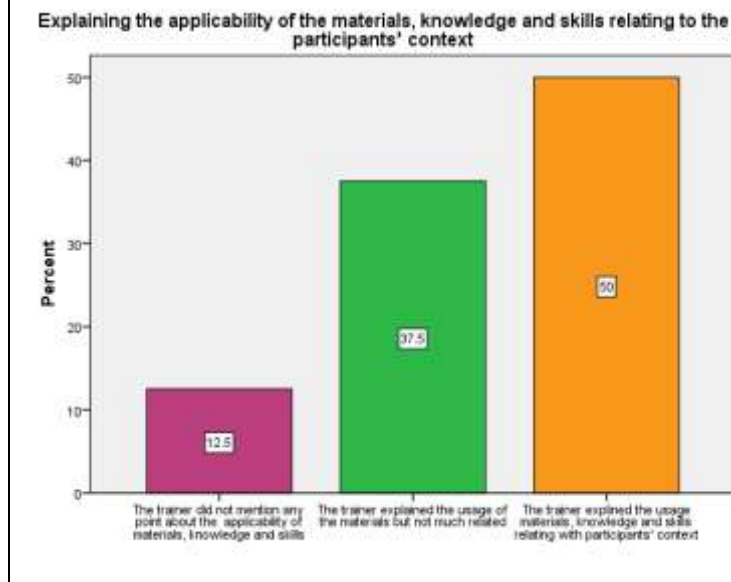
The first quality of a skilled and good teacher/trainer is the subject knowledge, the trainer must need to be knowledgeable on the specific content of the session which he/she supposed to teach. If the trainers have the expected level of subject knowledge, he/she become very confident in explaining the specific content of the session. The vocational training system of our country is emphasizing the theoretical part of the courses and accordingly the trainers also have very good subject knowledge to explain the content of the session in an Excellent manner.



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5.3.1.7. Explaining the Applicability of the Materials, Knowledge and Skills Relating to the Participants' Context

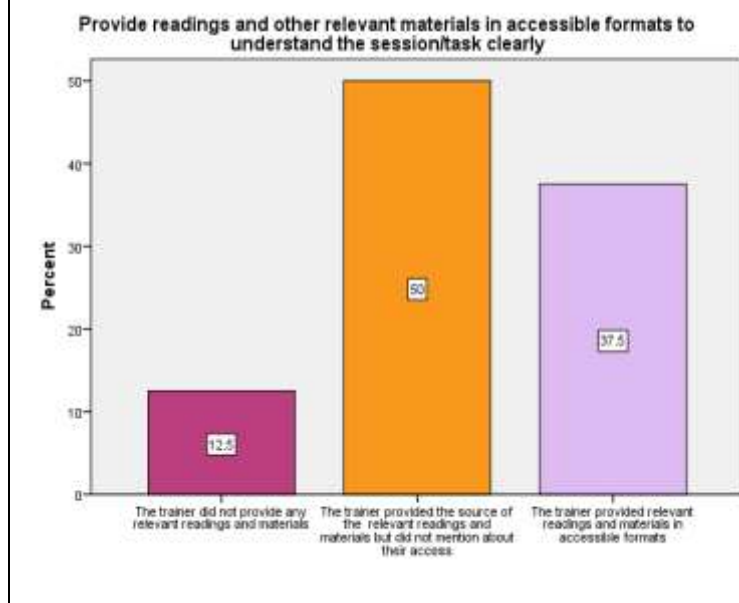
The main purpose of the vocational training courses is to apply the knowledge and skills in the real or professional lives of the participants. For using the knowledge and skills in the real-life situation the participants must need to know about the usage and applicability of the knowledge and skills and the relevant materials. So, in the vocational trainings the trainers should explain the usage of the relevant materials including the ways to apply the knowledge and skills achieved from the particular training course. Especially in the vocational training it is very important to know the proper usage of the materials and in the current teaching-learning practice of vocational trainings the trainers are doing this in an excellent way.

FIGURE 8

The vocational training observation data showed that 50% of the trainers explained the usage of the materials, knowledge and skills relating with participants context. 37.5% of the trainers explained the usage of the materials but not relate this with participants context. And very less number of trainers (12.5%) did not mention any point about the applicability of materials, knowledge and skills which the participants are supposed to achieve from the particular training session (training sessions observation July 2019 to Feb 2020, Figure 8).

5.3.1.8. Provide Readings and other Relevant Materials in Accessible Formats to Understand the Session/Task Clearly

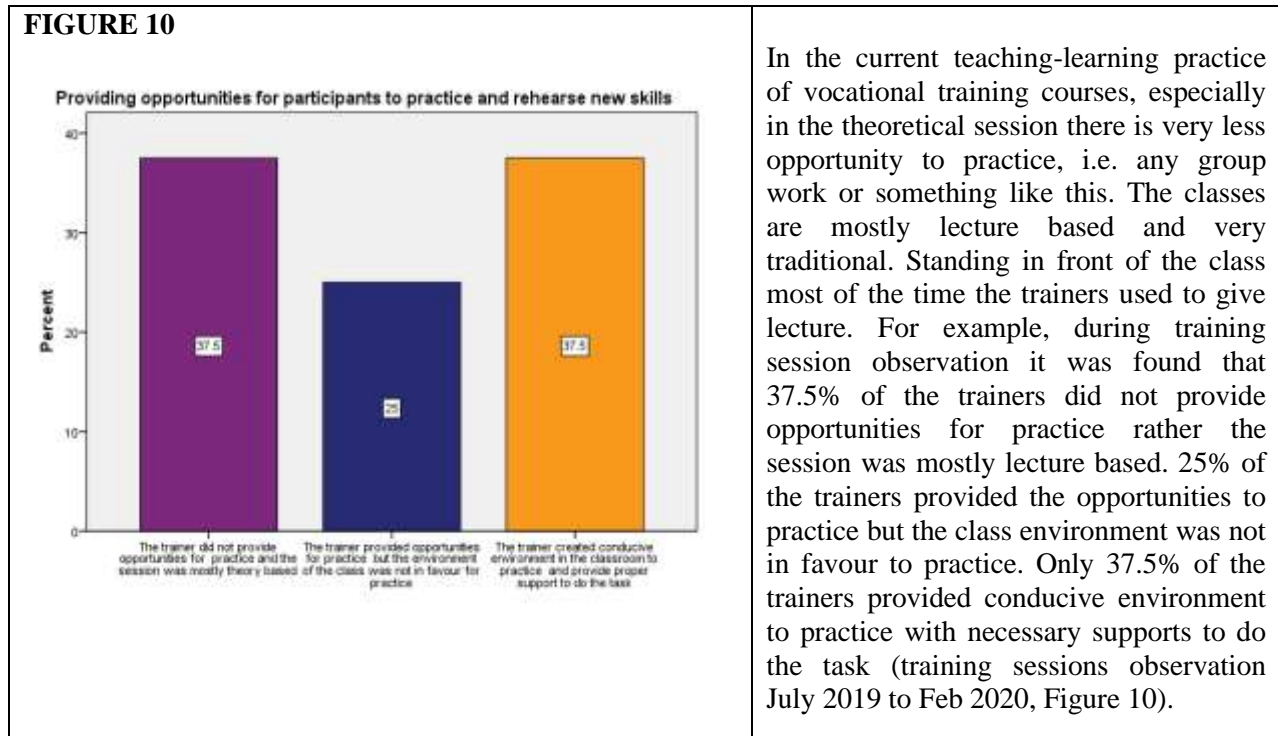
In any kind of a course or class if the participants got the essential readings and other materials in their hands in an accessible format then the participants get the chance to have a look at this. If the participants get the chance to go through the readings during the class or before the class then they can get a comprehensive idea about the class discussion which help them to interact and to be involved with the discussion. Especially in the vocational skill development courses there are many technical terminologies and based on the particular theoretical knowledge they have to do the practical task, so if there is any ambiguity the participants face difficulties to do the practical task properly.

FIGURE 9

In the theoretical session of the vocational skill development courses it was found that a good number of trainers (37.5%) provided relevant readings and materials in accessible formats. 50% of the trainers also mentioned about the source of the readings and other materials though did not say clearly how these are accessible. There are very few numbers of trainers (12.5%) who did not provide any relevant readings and materials (training sessions observation July 2019 to Feb 2020, Figure 9).

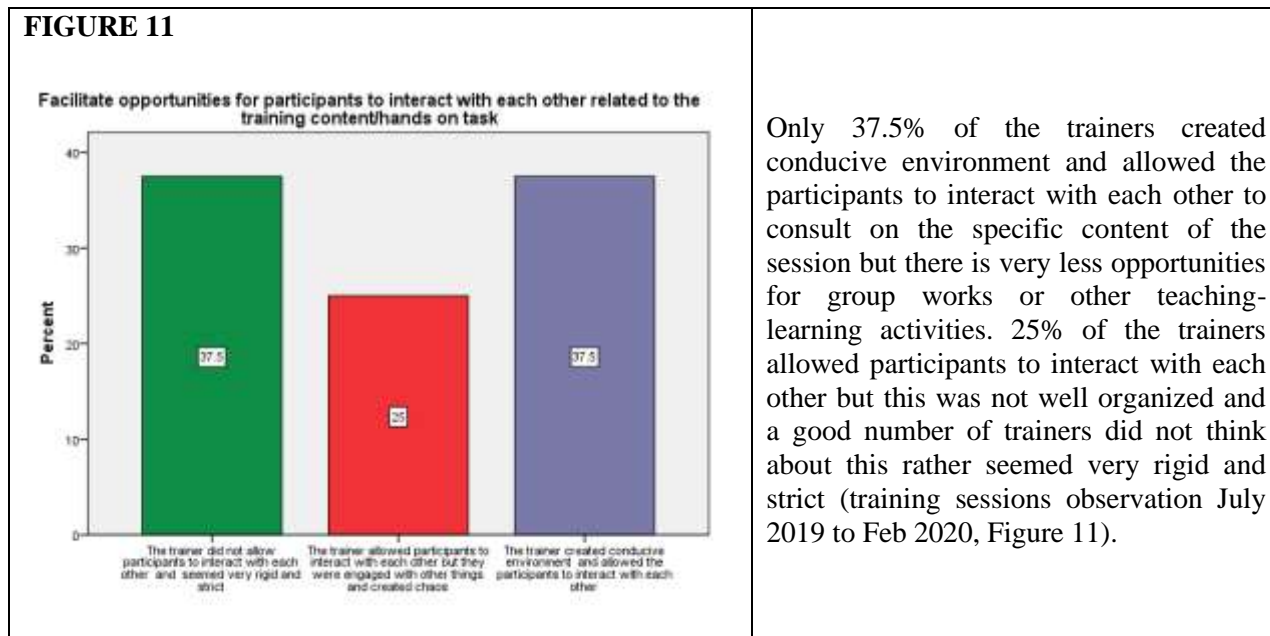
5.3.1.9. Providing Opportunities for Participants to Practice and Rehearse New Skills

There is a proverb that ‘practice makes a man perfect’, this is more appropriate for achieving new knowledge. After listening from the teacher/trainer if the participants get the opportunity to practice on this, might be by writing on their note books or doing the task practically then they can learn well and the learning become sustainable. Especially, the vocational trainings require more practice and opportunities to strengthen the new skill.

FIGURE 10

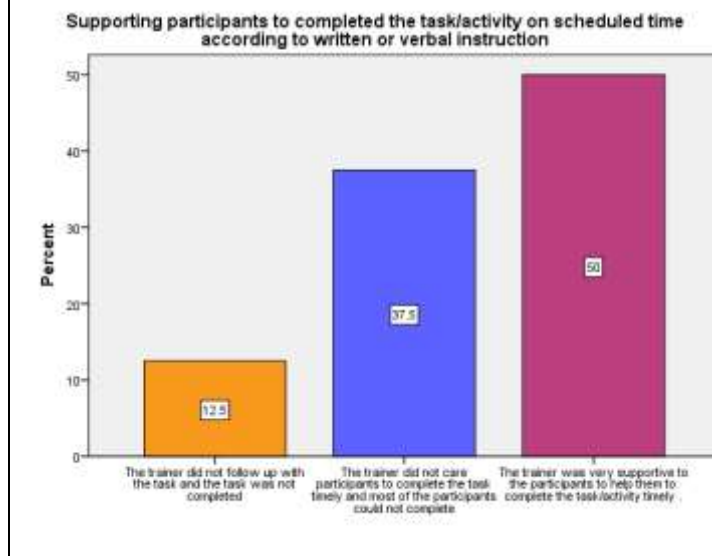
5.3.1.10. Facilitated Opportunities for the Participants to Interact with Each Other to consult the Specific Content of the Session

Now-a-days the effective teaching-learning process emphasized on the students' interaction and active involvement in the classroom and new pedagogical approach suggested the learners' center teaching-learning activities. The teacher/trainer can follow different types of strategies to increase students' interaction and active involvement in the teaching-learning process, like, group works, pair works, peer learning, group presentation, role play, etc. But in the theoretical classes of the vocational training courses these types of teaching strategies are almost absent and there are very less students' involvement in the whole teaching -learning process.

FIGURE 11

5.3.1.11. Supported Participants to Complete the Task/Activity on Scheduled Time According to the Written or Verbal Instruction

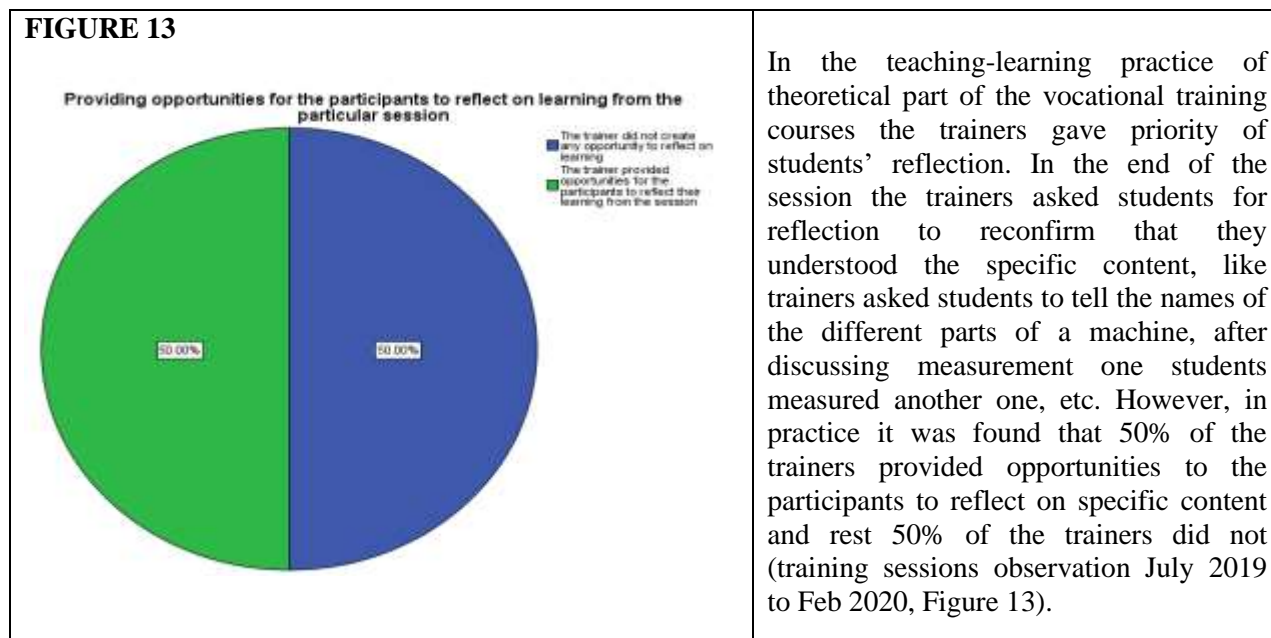
For good teaching time maintenance is one of the most important point, along with the teacher the students also should complete their respective task by specific time. Sometimes for difficulties and challenges students can not complete the task, in that case the teachers/trainers should support the students as required to complete the task by the mentioned time.

FIGURE 12

In the teaching-learning process of vocational training courses the scenario is very positive in this regard. 50% of the trainers were very supportive to the participants to complete the class work by the mentioned time. 37.5% of the trainers did not care the participants to complete the task by time and even 12.5% of the trainers did not follow-up with the participants whether they are able to complete this or not (training sessions observation July 2019 to Feb 2020, Figure 12).

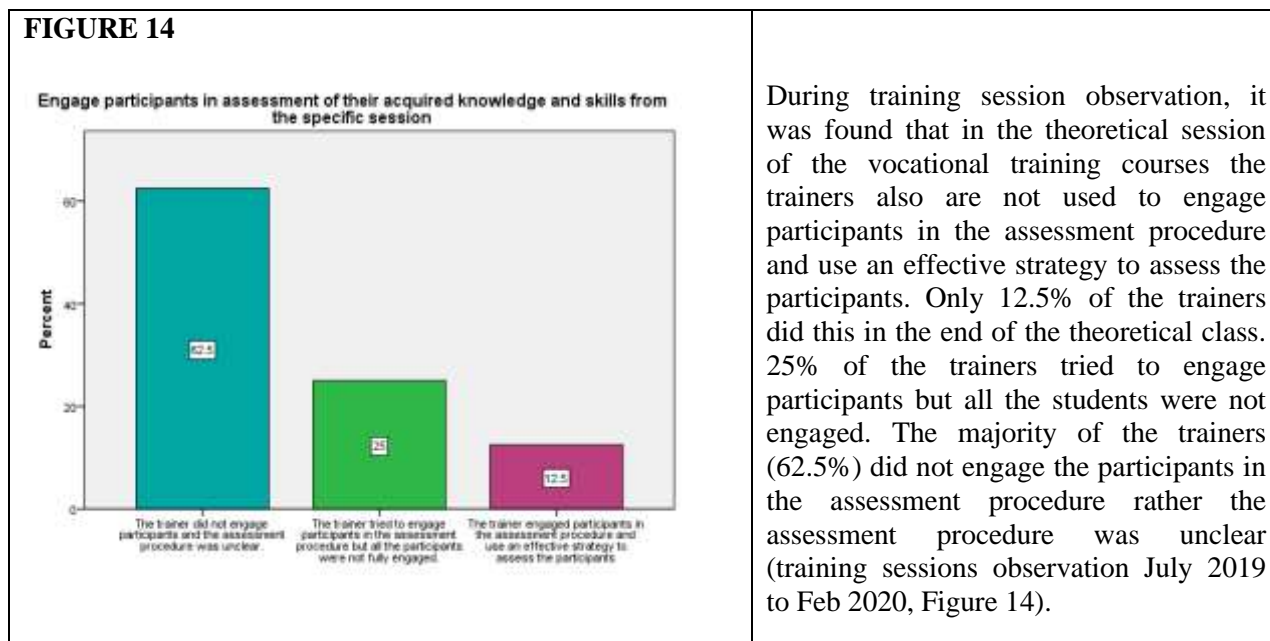
5.3.1.12. Providing Opportunities for the Participants to Reflect on Learning from the Particular Session

Reflection is very important to review the new learning, in fact reflection helps one to confirm better learning looking at the specific content from different lens. To some extent it also helps the learners to revisit the important items and ensure the correctness of the complex part of the lesson. However, it is also true that student's reflection in the end of a session helps students to strengthen the learning, it also makes the applied teaching strategy an effective one.

FIGURE 13

5.3.1.13. Engaged Participants in the Assessment of their Knowledge and Skills from the Specific Session

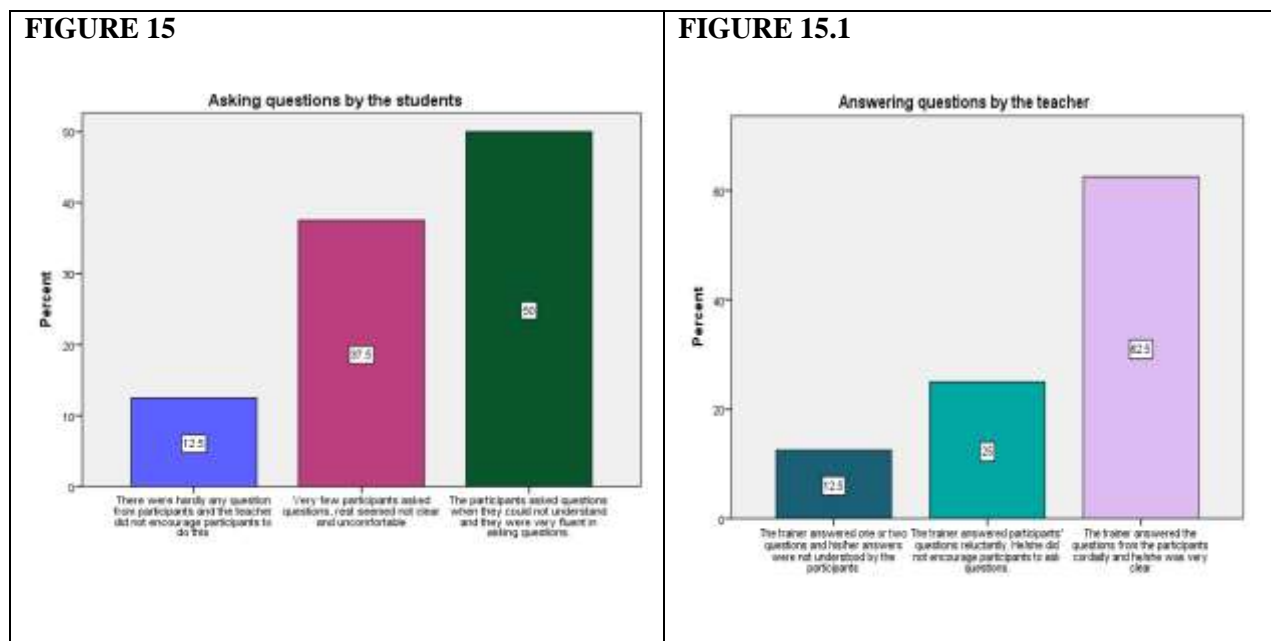
In the current trend of the teaching-learning it is much appreciated and effective if the trainers can generate a constructive discussion to engage participants in the assessment procedure and use an alternative strategy to assess students' learning. In our country this kind of assessment procedure is rarely available, usually the trainers are used to assess the students traditionally, i.e. through paper-pencil test.

FIGURE 14

5.3.1.14. Asking Questions by the Trainees and Answering the Questions by the Trainers

In an effective classroom environment students/participant play an active role, they become engaged in the learning process and interact with each other and feel free to ask the teacher if seems anything ambiguity and complex. Similarly, in an effective classroom qualified and skilled trainer also always answer to the student's questions which is in fact one of the important symbols of a good trainer. However, in the theoretical classes of the vocational training courses there is good practice in this regard. From the students perspective it was found that in the 50% of the sessions- students asked questions when they could not understand and they were very fluent in asking questions, in the 37.5% of the classrooms students asked questions but sometimes they seemed uncomfortable and only in the 12.5% of the classroom there were hardly any question from the participants and the teachers did not encourage participants to do this

rather they showed avoiding tendency to some extent (training sessions observation July 2019 to Feb 2020, Figure 15).



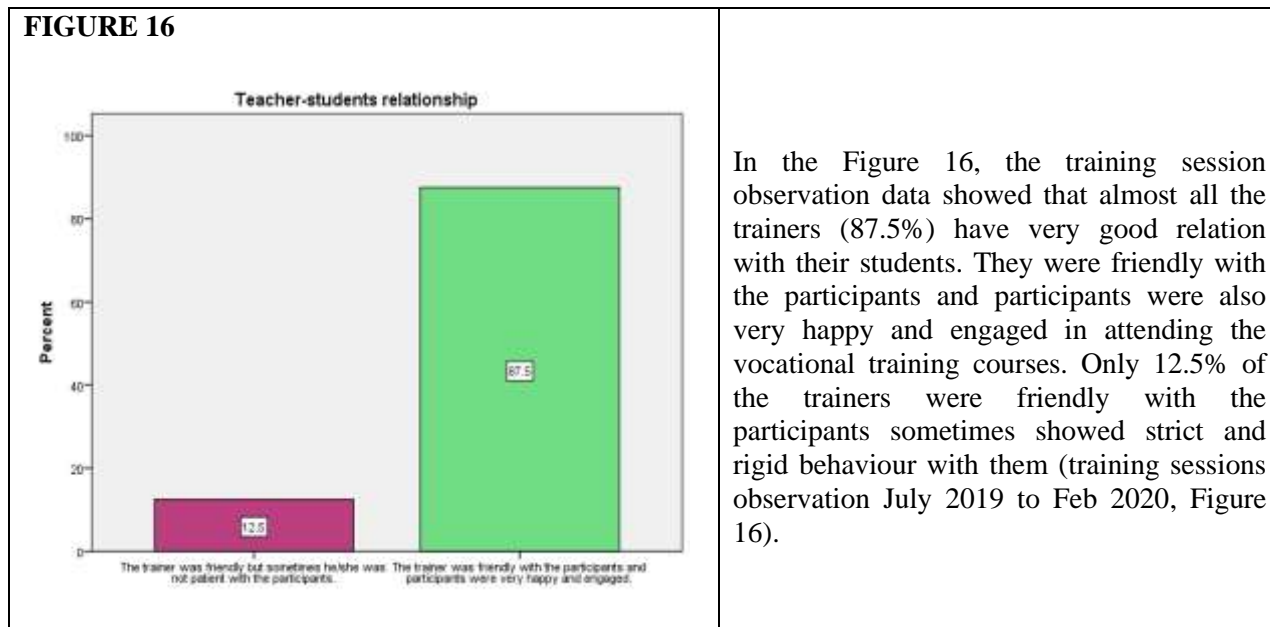
On the other hand, from the trainers' perspective it was also found that the trainers are very positive in this point. Majority of the trainers (62.5%) answered the students' questions very cordially and they were very clear, well behaved and supportive to the participants. Though 25% of the trainers answered students' questions but they seem reluctant and did not encourage students to ask questions and only 12.5% of the trainers answered one or two questions and sometimes the answers were not much clear (training sessions observation July 2019 to Feb 2020, Figure 15.1).

5.3.1.15. Teacher-Students Relationship

Good teacher-students relationship helps student to be comfortable and confident in the classroom environment. Good relationship with the teacher also helps student to actively

participate in class activities, the students become engaged whatever is done in the class and feel free to ask the teacher in case of any challenge or difficulties. The modern pedagogical approach also supports good relationship between the teachers and students. The most positive thing in the vocational skill development system in Bangladesh is very good relationship between teachers and students.

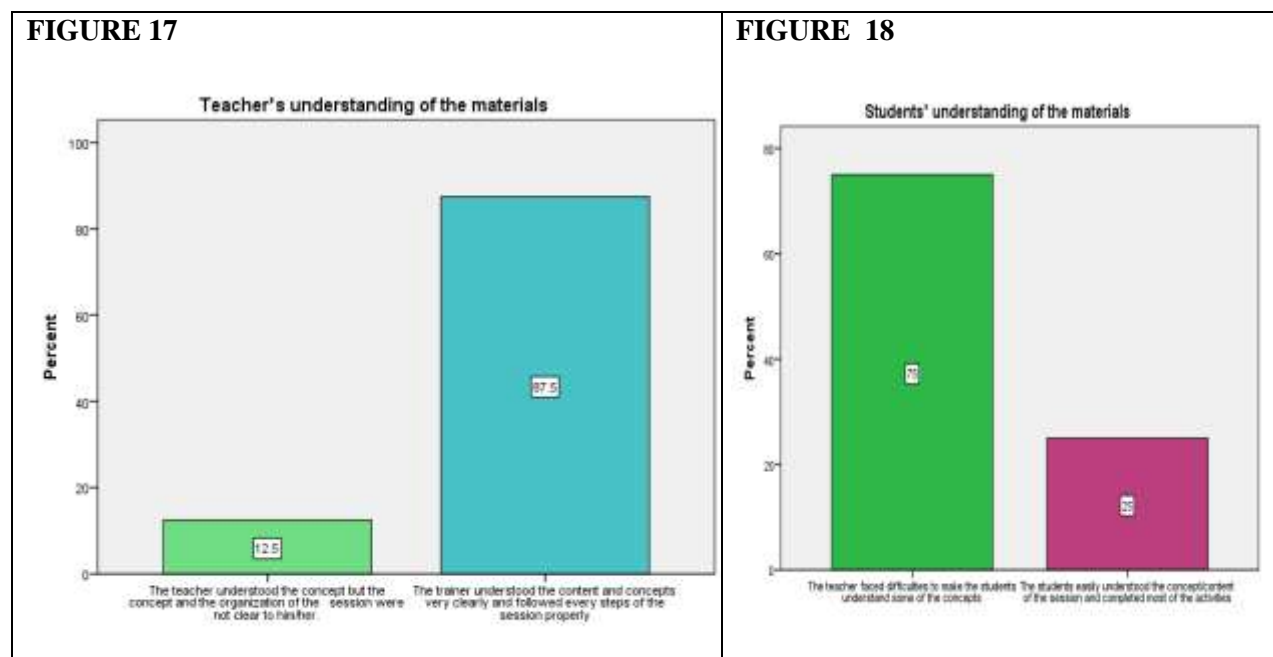
FIGURE 16



5.3.1.16. Teacher's and Student's Understanding of the Relevant Materials of the Session

For the practice of effective teaching and learning the first essential criteria is qualified teachers/trainers in terms of subject knowledge. The trainers should be very confident and should have vast knowledge on the particular subject which he/she supposed to teach, he/she should understand each and every concepts of the lesson. The satisfactory subject knowledge of the trainers also helps him/her to plan an effective session. On the other hand, the course content, relevant course materials whatever we say all the things should be selected considering the

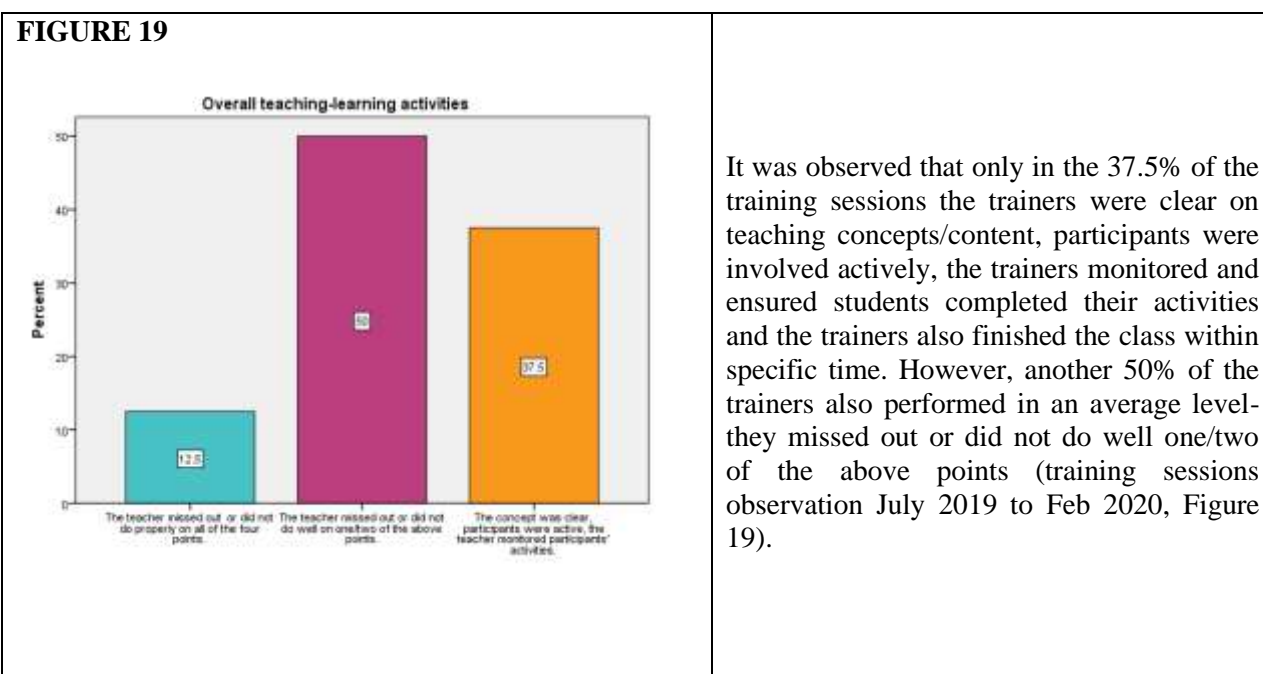
students background and level. If the teacher/trainer is very good, all the materials and facilities are extra-ordinary but students are not up to the level to understand those things then learning will not be happened there. So, course content and materials should be selected considering both the teachers and students' perspectives.



The above figures 17 & 18 showed that the majority of the trainers (87.5%) understood the content, concepts and relevant course materials very clearly as they have required academic background. But the majority of the students (75%) did not understand the course materials and content, the trainer face difficulties to make the students to understand some of the content which ultimately indicated that the course content and materials are not designed or selected considering the students level (training sessions observation July 2019 to Feb 2020).

5.3.1.17. Overall Teaching Learning Process and Activities

In a classroom teaching practice if the content and concepts are clear, participants engaged and involved with the class activities actively, the trainers monitor and ensure students' activities and finally the trainer finish the session within planned time we can consider this as an excellent teaching practice. In the teaching -learning practice of vocational training courses a small number of trainers performed well in all the above areas of good teaching.



5.3.2. Practice of Teaching -Learning Process and Activities in the Practical Class of the Vocational Training Courses

Total duration of a class is usually 4 hours, first two hours is the theoretical and then based on the discussion of the theoretical class-the trainers asked the participants to do the hands-on work in the practical class. For the practical classes they use the job- sheet provided from the relevant project or program. The job-sheet clearly mentioned work procedure, precaution and outcome of the particular job. However, the practical classes were observed with a separate 'Training

Observation Schedule’ including some relevant indicators with the practical session than the theoretical ‘Training Session Observation’. The relevant indicators which were observed during practical session observations were- i) starting the practical class with proper instruction mentioning the learning objectives and time plan ii) Demonstrating the particular task iii) explaining the usage of the materials, knowledge and skills relating to the participants context iv) provided necessary materials in an accessible format to do the practical task properly v) Providing Opportunities for the participants with necessary tools, equipment and machineries to practice the hands on skill vi) Participants shared their individual contexts and needs and relate the task with their purpose vii) facilitated opportunities for participants to interact with each other about the hands on task viii) supporting participants to complete the task on scheduled time according to the written or verbal instruction

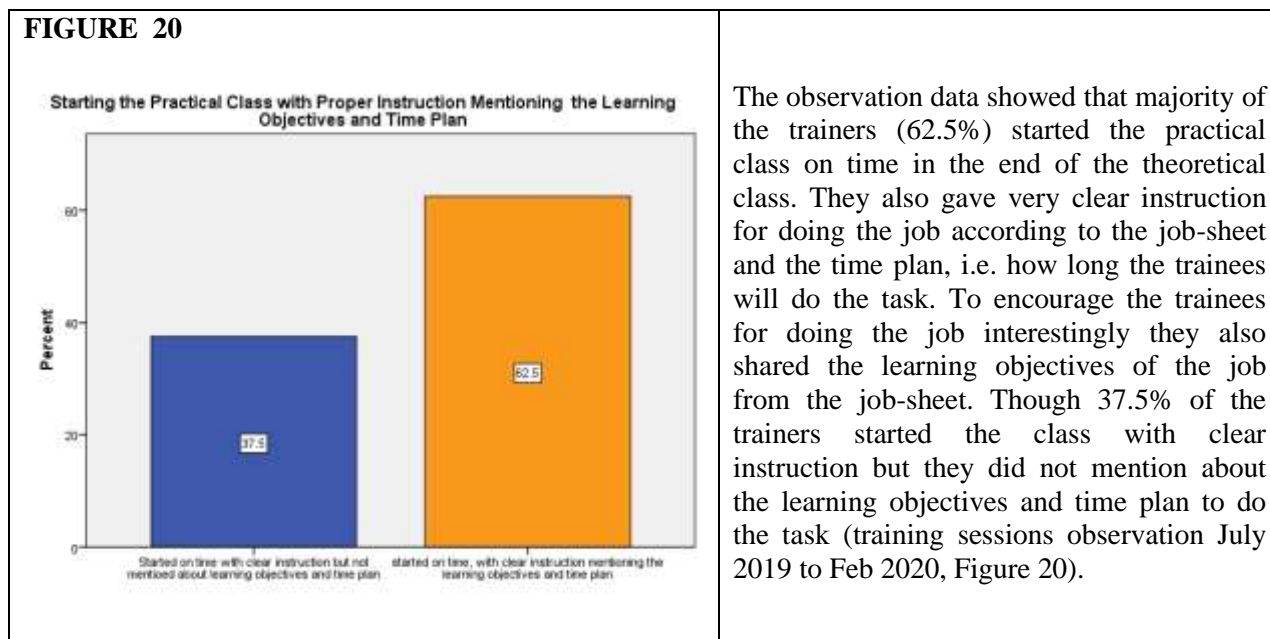
ix) providing opportunities for participants to reflect on their task x) assessment strategies used in the practical sessions xi) asking questions by the participants and answering by the trainers xii) teacher-students relationship in the practical session xiii) teachers’ and students’ understanding of the task and relevant materials xiv) overall teaching-learning activities in the practical class of the vocational training courses.

5.3.2.1. Starting the Practical Class with Proper Instruction Mentioning Learning Objectives and Time Plan

Just after the theoretical class the trainers used to ask the trainees to go the practical class and usually the practical classroom is situated beside the theoretical classroom. So actually, the trainers started the practical class in the end of the theoretical class, in the end of the theoretical class the trainers gave the instruction to the trainees how to do the practical task explaining the use of the materials. The trainers also provided the job-sheets and necessary materials to the

participants before the class which helps the trainees to understand the job properly. The job-sheets are very clearly written including the name of the job, objective, materials and equipment, sketch of the task, work procedure, precaution and conclusion where the learning outcome of the practical class is mentioned. So, during starting the practical session the trainer also explained the learning objectives and learning outcome of the practical session including the time plan of the whole class.

FIGURE 20

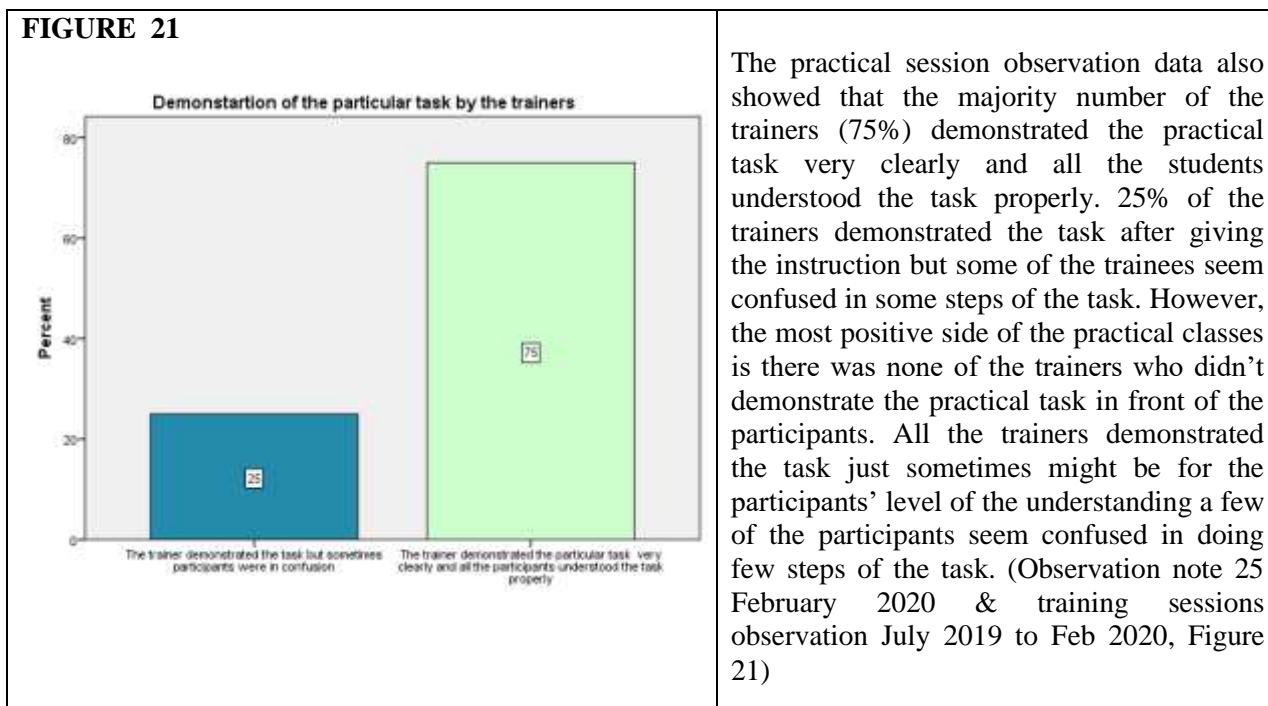


5.2.2.2. Demonstration of the Particular Task by the Trainers

In the practical class one of the most important part is demonstrating the particular task by the trainers which is very useful to help the trainees to understand the task very clearly. In the current practice of teaching-learning of the vocational training courses the trainers do the demonstration of the task in the end of the theoretical class after giving the detail instruction for doing the task. In fact, it was observed that the trainers do the demonstration of the task twice- at first, they do the demonstration and ask the trainees just to see and then in the second time they

allow the participants to ask questions about the task if they didn't understand anything. So, by the 'second time demonstration' the trainers make all the participants to understand the instruction clearly and then the participants do the task themselves in the practical class.

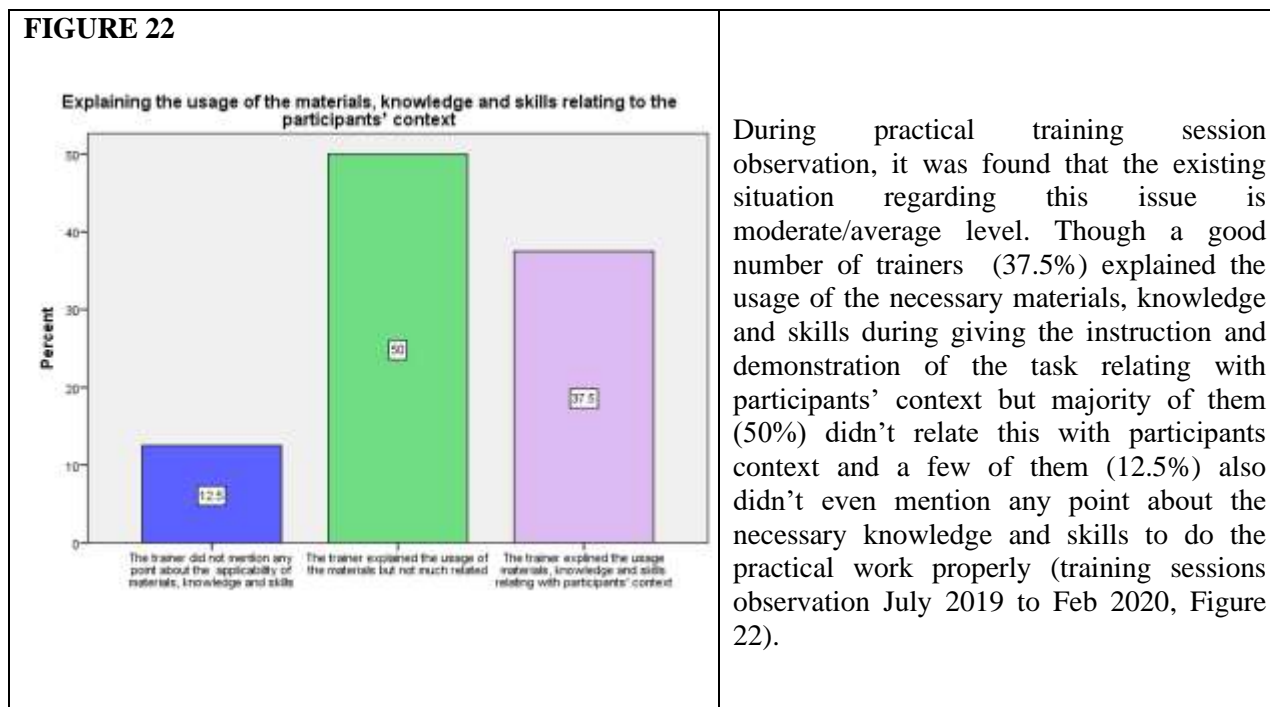
FIGURE 21



The practical session observation data also showed that the majority number of the trainers (75%) demonstrated the practical task very clearly and all the students understood the task properly. 25% of the trainers demonstrated the task after giving the instruction but some of the trainees seem confused in some steps of the task. However, the most positive side of the practical classes is there was none of the trainers who didn't demonstrate the practical task in front of the participants. All the trainers demonstrated the task just sometimes might be for the participants' level of the understanding a few of the participants seem confused in doing few steps of the task. (Observation note 25 February 2020 & training sessions observation July 2019 to Feb 2020, Figure 21)

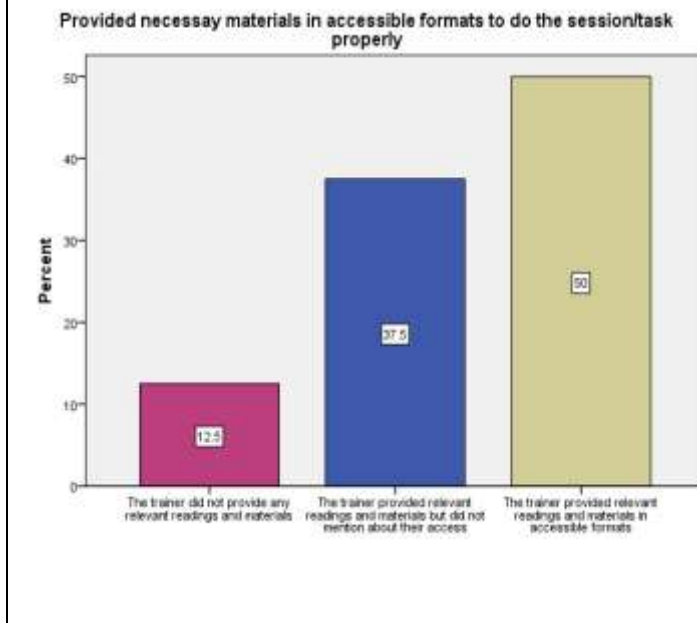
5.2.2.3. Explaining the Usage of the Materials, Knowledge and Skills Relating to the Participants Context

For doing any kind of a practical task properly the participants need to be oriented with the materials which will be used in doing the task and it is much better if the necessary materials of the task have been selected from the students' context. On the other hand, for doing the task and using the materials properly necessary knowledge and skills to use the materials is considered as pre-requisite- the participants must need to know about the materials and their usage, i.e. they must need to have the skills to use the materials in a practical work. Otherwise they will not be able to do the task rather there might have the possibility unexpected accident occurrences.

FIGURE 22

5.2.2.4. Provided Necessary Materials in an Accessible Format to Do the Practical Task Properly

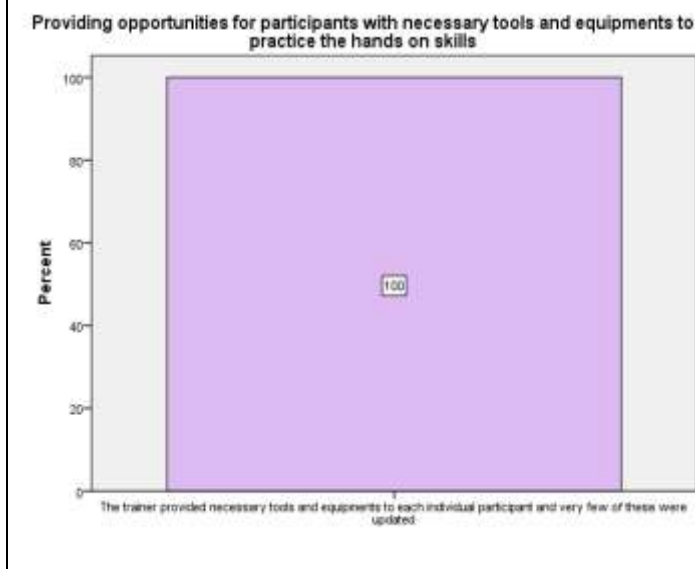
In a class there were about 30 participants in an average, before starting the practical class the trainers demonstrated the task with sufficient necessary materials but at the same time it is most important to provide all types of necessary materials to all the participants for doing the practical task in right way. If there is lack of materials many of the participants will not be able to do the task by themselves, many of them will be missed out from the hands-on experience. So, for a fruitful practical class the foremost criteria is to provide the necessary materials to all the participants so that all of them get the opportunity to learn the task by doing practically themselves.

FIGURE 23

The practical training observation data showed that 50% of the trainers provided necessary readings and materials to all the participants in an accessible format. Here readings refer to the conceptual and theoretical materials provided in the theoretical class including the job-sheet where the work procedure, materials and equipment, precautions, etc. are clearly mentioned. Only 37.5% of the trainers provided the materials but their access is not clearly mentioned and very few of the trainers (12.5%) missed out this point (training sessions observation July 2019 to Feb 2020, Figure 23).

5.2.2.5. Providing Opportunities for the Participants with Necessary Tools, Equipment and Machineries to Practice the Hands-on Skill

In the practical class participants do the assigned task using available tools, equipment and machineries in the classroom and in an effective practical session each and every individual student should be provided the required tools and machineries to do the task. In the modern technological age, the tools and machineries also need to be updated. During practical session observation it was found that most of the training organizations have sufficient amount of tools and machineries, during practical class each individual student got a required machine or tool individually but most of the machines are old version, new updated or auto-machineries are not available in the practical classroom (Observation note, 25 February 2020).

FIGURE 24

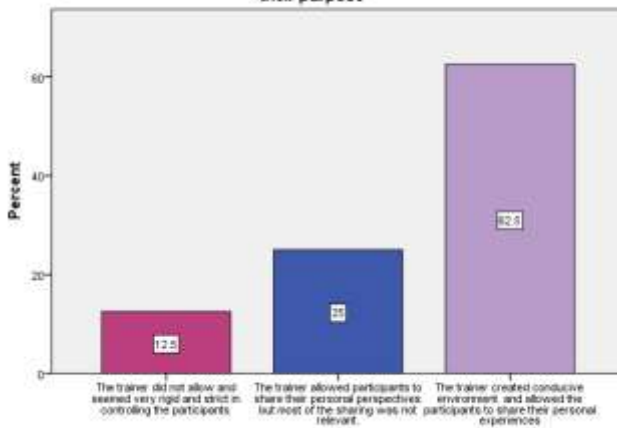
In Figure 24, the practical session observation data also showed that all the training organizations (100%) have sufficient number of tools and equipment which can be provided to each and every individual participant but these tools and equipment were not new and updated (training sessions observation July 2019 to Feb 2020, Figure 24).

5.2.2.6. Participants Shared Their Individual Contexts and Needs and Relate the Task with Their Purpose

Generally, people enrolled in the vocational training courses for the purpose of getting a job or to use the training's skills in their work places. There are also a small group of people who are receiving the training to start their own business or any kind of an income generating work. Whatever the trainees' purpose is the vocational trainings should be related with the participants' context, needs and purpose, especially, the hands-on practical experience is very important to make their different purposes successful. In the practice of the practical classes of the vocational training courses through observation and exploring with the trainers and trainees it was found that majority of the trainers knew about the context and background of the trainees and their purposes to receive the particular training. So, during the practical class the participants were very comfortable to share their purposes to the trainers and the trainers were also very open and cordial to link the particular task with participants background, needs and purposes.

FIGURE 25

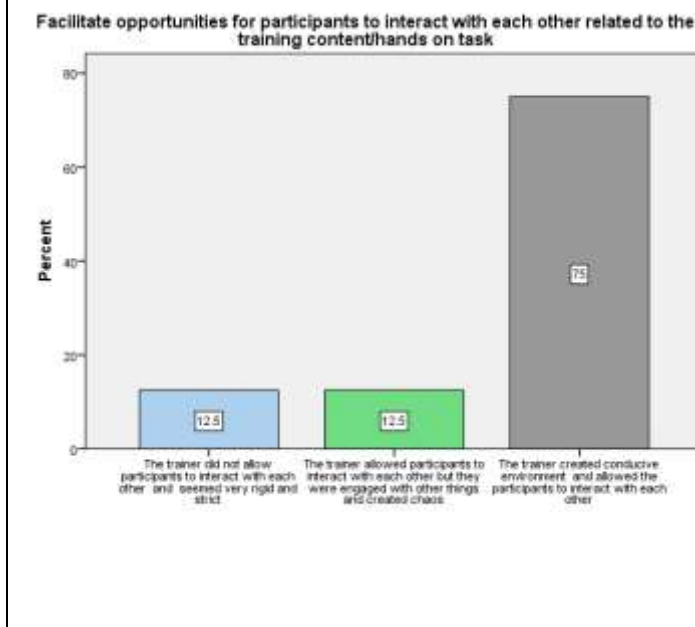
Participants Shared their individual context and needs and relate the task with their purpose



In the practical training session observation, it was found that majority of the trainers (62.5%) knew about their participants' background and purpose to receive this training and they were very supportive to the participants to relate the practical work with their needs. 25% of the trainers allowed the participants to share how do they want to use this training but sometimes this added unnecessary words and become irrelevant. 12.5% of the trainers didn't bothered about this issue (training sessions observation July 2019 to Feb 2020, Figure 25).

5.2.2.7. Facilitated Opportunities for Participants to Interact with Each Other about the Hands-on Task

For completing a hands on practical task the participants are required to know the basic information about the task, what are the materials necessary to do the task, especially, how to use these materials to complete the task and about the procedure of the work participants need to be very clear on each and every steps of the task. Otherwise, the participants will not be able to complete the task in a right way. In that case it's really a great support for any kind of a participants group if there is an opportunity to get peer supports to complete the task resolving the unexpected difficulties.

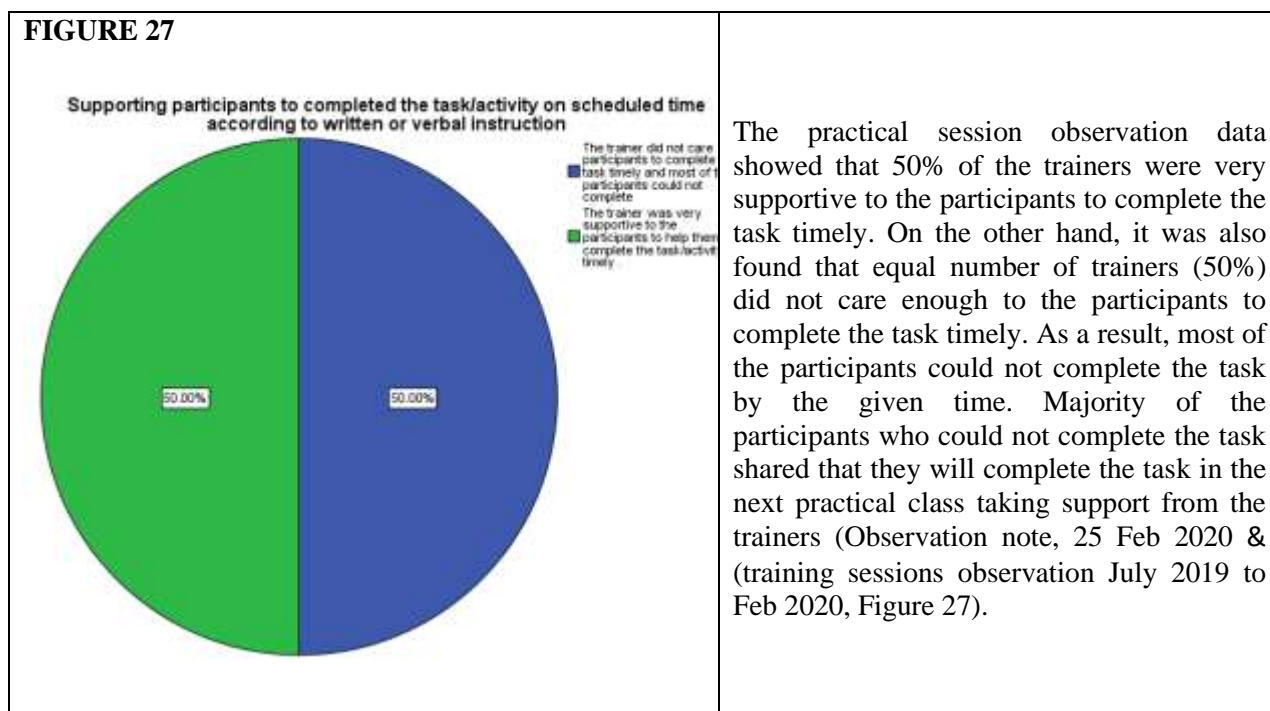
FIGURE 26

In the current practice of practical classes, it was found that 75% of the trainers gave opportunities to the participants to consult with each other and take peer supports in case of facing any difficulty to complete the assigned practical task (training sessions observation July 2019 to Feb 2020, Figure 26).

5.2.2.8. Supporting Participants to Complete the Task on Scheduled Time According to the Written or Verbal Instruction

In the beginning of the practical class the trainers supposed to give a time-frame that by this time all the participants are required to complete this particular task and the trainees also should be able to complete the task by the given time. In a training session all the participants are not equal- always a few students lagging behind from some other bright students and faced struggle to complete the assigned the by the specific time. So, a good trainer/teacher moves around the class and provide necessary to the participants who face difficulties in completing the task. To some extent the trainers allowed the brighter students to support the participants who are facing problems. With the supports of the trainers and or the brighter students all the students able to complete the task by the mentioned time that actually is considered as a very good example of an

effective practical class. In the practice of practical classes of the vocational training courses on this issue the scenario is moderate/average.

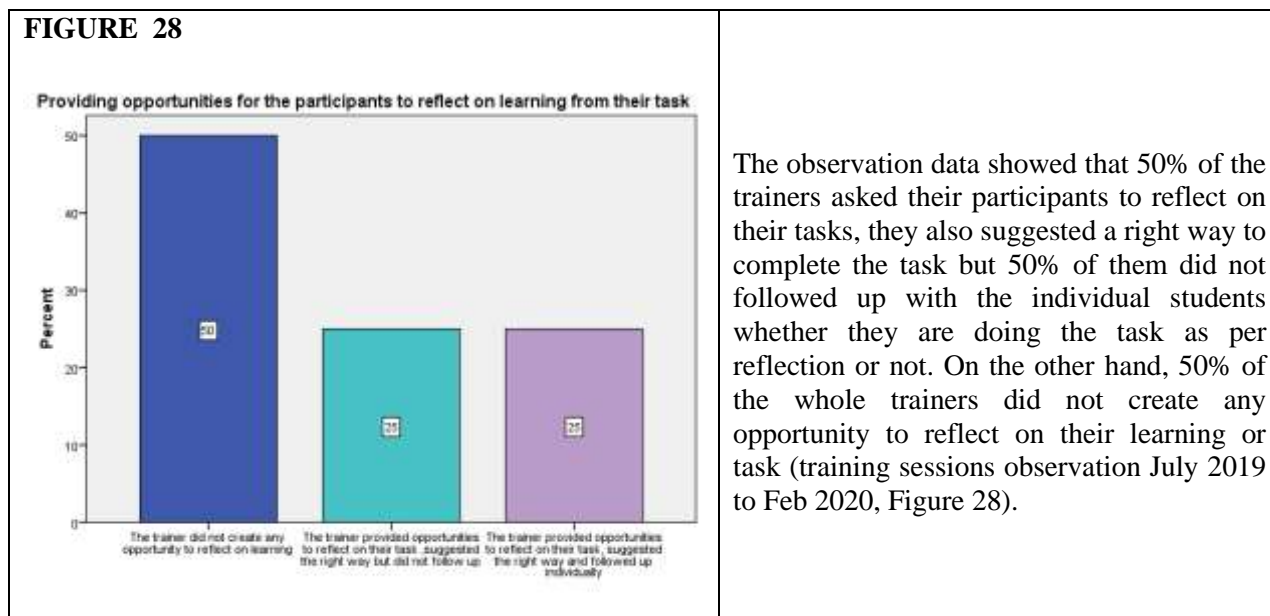


5.2.2.9. Providing Opportunities for Participants to Reflect on Their Task

In the practical class the trainers assigned the participants to do hands on task which is very technical in many cases and for doing the task they have to cut, measure and use the tools and machineries which require concrete knowledge and skill. Otherwise just for a small mistake the whole thing become useless. So, in the practical class usually the trainers asked students to show the task after a little progress and at that time the trainers ask students to reflect on his/her work to be sure whether he/she is proceeding on right track or not. During reflection if there are any mistake the trainers help the individual participant to do the task in a right way, not only this the trainers also followed up with these particular students to complete the task. In the practical classes of the vocational training courses the same practice has been found but a small number of trainers were doing this- the participants who were doing mistakes only 25% of the trainers

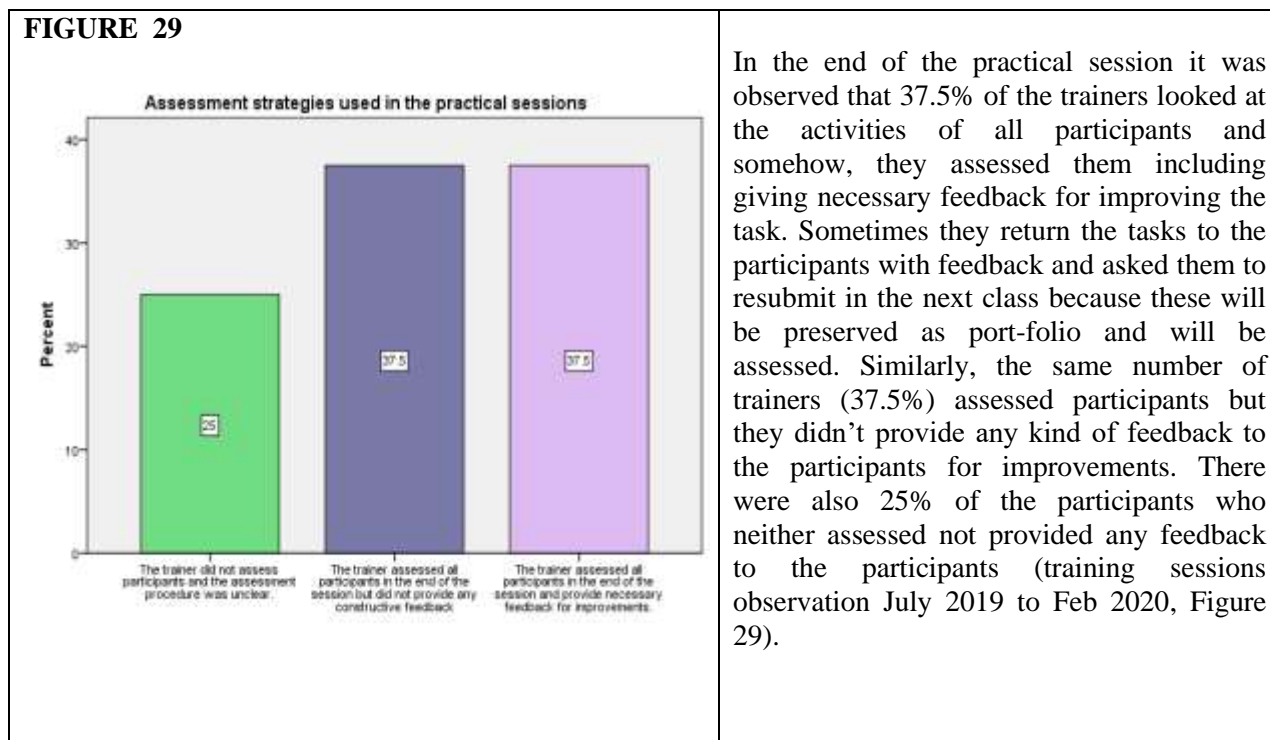
asked them to reflect and identify what mistakes they did and then suggested the proper way to complete the task.

FIGURE 28



5.2.2.10. Assessment Strategies Used in the Practical Sessions

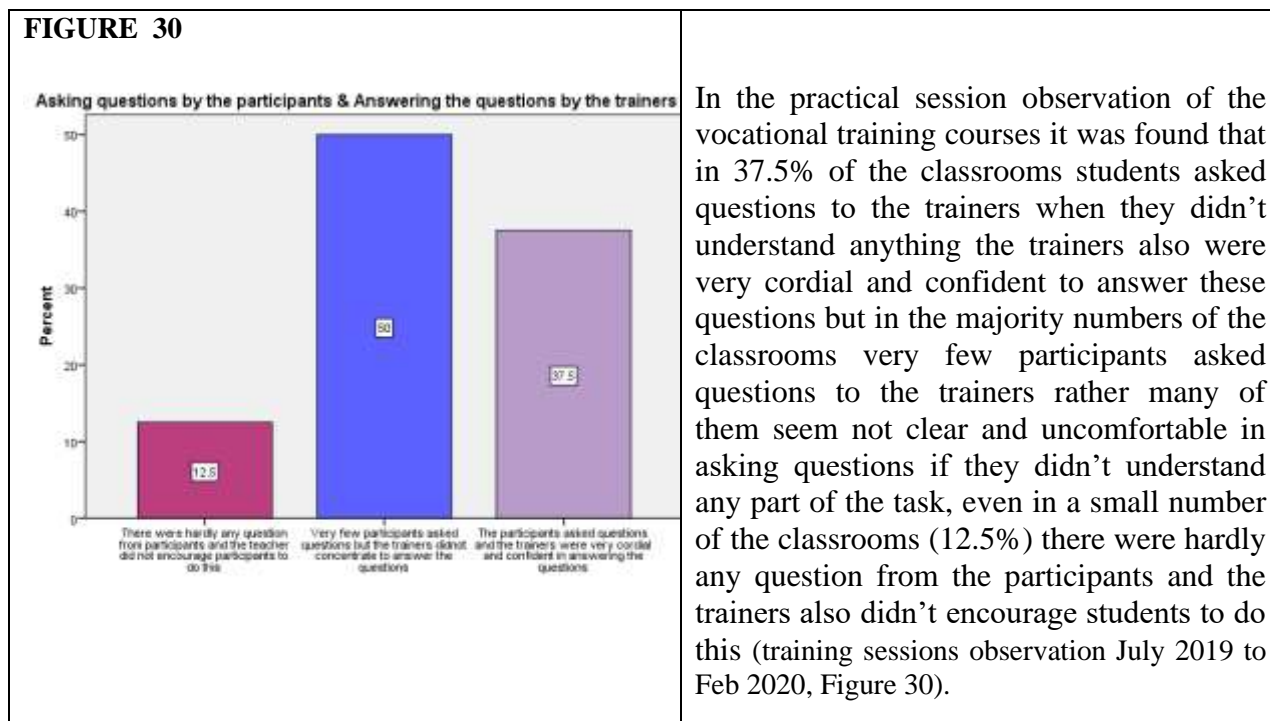
Based on the knowledge from the theoretical session the trainees go to the practical class for doing the hands-on activities. So, in the practical task there is an implication of the theoretical knowledge as well as they have to have the necessary skills required for doing the practical task. In the end of the practical sessions sometimes the trainers assess the participants' task just after the class or sometimes they preserved the students work as port-folio in a systematic way and assessed these after a certain time. In the assessment procedure the most important part is to provide necessary feedback to the participants to improve their works or to complete the task in a right way.

FIGURE 29

In the end of the practical session it was observed that 37.5% of the trainers looked at the activities of all participants and somehow, they assessed them including giving necessary feedback for improving the task. Sometimes they return the tasks to the participants with feedback and asked them to resubmit in the next class because these will be preserved as port-folio and will be assessed. Similarly, the same number of trainers (37.5%) assessed participants but they didn't provide any kind of feedback to the participants for improvements. There were also 25% of the participants who neither assessed not provided any feedback to the participants (training sessions observation July 2019 to Feb 2020, Figure 29).

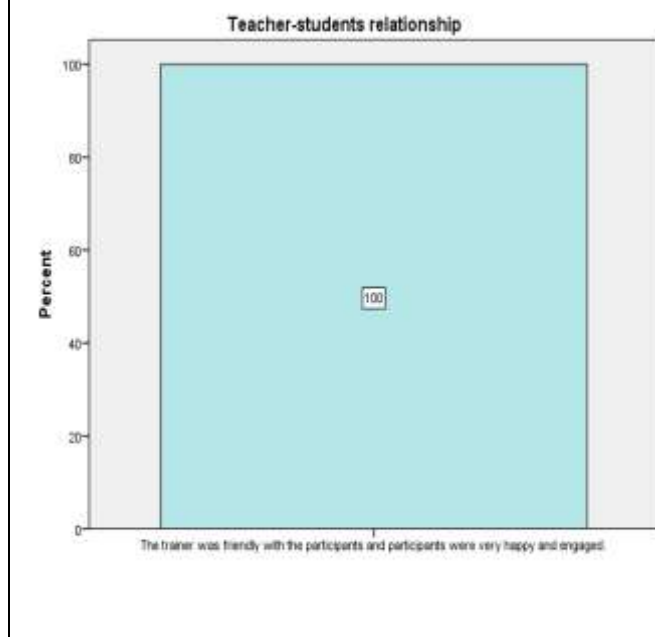
5.2.2.11. Asking Questions by the Participants and Answering by the Trainers

In the good practice of teaching-learning teachers/trainers give priority to the participants' views and their involvement in the whole teaching-learning process and in these types of classroom environment participants feel comfortable in learning. In case of any kind of a difficulties and problems they feel free to ask the trainers, never feel hesitation to take any kind of help from the trainers for completing the assigned task. On the other hand, the trainers also become very cordial and sincere in supporting the participants to complete the particular task. They show very positive manner to answer any kind of a relevant question from the participants.

FIGURE 30

5.2.2.12. Teacher-Students Relationship in the Practical Session

Sometimes the environment of the practical classroom is not very formal-in some cases students become scattered to collect the necessary materials or tools and other machineries. This is actually the nature of a practical class. Sometimes students also face challenge to get the necessary materials and to run or use a machine for the first time. In that case if there is a good relationship with the students and trainers the participants feel comfortable in asking any kind of a question or taking supports from the trainers about running the machine or other difficulties they face in the classroom.

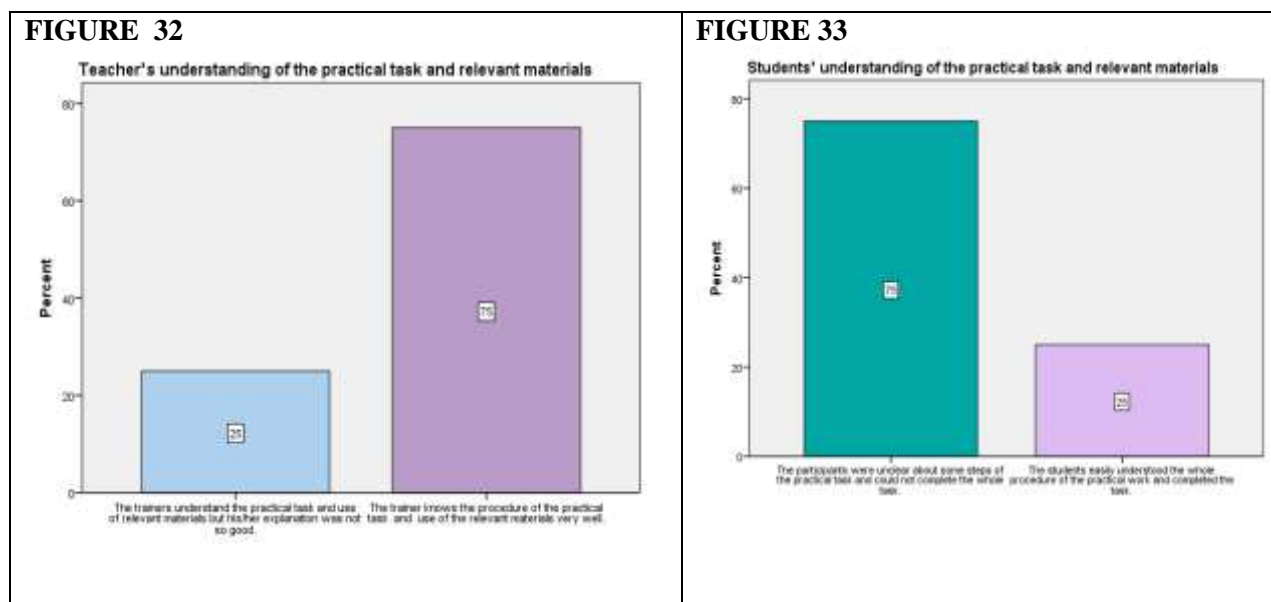
FIGURE 31

In the practical session observation of the vocational training courses it was found that in the 100% of the practical classroom the teacher-students relationship was very good. The trainers were very supportive and friendly with the participants and participants were also very happy and engaged in doing the practical task (training sessions observation July 2019 to Feb 2020, Figure 31).

5.2.2.13. Teachers' and Students' Understanding of the Task and Relevant Materials

Not only in the practical class, in any kind of a class the essential and important point is teachers' understanding about the subject of the session because based on the subject knowledge and own understanding about the whole thing the trainers conduct the session including giving instruction to the participants. Especially in the practical class if the instruction is not clear to the participants then the participants will never be able to do the task. On the other hand, it is another responsibility of the trainers to make all the participants clear about the task, necessary materials, use of the tools and machineries and procedure of the assigned task. The trainers might do this during giving the instruction of the task or giving individual supports during the practical class. In this regard the necessary materials of the task, tools, machineries and other relevant things

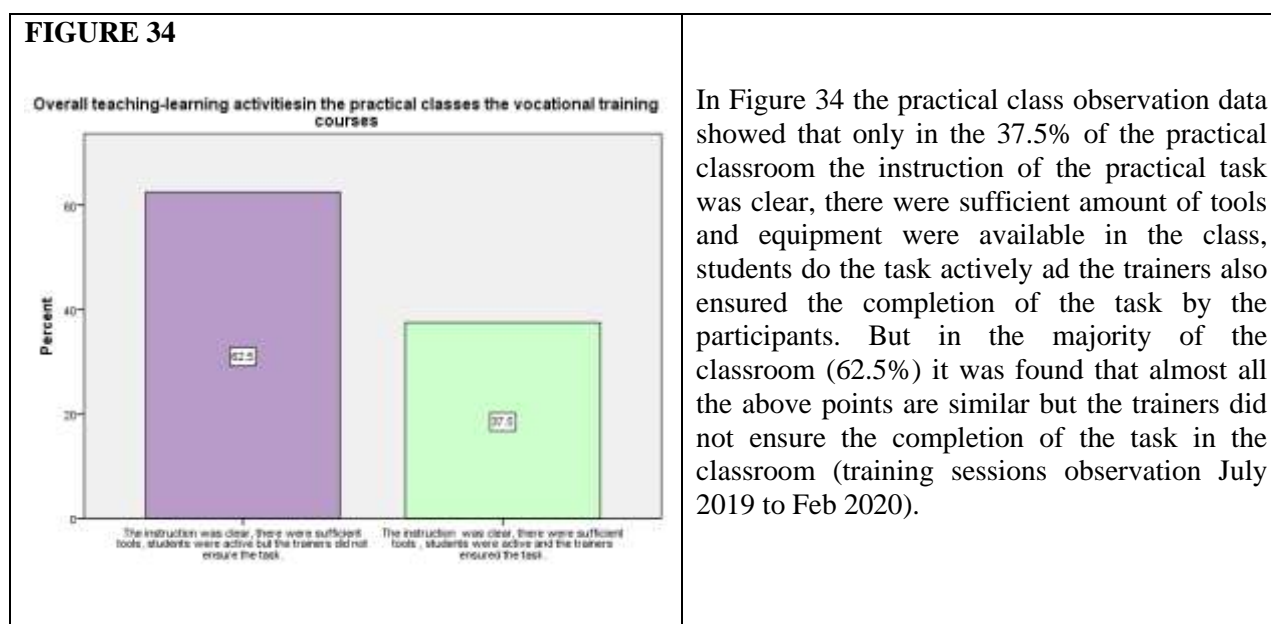
should be up to the participants' level of understanding and relevant with their context and background.



The above Figure 32 showed that the majority of the trainers (75%) are very confident and knew the procedure of the practical task and use of the relevant materials very well. Only 25% of the trainers understand the procedure of the task but their explanations were not so good. On the other hand, the scenario of the students' understanding of the practical task and relevant materials are opposite from the trainers' understanding. In Figure 33, the practical session observation data showed that only in the 25% of the practical class participants easily understood the whole procedure of the practical task and completed the task but in the majority of the practical class (75%) the participants were unclear about some steps of the practical task and could not complete the task. This is an interesting observed phenomenon, the reason behind this might be the assigned practical work and the necessary materials are not relevant with the participants' context and background (training sessions observation July 2019 to Feb 2020).

5.2.2.14. Overall Teaching-Learning Activities in the Practical Class of Vocational Training Courses

In a good practical training session, a few of the things need to be ensured, like, the instruction for the practical task need to be very clear, for doing the particular task properly sufficient number of tools, machineries and equipment need to be available in the classroom, the participants need to be active engaged to do the task and finally the trainers should be very careful and sincere to ensure the completion of the practical task. In the current practice of practical classes of the vocational training courses the trainers are skilled enough to give a clear instruction in the classroom, there were sufficient number of tools and equipment available in the classroom but sometimes trainers did not ensure the completion of the practical task by all the participants.



CHAPTER VI

DATA ANALYSIS AND FINDINGS:

VSD Trainings and Employability from the Perspectives of Target Groups

6.1. Introduction

In the existing situation of vocational training courses there are different categories of trade courses which the training organizations are offering under management of BTEB. For example, in the training organizations of our country the available trade courses are- Auto Mechanics, Motor cycle Servicing Mechanics, Welder, Electronic Assembling Technician, Electrician, Industrial Sewing Operation, Sewing Machine Operator, Mid-level Supervisor, House Keeping, Textile Waving Machine Operator, Plumbing, Garments Finishing and Operator, Quality Control Management, etc. Duration of the courses are differs depending on the lengths of the course contents, like, some are 3 months course, some are 4 months and some are 6 months course. The main target groups of the vocational training courses are the unemployed youth groups of our country but sometimes some groups, like, students, the people who are already doing a job attended these courses. Considering the different target groups two surveys were conducted in this study- one with the current participants (386 participants) of different trades of the vocational training courses and another survey was conducted with group of people who already completed any kind of a vocational training course. The second survey was conducted with 120 people who completed any kind of a vocational training (graduated), as they are scattered across the whole country it was not possible to conduct the survey with equal number of current participants. For conducting the both categories of surveys necessary supports were taken from

the Principals and Senior Trainers of the training organizations. However, in this chapter, the perspectives of the target groups (both current trainees & graduates- who completed the vocational training) regarding the vocational training courses was analyzed based on both of the survey data.

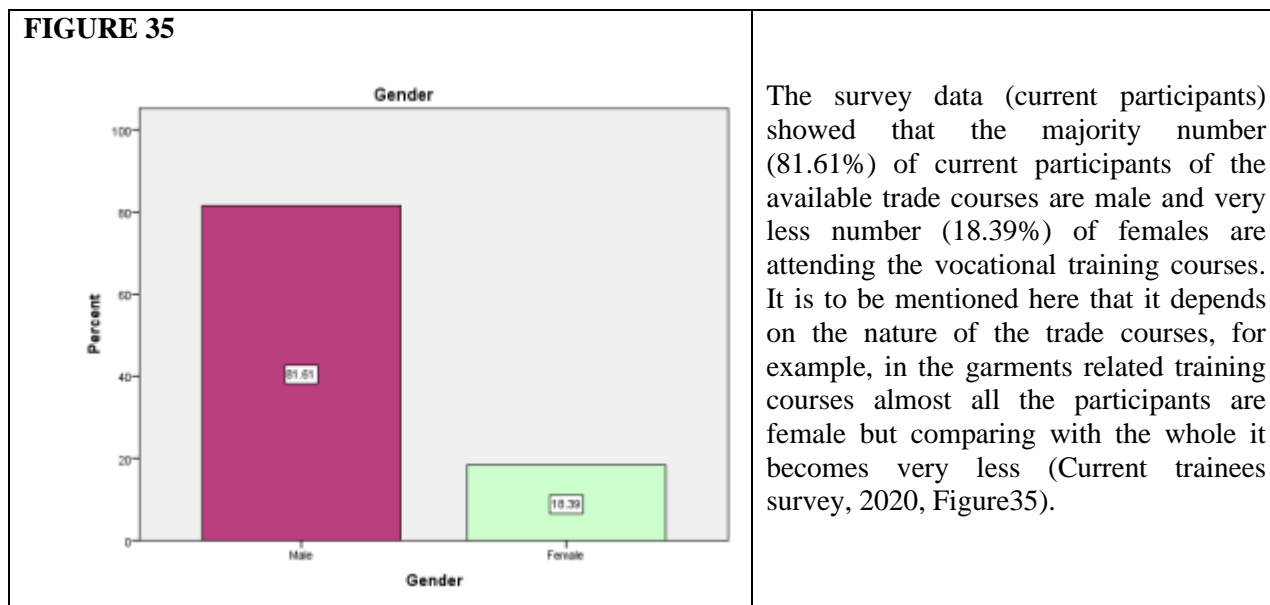
6.2. Background Information of the Target Groups and Source of Information of the Vocational Trade Courses

It is mentioned earlier that the main target groups of the vocational training courses are the unemployed youth groups of our country but in many cases the students, the people who are already doing a job or interested to initiate their own business also attended/attending the vocational training courses. In this section gender, age, profession and educational qualification of the target groups of the vocational training courses are analyzed based on the survey data.

6.2.1. Proportion of the Male and Female Attending the Vocational Training Courses

The survey was conducted among the current participants of different trade courses available in our country or the trade courses offered by the training organizations of our country. For example, the trade courses were Quality Control Management (RMG), Mid-Level Management (RMG), Electrical Installation and Maintenance, Auto Mechanics and Driving, Driving Basic Maintenance, Auto Motive Driving, Brick Laying (City and Guilds), Refrigerator and Air Conditioning (RAC), Graphics Design, Pattern Making, Dress Making, Sewing Machine Operation, Computer Office Application, Architectural Drafting with AutoCAD, Welding, Plumbing, Plumbing and Pipe Fittings. For the nature of the available

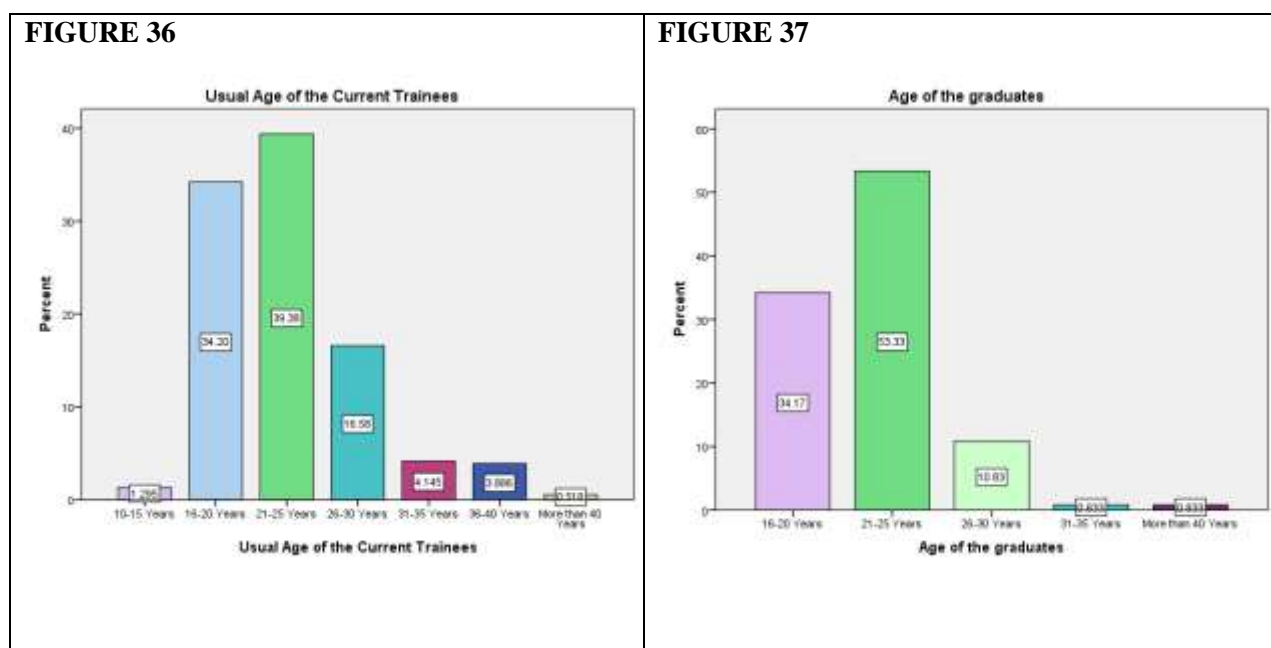
trade courses it was found that the majority of the participants of the vocational training courses are male. In our country's context usually, female do not prefer the profession related to the above-mentioned trade courses.



6.2.2. Age of the Target Groups

During designing the syllabus of the vocational training courses, it was considered that the target groups of those courses will be the unemployed youth group of our country. In the real situation it was found that age of the majority of the current trainees (73.58%) of vocational trainings is in between 16-25 years but many of them are not unemployed rather many of them are students. The following figures 36 & 37 showed that 39.38% of the current participants are 21-25 years old and 34.20% of the participants are 16-20 years old and rest of them are more than 25 years old, e.g. 16.58% of the participants are in between 26-30 years old, 4.15% are 31-35 years old, 3.87% are 36-40 years old and .52% are more than 40 years old (Current trainees survey, 2020, Figure 36).

Similarly, in case of the people who completed the vocational training courses (graduates) it was found that the majority number of the graduates (87.5%) are in between 15-25 years old and among them 53.33% of the graduates are 21-25 years old and 34.17% of the graduates are 16-20 years old and very less of the graduates are more than 25 years old who are looking for job, like, only 10.83% of the graduates are 26-30 years and .833% are more than 30 years old (Graduates Survey, 2019, Figure 37).

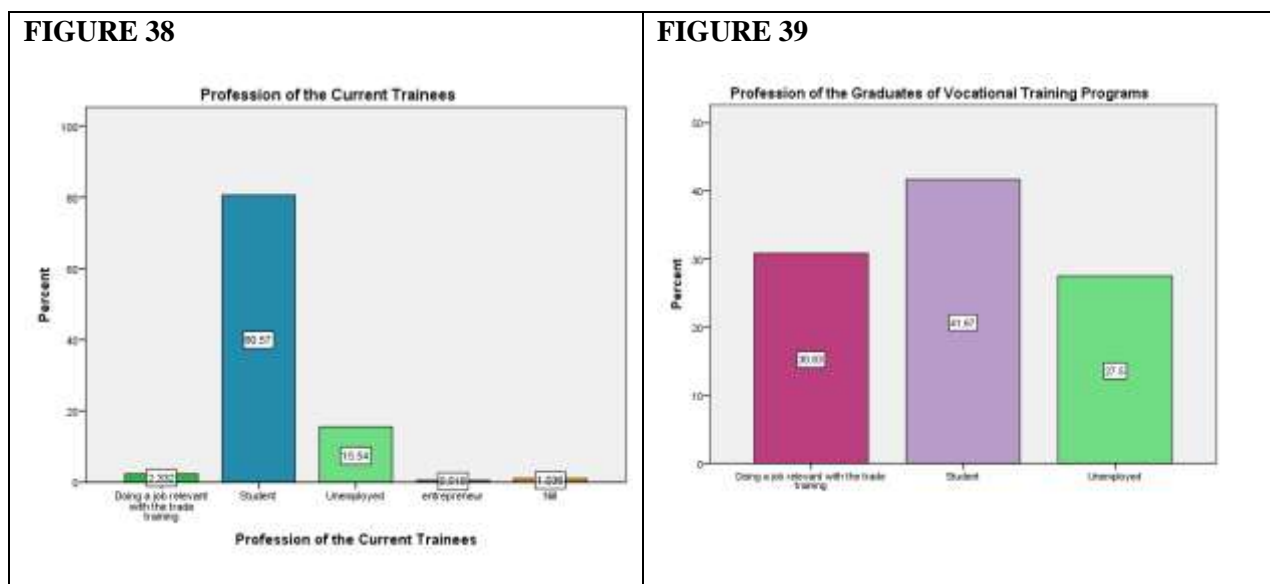


6.2.3. Professions of the Target Groups

From the above data support, it was found that majority of the target groups of the vocational training courses are young group of people who are in between 16-25 years old. So, from both the survey with current trainees and graduates of the vocational training courses are either students or after completing a certain level of general education, like, JSC, SSC, HSC they attended a particular training and now they are looking for a relevant job as unemployed people.

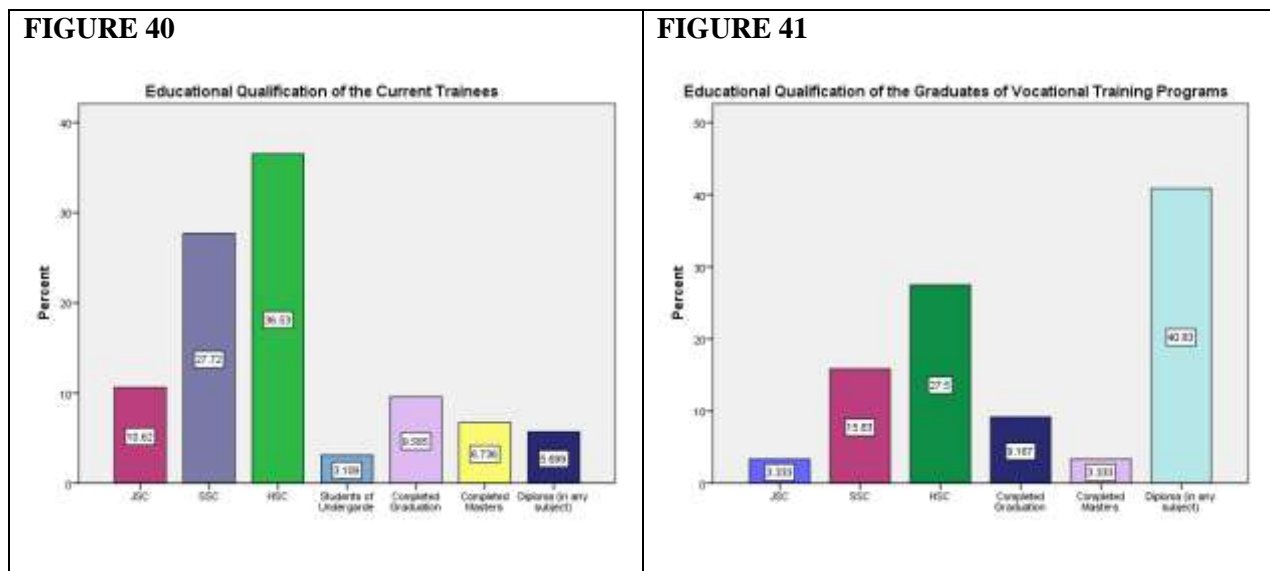
Majority of the target groups are studying in a college or any other educational organization and simultaneously they are attending/attended a vocational training course as per their interest and future plan. The survey data with current participants of different training programs showed that 80.57% of the current participants are students and 15.54% of the current participants are unemployed, i.e. they are neither student nor doing any kind of a job and the rest are very few amount (3.89%) of the current participants are doing a job or entrepreneur (Current trainees survey, 2020, Figure 38).

But in case of the graduates, i.e. the people who completed any kind of a vocational training course the scenario is a little different. Most of them are students but this amount is not such a big amount like the current trainees, in regards to them another important point is after completing the vocational training course a good number of graduates started a relevant job. The survey data with the graduates showed that 41.67% of the graduates are still students, 30.83% of the graduates are doing a relevant job and 27.5% of the graduates are unemployed looking for a job (Graduates Survey, 2019, Figure 39).



6.2.4. Educational Qualifications of the Target Groups

It is mentioned earlier that majority of the target groups of the vocational training courses are students who are still running students or completed one certain level of general education system. The survey data with the current trainees showed that majority number of the trainees (74.87%) are attending the after completing a certain level of general education, like, JSC or SSC or HSC. Among them the big portion (36.53%) of the training were attending the vocational training courses after completing the HSC level of general education and educational qualification of the rest trainees were SSC level (27.72%) and JSC level (10.62%). Simultaneously there are a few numbers of trainees who are still current students of under grade (3.11%) or completed graduation (9.59%) or masters (6.74%) in any discipline or completed diploma in any subject (5.70%) (Current trainees survey, 2020, Figure 40).

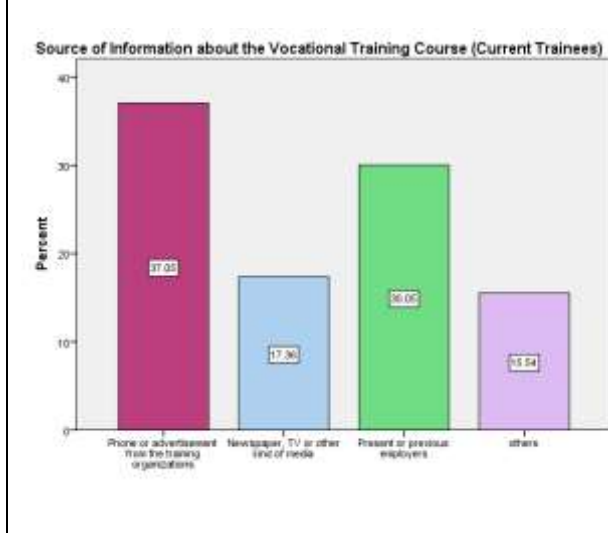
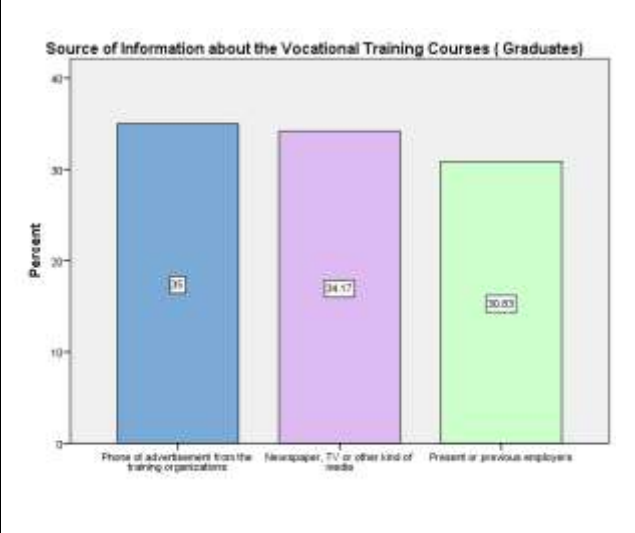


On the other hand the survey data with graduates of the vocational training courses showed a different scenario in their case a good number of graduates (40.83%) had a diploma degree in

any subject and 27.5% of their educational qualification is HSC and the rest of them are JSC (3.33%) or SSC (15.83%) or completed graduation (9.17%) or completed Master's degree (3.33%) (Graduates Survey, 2019, Figure 41).

6.2.5. Source of Information about the Vocational Training Courses

Usually one training organization offers several kinds of vocational training courses and before starting a training course the training organizations circulate their advertisement to the target groups through varieties of ways for getting sufficient number of applicants to enroll. In our country the training organizations mainly circulate the advertisement through newspaper, television or any other media of communication, in some cases the training organizations directly made phone call to the specific target groups of particular training course. Sometimes the people who are already in a job got the information of the vocational training courses from their current or previous employers. The survey data showed that 37.05% of the current trainees and 35% of the graduates of the vocational training programs were informed about the training courses through phone or advertisement from the training organizations, 30.05% current participants and 30.83% graduates were informed about the training courses from their current or previous employers and 17.37% of the current trainees and 34.17% of the graduates of the graduates knew about the training courses through newspapers, television or any other media of communication (Survey current participants, 2020, Figure 42 & Survey graduates, 2019, Figure 43).

FIGURE 42**FIGURE 43**

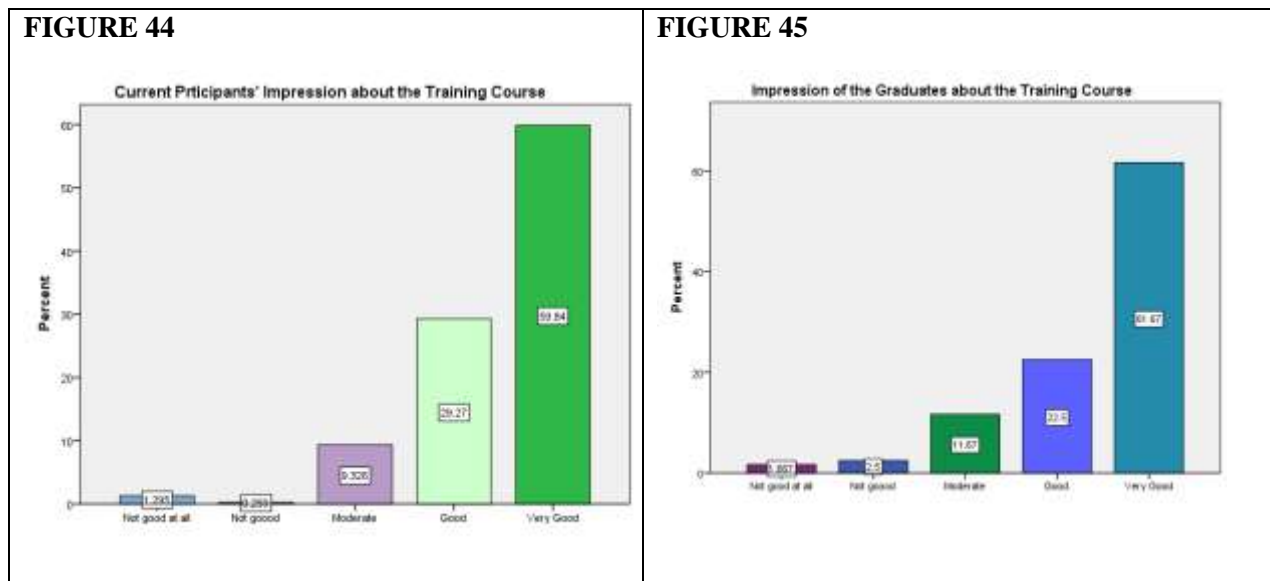
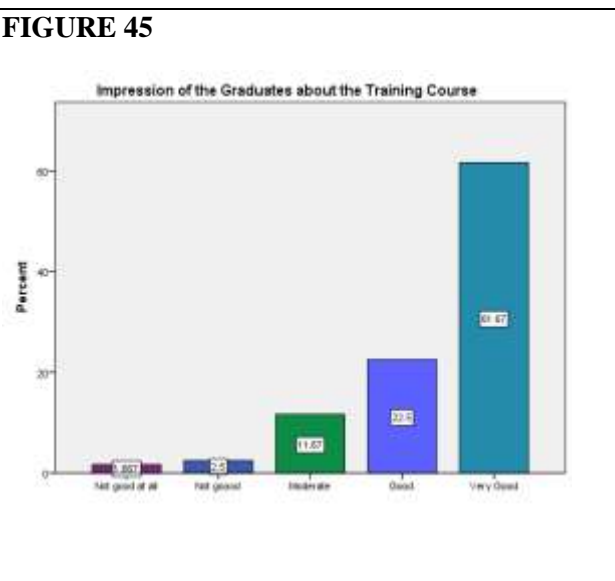
6.3. Perception of the Target Groups Regarding Vocational Training Courses and Their Current Practices

Based on the survey data with current trainees and graduates of the vocational training courses the perspectives of the target groups about the current practice of the vocational training courses were analyzed in this section. Especially, target groups' impression about the vocational training courses, the theoretical and practical part of the courses, trainers and available tools and equipment in the training organizations, exposure and opportunities of job placement in the relevant factories during attending the training courses. In survey the target groups opinion was also explored regarding redesigning of the existing vocational training courses.

6.3.1. Impression of the Target Groups about Vocational Training Course

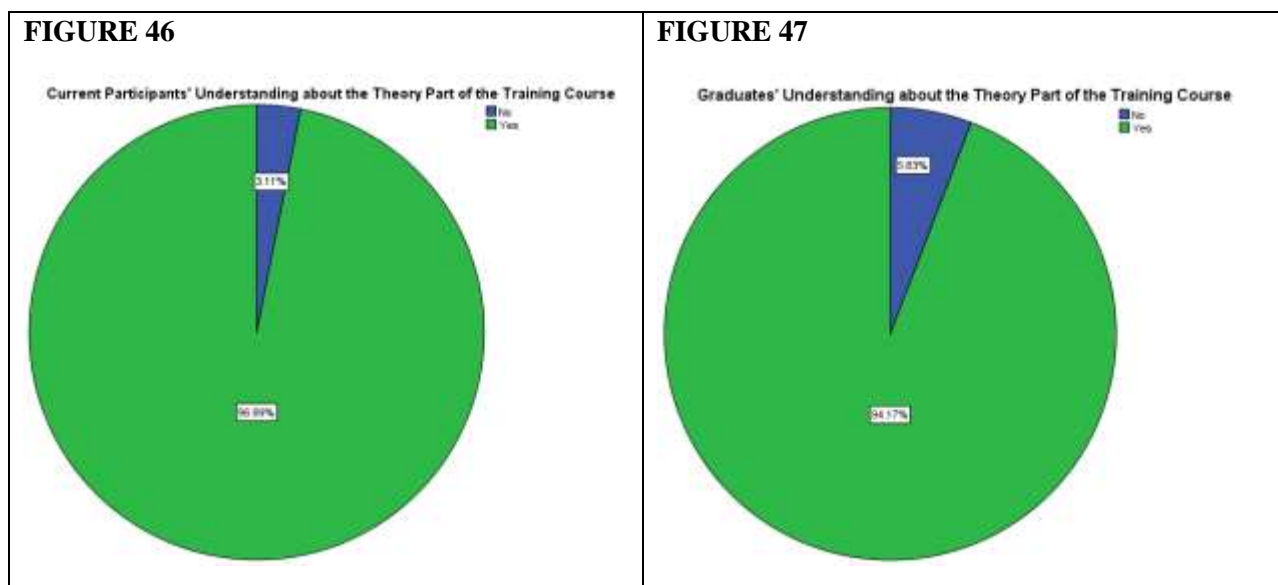
For any kind of a training course the main beneficiary group is the target group, i.e. the trainees are the main central point of the training programs and courses. So, in many cases the quality of the training programs depends on the target groups impression and perceptions about the training

courses. Target groups of a course actually involved with all the aspects of a training program, like, they study the whole content of the course in detail, attend the training sessions, participate all the relevant activities of the courses and finally attend the assessment procedure of the course. So, based on their whole experience related to the training course the target groups express their opinion about the course which is really very important. About the vocational training courses of our country the survey data showed that 59.84% of the current participants and 61.67% of the graduates said the vocational training courses were ‘very good’, 29.27% of the current participants and 22.5% of the graduates said the training courses were ‘good’. On the other hand very little number of the target groups (9.33% of the current participants & 11.67% of the graduates) was moderate about the training courses and very few of the participants (0.25% of the current participants & 2.5% of the graduates) said the courses were ‘not good’ and ‘not good at all’ (1.30% of the current participants & 1.67% of the graduates) (Current participants survey, 2020, Figure 44 & Graduates survey, 2019, Figure 45).

FIGURE 44**FIGURE 45**

6.3.2. Participants Understanding about the Theory Part of the Training Course

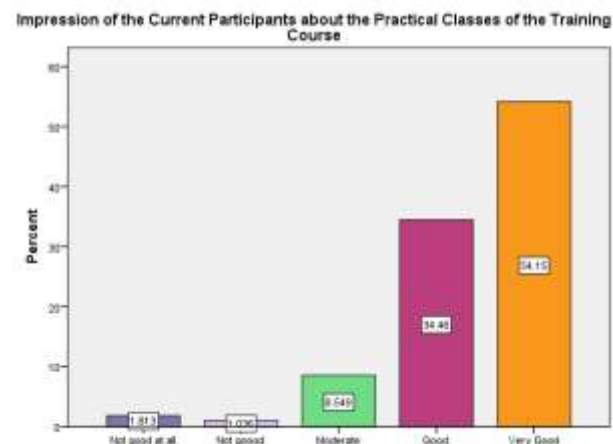
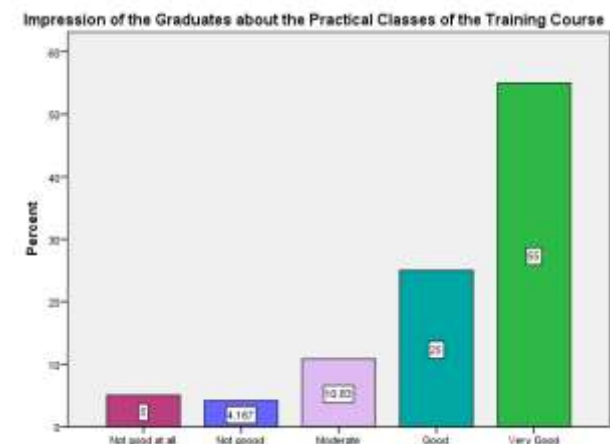
In the vocational training courses, there are two parts: the theoretical part and the practical part. In the theoretical part there are mainly the knowledge level things, like, different content and concepts which the trainer used to teach in a traditional class setting. These content and concepts of the theoretical part is very important because based on the theoretical knowledge the participants have to attend the practical classes of the training course. If the theoretical knowledge and concepts is not clear to the participants it affects the practical task, i.e. the participants cannot be able to do the practical task properly if there is any ambiguity in the theoretical part of the training course. The survey data showed that almost all the current participants (96.89%) and graduates of the vocational training programs who completed the training courses (94.17%) understood the theoretical part of the training course (Current participants survey, 2020, Figure 46 & Graduates survey, 2019, Figure 47).



6.3.3. Impression of the Target Groups about the Practical Classes of the Vocational Training Course

It is mentioned earlier that there are two parts in all types of vocational training courses- the theoretical part and the practical part. The theoretical part of the course is very important because based on the theoretical knowledge the participants have to attend the practical classes. On the other hand, the practical part of the courses is also very significant because based on the practical knowledge and skills the participants have to start their profession, if there is any skills gap, they cannot perform well in their work places. However, achievement of the skills and competencies on hands on activities also depends on the quality of the practical classes. The survey data showed that the majority of both current participants (54.15%) and graduates (55%) of the vocational training program said the practical classes of the training courses were ‘very good’ and 34.46% of the current participants and 25% of the graduates said the practical classes were ‘good’. Very less number of current participants was moderate (8.55%) about the practical classes and said the practical classes were ‘not good’ (1.04%) and ‘not good at all’ (1.81%) respectively (Current participants survey, 2020, Figure 48 & Graduates survey, 2019, Figure 49).

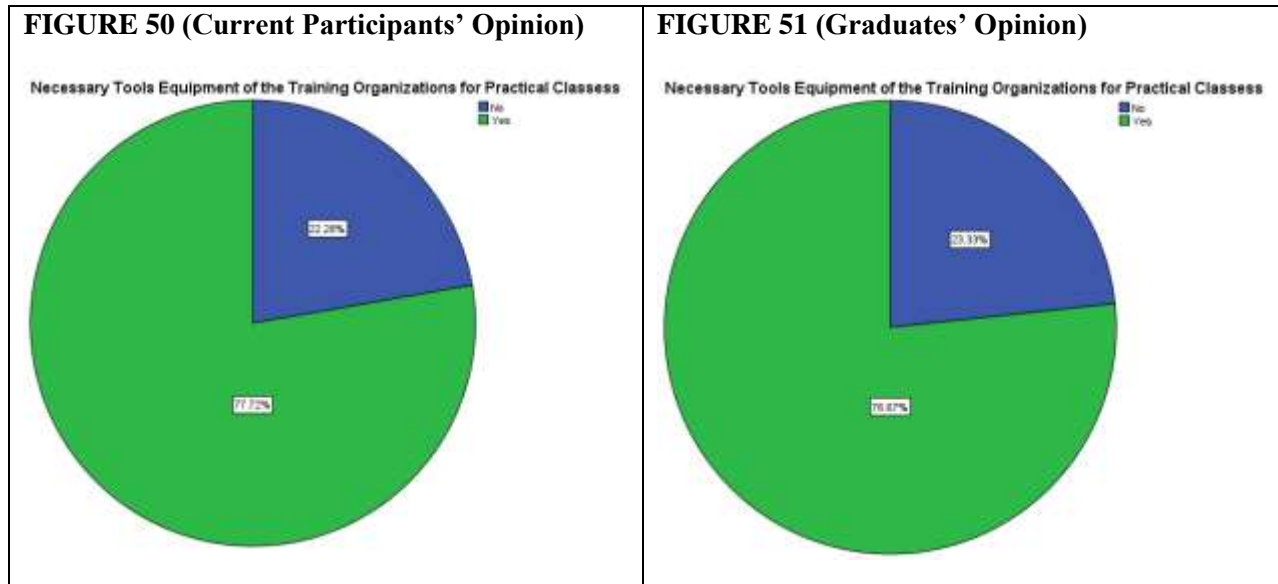
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FIGURE 48**FIGURE 49**

Similarly, very less number of graduates was moderate (10.83%) about the practical classes and said the practical classes were ‘not good’ (4.17%) and ‘not good at all’ (5%) respectively.

6.3.4. Availability of Necessary Tools and Equipment in the Training Organizations

In the vocational training programs skills and competencies is the first priority which helps participants to perform different kinds of hand on activities. For achieving the required skills and competencies the practical part of the training course is very important. Similarly, the quality of the practical class also depends on available tools and equipment of the training organizations. Without required and updated tools and equipment it is not possible with the trainers to conduct a quality practical class, the trainees also do not get the opportunities to do and practice the practical hands on activity if there is lack of necessary tools and equipment in the training organizations (Current participants survey, 2020, Figure 50 & Graduates survey, 2019, Figure 51).

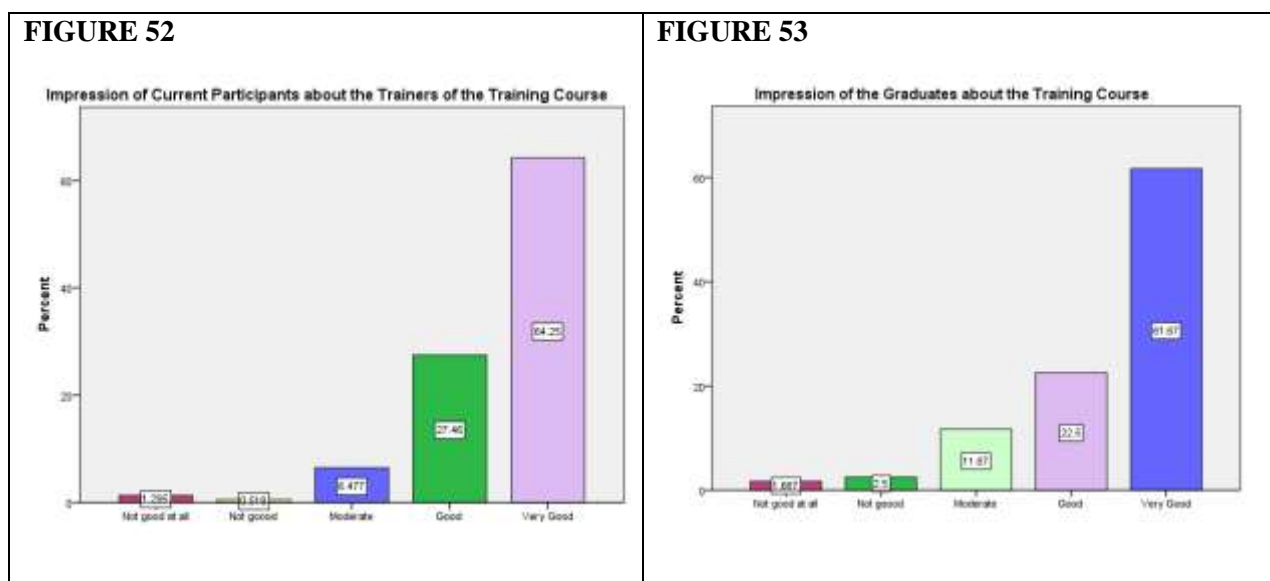


The survey data showed that most of the current participants (77.72%) and graduates (76.67%) said there were necessary tools and equipment in the training organizations for facilitating the practical classes.

6.3.5. Impression of the Target Groups about the Trainers of the Training Course

It is widely acknowledged that quality of any kind of a training program depends on the quality of its teachers and trainers. Whatever the content/course is whether it is very difficult or complex if the trainers are skilled and can facilitate the session interestingly it's become easier to the participants, the participants enjoy the session and learn the content/concepts very well. In the current scenario of vocational trainings the existing trainers of the training organizations are ready to facilitate the traditional training courses, both the current participants' and the graduates' impression in this regard also positive, like, 64.25% of the current participants and 61.67% of the graduates mentioned the trainers of their training courses were 'very good' and

27.46% of the current participants and 22.5% of the graduates said the trainers were ‘good’. Very less number of current participants (6.48%) and graduates (11.67%) were moderate in expressing their opinion about the trainers of the training courses. On the other hand there was no mentionable number of current participants and graduates who shared the trainers were ‘not good’(0.52% of the current participants & 2.5% of the graduates) or ‘not good at all’(1.30% of the current participants & 1.67% of the graduates) (Current participants survey, 2020, Figure 52 & Graduates survey, 2019, Figure 53).

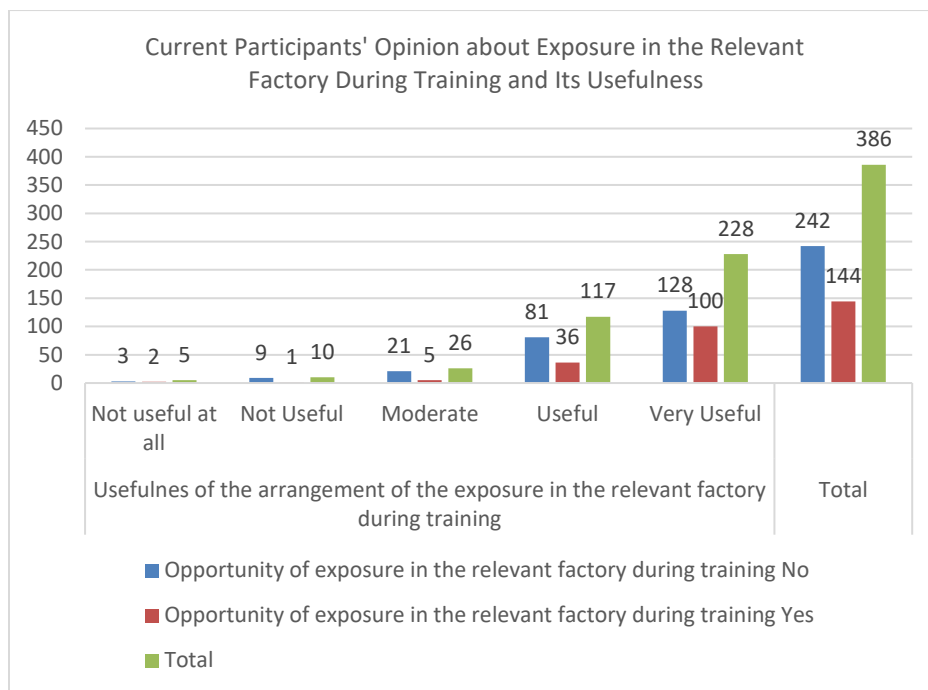


6.3.6. Exposure in the Relevant Industries During Vocational Training and Its Usefulness in Target Group’s Views

Vocational trainings are mainly focused on skills and competencies on hands on activities. During vocational training the participants learn particular types of practical work which they apply in their professions doing different hands-on activities as per industries requirements. But in many cases the realities in the industries are not well known with the participants and the

practical works which they attend in the practical classes of the training course are not similar with their professional work. As a result, most of the participants face troubles in their work places and they require inhouse professional development supports from the industries. So, most of the current participants thought opportunities of exposure in the relevant factories during receiving training is very useful for them though very less number of training organizations have this kind of opportunities.

FIGURE 54



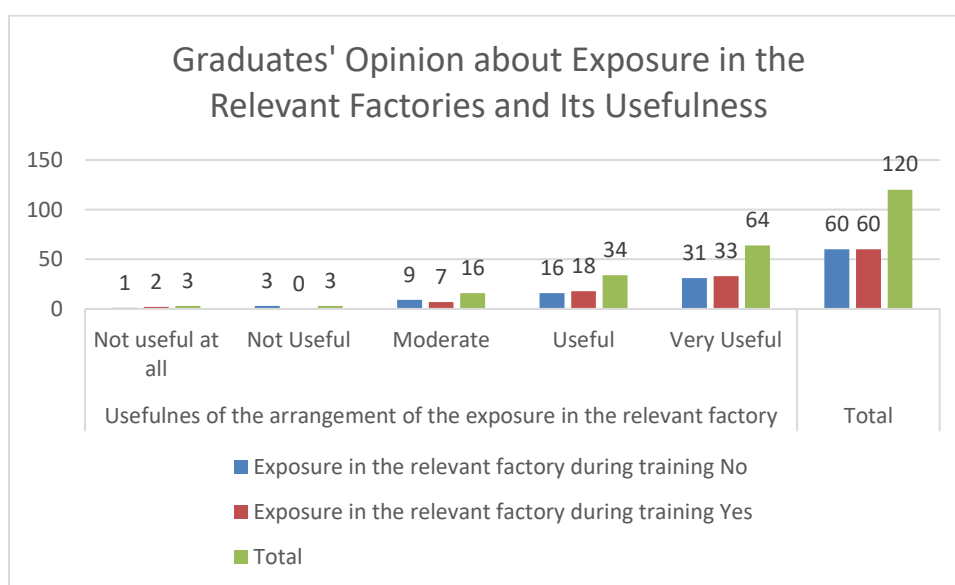
In the above Figure 54, the survey data with current participants showed that regarding available opportunities of exposure in the relevant factories during training the majority number of current participants (242 from 386 or 62.69% of the current participants) said there was no available opportunities of industrial exposure in the training organizations during training, only 144 from 386 or 37.31% of the current participants said there are opportunities of industrial exposure during training. But the majority number of current participants (228 from 386 or 59.07%) said

that exposure in the relevant factory during training is 'very useful' and among them 128 from 228 or 56.14% of the participants said there is no opportunities of exposure in the relevant factories during training and 100 from 228 or 43.88% of them said there is opportunities of exposure in the relevant factories during training. Similarly, a good number of participants (117 from 386 or 30.31%) said this kind of exposure is 'useful' but most of them (81 from 117 or 69.23%) said there was no opportunities of industrial exposure during training and only 36 from 117 or 30.77% of the participants said opportunities of exposure in the relevant factories were available during training. On the other hand very less number of current participants (26 from 386 or 6.73%) were moderate in this point but their opinion about the availability of the exposure in the relevant factory during training was similar- majority of them (21 from 26 or 80.77%) said this kind of opportunities are not available in the training organizations and very less of them (5 from 26 or 19.23%) said there were. However, almost all the participants were positive about the exposure in the relevant factory during training (371 from 386 or 96.11% said 'very useful' or 'useful' or were 'moderate') and very fewer number of participants these types of opportunities are 'not useful' (10 from 386 or 2.59%) or 'not useful at all' (5 from 386 or 1.30%) (Survey with current participants, 2020, Figure 54).

On the other hand, the people who completed different kinds of vocational training (graduates of vocational training programs) also expressed similar types of opinion regarding the exposure in the relevant factories during training. Majority of them said this kind of opportunities during training is very useful but the training organizations of our country did not arrange this type of exposure in the relevant factory. In the following graph 24 the survey data with the graduates of vocational training courses showed that like the current participants of the vocational training courses majority of the graduates of vocational training programs were positive about the

exposure in the relevant factories during training and its usefulness but 60 from 120 or 50% of the graduates said during training there was no opportunities of exposure in the relevant factories. In the survey data in detail it was found that 64 from 120 graduates or 53.33% of the graduates said that during training the exposure in the relevant factory is 'very useful' and from them 48.44% (31 from 64) of the graduates said there is no opportunities of exposure in the relevant factories and 51.56% (33 from 64) of them shared there were exposure in the relevant factories during the training course. Similarly 34 from 120 or 28.33% of the graduates said during training exposure in the relevant factories is 'useful' and from them 47.06% (16 from 34) said this kind of opportunities were not available in the training organizations during training and 52.94% (18 from 34) shared during training there were exposure in the relevant factories.

FIGURE 55

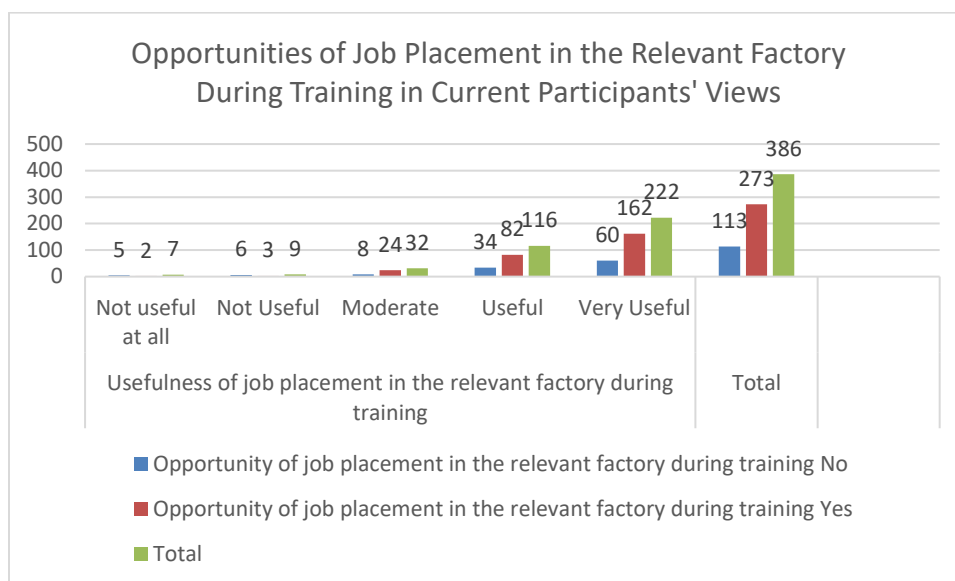


Apart from this 13.33% of the graduates (16 from 120) were moderate in this point and very fewer of the graduates mentioned this kind of exposure in 'not useful' (3 from 120 or 2.5%) and 'not useful at all' (3 from 120 or 2.5%) respectively. All most all of them (3 from 3 or 100%)

also said there were no opportunities of exposure in the relevant factories during training (Survey with graduates, 2019, Figure 55).

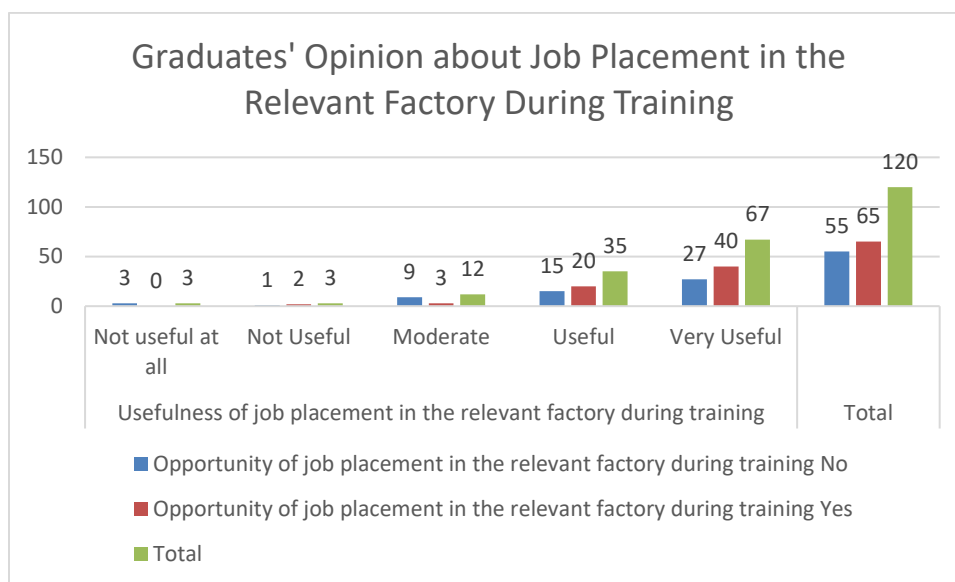
6.3.7. Opportunity of Job Placement During or After the Vocational Training

Usually, people enrolled in a vocational training program targeting a particular profession and vocational training programs also prepare people to work as a skilled professional in the specific profession. So, in the vocational training programs there is option for 'job placement' where the training organizations mediate different parties to ensure job placement for the trainees. In some cases, there are individual negotiation with employers from the trainees' part to join a relevant profession after completing a particular vocational training. Very recently in our country there are practice of recruiting a 'Job Placement Officer' in the training organizations whose main job responsibility is to support the trainees finding out a suitable job maintaining a regular communication with the employer groups. But considering the unemployment situation of our country this is not much effective or sufficient to support the trainees for employment. The survey data with current participants showed that 273 out of 386 or 72.73% of the current participants mentioned there were opportunities of job placement during training and the rest 113 out of 386 or 29.27% said there was no job placement opportunities. Among 273 out of 386 or 72.73% participants 162 out of 273 or 59.34% said the opportunity of job placement during training is 'very useful', 82 out of 273 or 30.04% said 'useful', only 24 out of 273 or 8.79% were moderate in this point and very fewer said this type of opportunity is 'not useful' (3 out of 273 or 1.1%) or 'not useful at all' (2 out of 273 or .73%).

FIGURE 56

On the other hand the people who said there was no opportunities of job placement during training (113 out of 386 or 29.27%) among them majority of them (60 out of 113 or 53.10%) said this kind of opportunities during training is ‘very useful’, 34 out of 113 or 30.09% said it is ‘useful’, 8 out of 113 or 7.08% were moderate and there were not mentionable number of participants who said ‘not useful’ (6 out 113 or 5.31%) or ‘not useful at all’ (5 out of 113 or 4.42%) (Survey with current participants, 2020, Figure 56).

On the same view point the survey was also conducted with the graduates of different vocational training programs and this survey data also showed that like current participants of the vocational training programs majority of the graduates (65 out of 120 or 54.17%) also mentioned there were opportunities of job placement during training and the rest (55 out of 120 or 45.83%) said this kind of opportunities were not available during training.

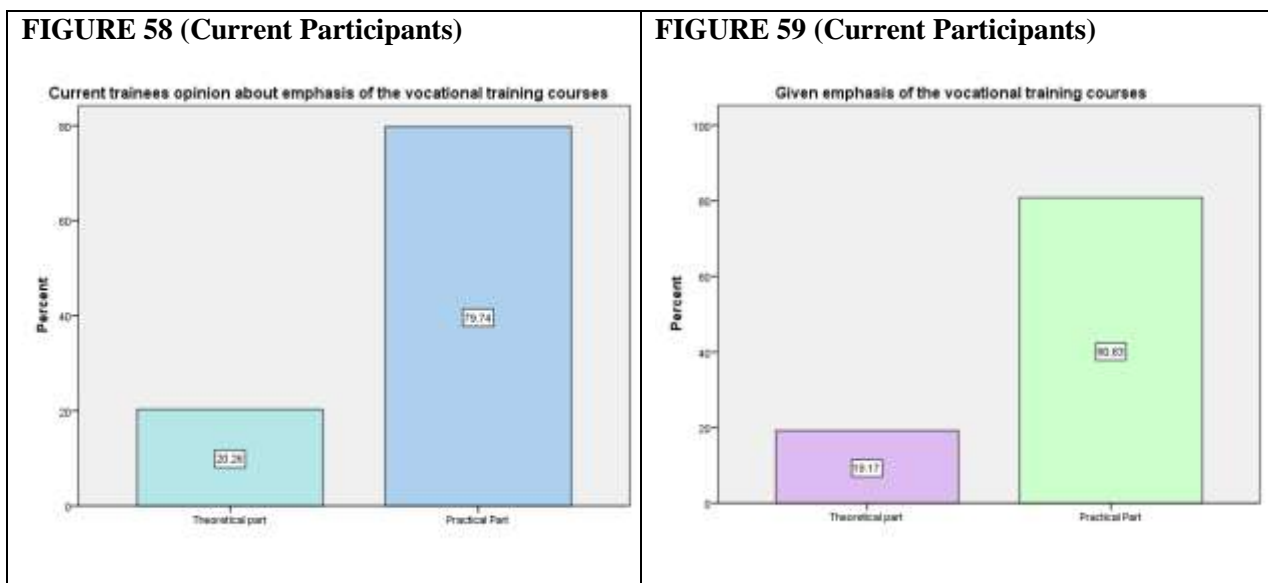
FIGURE 57

On the other hand, majority of the graduates showed positive views regarding usefulness of job placement during or after a vocational training, for example, 67 out of 120 or 55.83% said 'very useful', 35 out of 120 or 29.17% said 'useful' and 12 out of 120 or 10% were moderate about this. Very fewer number of graduates said job placement opportunities is 'not useful' (3 out of 120 or 2.5%) or 'not useful at all' (3 out of 120 or 2.5%) which is not countable (Survey with Graduates, 2019, Figure 57).

6.3.8. Given Emphasis on the Theoretical and Practical Part of the Vocational Training Courses during Teaching

In the pedagogical practice of vocational training courses, the trainers used to teach the theoretical and practical part of the courses in separate sessions. In a separate session at first the trainers facilitated the knowledge, concepts and other theoretical part of course and after that session based on the theoretical knowledge in another class set up, they used to facilitate the practical part of the training course. For achieving the required knowledge and skills both the

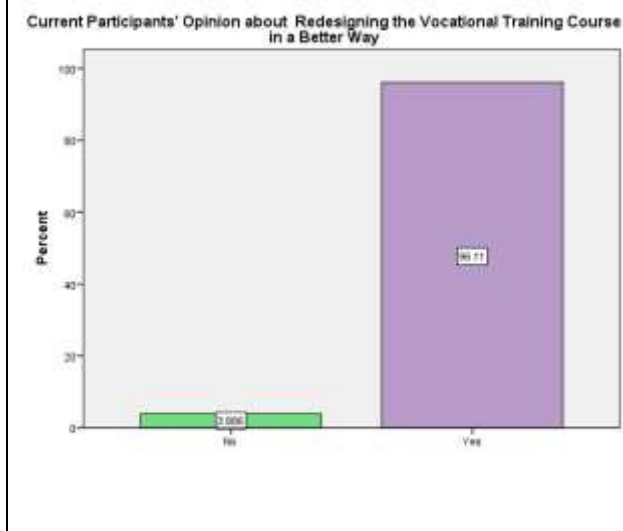
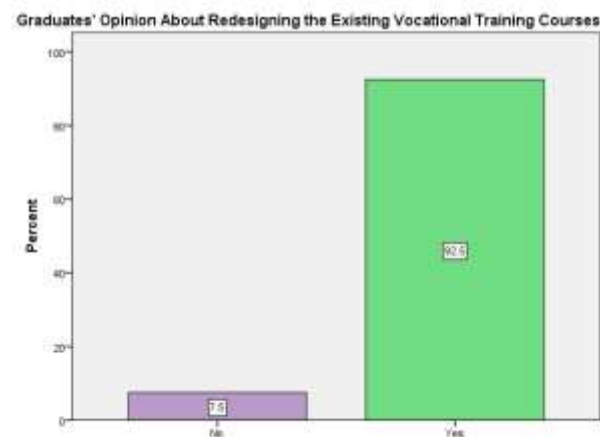
theoretical and practical parts/sessions of the training course are equally important because based on the knowledge and concepts the trainees do the practical task and based on the skills and competencies of the practical parts/sessions the trainees start their professions and perform in their work places. The survey data conducted with the current participants of the vocational training courses showed that 79.74% of the current participants said in the vocational training courses more emphasis should be given on the practical part of the course and only 20.26% of the participants said emphasis should be given on the theoretical part of the training course.



In the same survey the majority of participants (80.83%) also shared that in the current practice of vocational training system more emphasis given on the practical part of the training course. Very fewer number of participants (19.17%) said in the current practice emphasis given on the theoretical part of the course (Survey with current participants, 2020, Figure 58 & 59).

6.3.9. Target Group's Opinion About Redesigning the Existing Vocational Courses

At present BTEB is offering two categories of trade courses through different training providers. Some are conventional short training courses which started from 1985 and under NTVQF there are some level-wise vocational training courses which BTEB started from 2012 as per guideline of the NSDP-2011. In the existing practice of vocational training system, the second categories of vocational training courses, i.e. the vocational training courses under NTVQF are offered in a very limited way, very few training organizations are offering the NTVQF training courses rather most of the training organizations are offering the conventional short training courses because these are comparatively easier to offer. So, majority of the target groups both the current participants and the graduates of the training programs shared their opinion that it is essential to redesign the existing vocational training courses. The survey data with current participants showed that 96.11% of the participants said the existing vocational training courses need to be redesigned and only 3.89% of the current participants showed reluctant attitudes in this regard (Survey with current participants, 2020, Figure 60).

FIGURE 60 (Current Participants)**FIGURE 61 (Graduates who completed the vocational training courses)**

On the other hand, the survey data with the graduates also represented similar types of results in this regard. For example, 92.5% of the graduates mentioned that the existing vocational training courses need to be redesigned and very a smaller number of graduates expressed negative opinion about redesigning the existing vocational training courses (Survey with graduates, 2019, Figure 61).

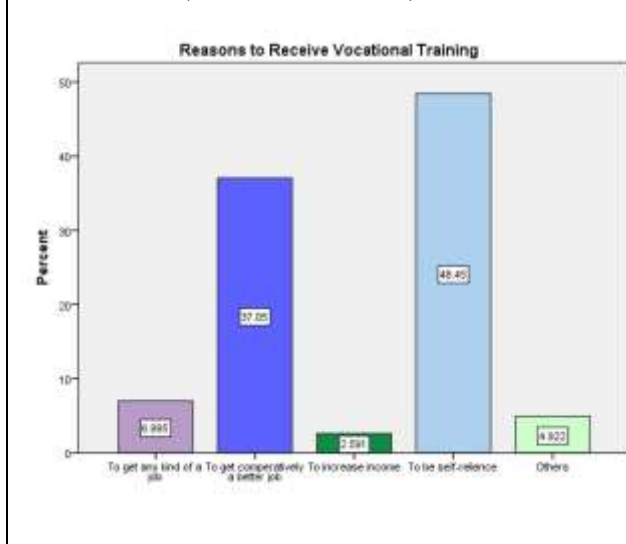
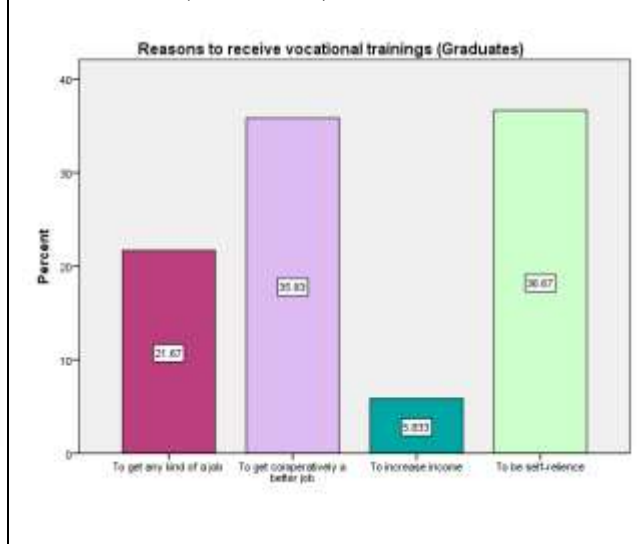
6.3.10. Perspectives of the Target Groups Regarding Importance of Trade Courses and Employability

In our country's context people usually enrolled or receive the vocational training courses to start any kind of an income generating job either recruiting by other employers or starting own business as entrepreneurs. The target groups of the vocational training courses are unemployed persons or students of general education who are planning to start their profession using particular vocational training skills and competencies. Considering this context of the country and reality about the target groups the present study explored some important facts related to

importance of vocational training courses and employability, like, purpose of receiving the vocational training courses, whether the vocational training courses are helpful to get jobs or in the workplaces and to increase employability of the target groups, uses of the certificates and skills and competencies of the vocational training courses, employers perspectives about the vocational training courses, changes happened in the target groups' lives using the skills and competencies achieved from vocational training courses, initiatives of the training organizations to increase the employability of the target groups through vocational training courses. In this section the above-mentioned facts were analyzed using the quantitative data collected through surveys conducted with the current participants of the vocational training courses and the graduates (who completed vocational training courses) of vocational training courses.

6.4. Purpose of Receiving the Vocational Training Courses

The main target groups of the vocational training programs are unemployed young group of our country but in some cases the people who already have a job enrolled in vocational training programs to get comparatively a better job or to increase their existing income. There are also a group of people who have their own learning from their families and surroundings that they want to be self-reliance by doing an income generating work by using a particular vocational training. So the purpose of receiving the vocational training courses varied depending on the situation of target groups, e.g. the people who are unemployed they are receiving the training course just to get any kind of a job, the people who already have a job they are receiving the training course to get comparatively another better job and to increase their current amount of income.

FIGURE 62 (Current Trainees)**FIGURE 63 (Graduates)**

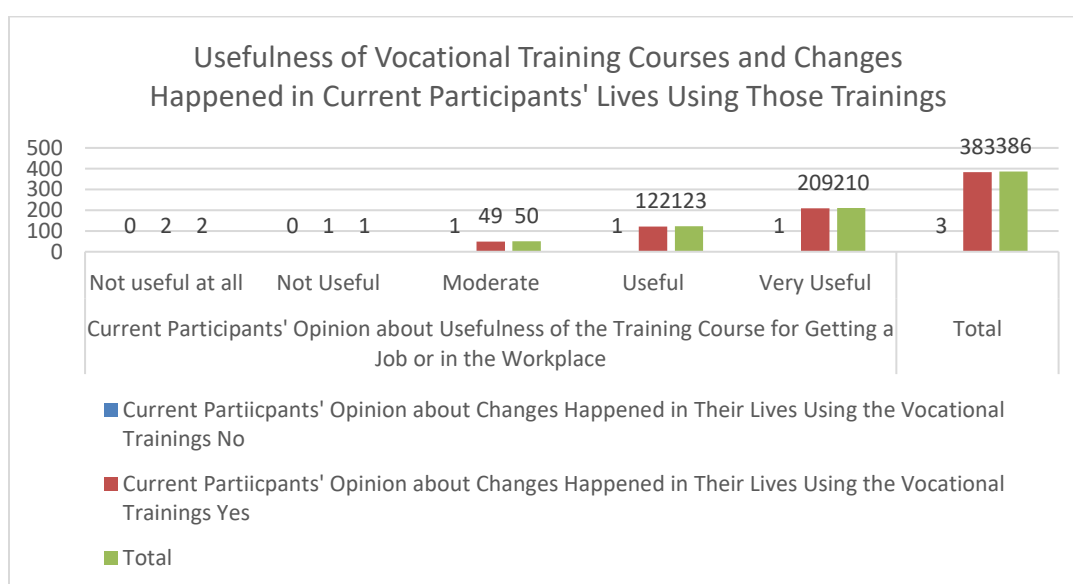
The survey data with current participants showed that the highest amount of the trainees (48.45%) want to be self-reliance after completing the vocational training course, then 37.05% of the trainees are receiving the vocational training course to get comparatively a better job and the rest of the trainees are receiving the training course to get any kind of a job (7.00%), to increase income (3.00%) and for other purposes (4.92%) (Current trainees survey, 2020, Figure 62)

On the other hand, the survey with the graduates also represented similar kind of scenario, the survey data with graduates of vocational training courses showed that 36.67% of the graduated received the vocational training courses to be self-reliance and almost equal number of people (35.83%) received vocational training for getting comparatively a better job. In case of the graduates the scenario is different in one point and that is a good number of the vocational training graduates (21.67%) received the vocational training courses for getting any kind of a job (Graduates survey, 2019, Figure 63).

6.5. Usefulness of the Vocational Trainings and Changes Happened in the Quality of Target Groups' Lives Using Those Trainings

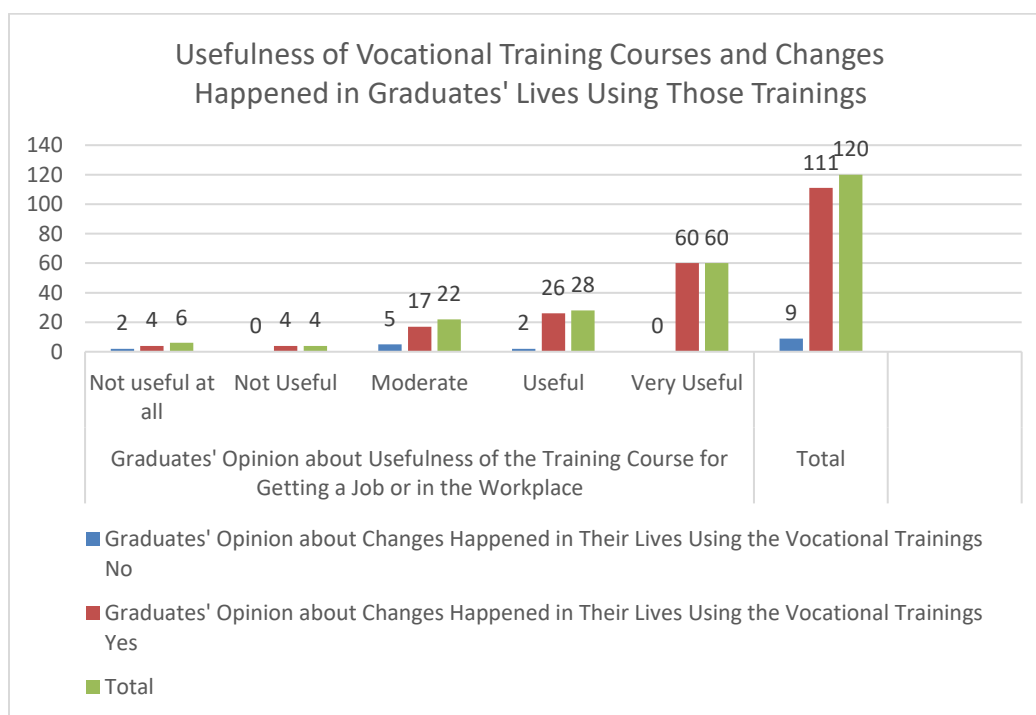
The purpose of the vocational training programs is to prepare the target groups for specialized professions and to support them to be skilled and competent for doing an income generating job. From this perspective the target groups also expect that after receiving/completing a vocational training course they will use the achieved skills and competencies to earn more which will help them to improve the quality of their live-leading or to change the live-style. In the following chart the survey data with current participants showed that almost all the current participants (383 out of 386 or 99.22%) shared changes happened in their lives using the vocational trainings. Simultaneously, 383 out of 386 or 99.22% shared positive opinion about the usefulness of the vocational training courses, for example, 210 out of 386 or 54.40% of the current participants said vocational trainings were 'very useful', 123 out of 386 or 31.87% of the participants said 'useful' and 50 out of 386 or 12.95% were 'moderate' in this regard.

FIGURE 64



The participants (210 out of 386 or 54.40%) who said vocational trainings were very useful almost all of them (209 out of 210 or 99.52%) agreed that changes happened in their lives using vocational training. This is also true for other viewpoints, like, 122 out of 123 or 99.19% who said the vocational trainings were 'useful' and 50 out of 386 or 12.95% were who were 'moderate' also agreed with this point, they said using the skills and competencies of the vocational training courses changes happened in their lives (Survey with current participants, 2020, Figure 64).

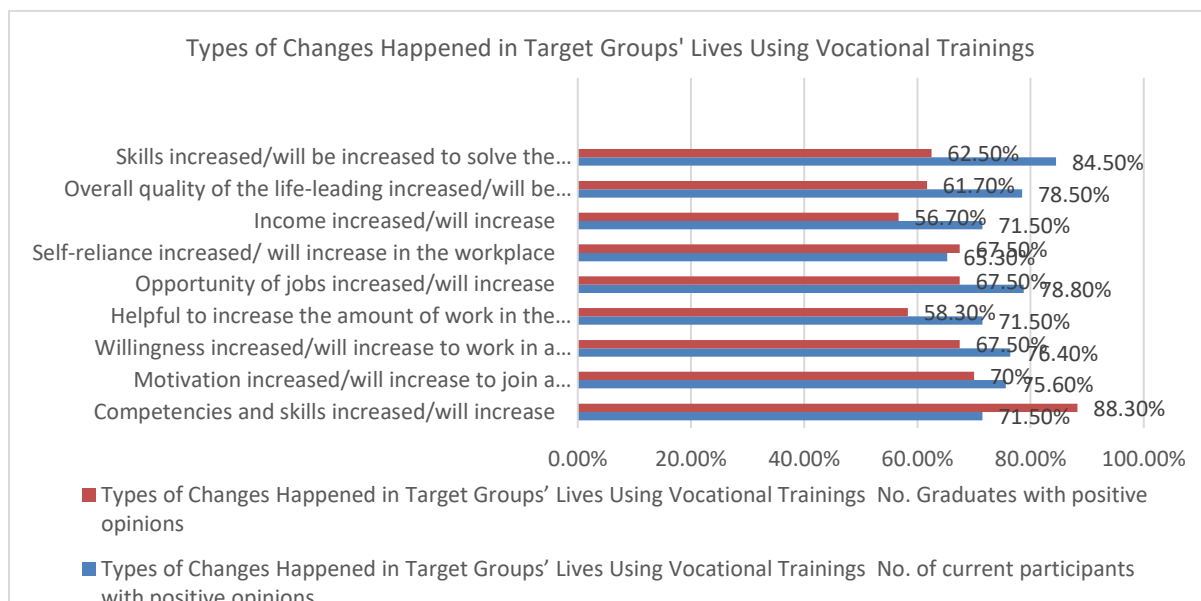
On the other hand, the graduates who completed the vocational training courses also expressed similar viewpoints in this regard. Like the current participants almost all the graduates (111 out of 120 or 92.5%) of vocational training courses also shared changes happened in their lives using vocational trainings, very fewer number (9 out of 120 or 7.5%) of the graduates said there was no changes in their lives using the vocational trainings. **FIGURE 65**



Similarly, majority number of graduates shared vocational training were ‘very useful’ (60 out of 120 or 50 %) and ‘useful’ (28 out of 120 or 23.33%) for getting a job or in the workplaces and others were moderate (22 out of 120 or 18.33%). Total 110 out of 120 or 91.67% were positive in this point who said ‘very useful’ or ‘useful’ or were moderate about this (Graduates survey, 2019, Figure 65).

6.5.1. Types of Changes Happened in Target Groups’ Lives Using Vocational Trainings

The target groups both the current participants and graduates viewed that different types of changes happened in their lives using the skills and competencies achieved from vocational training courses. According to the following Figure 66, through the survey with the current participants and graduates it was found that 71.5% of the current participants and 88.3% of the graduates shared ‘competencies and skills increased/ will increase’ using the vocational trainings, 75.6% of the current participants and 70% of the graduates said ‘motivation increased/will increase to join a suitable work or workplace after completing the vocational training courses, 76.4% of the current participants and 67.5% of the graduates said through vocational trainings willingness to work will increase/increased, 71.5% of the current participants and 58.3% of the graduates said vocational trainings were helpful to increase the amount of work in the workplace, 78.8% of the current participants and 67.5% of the graduates

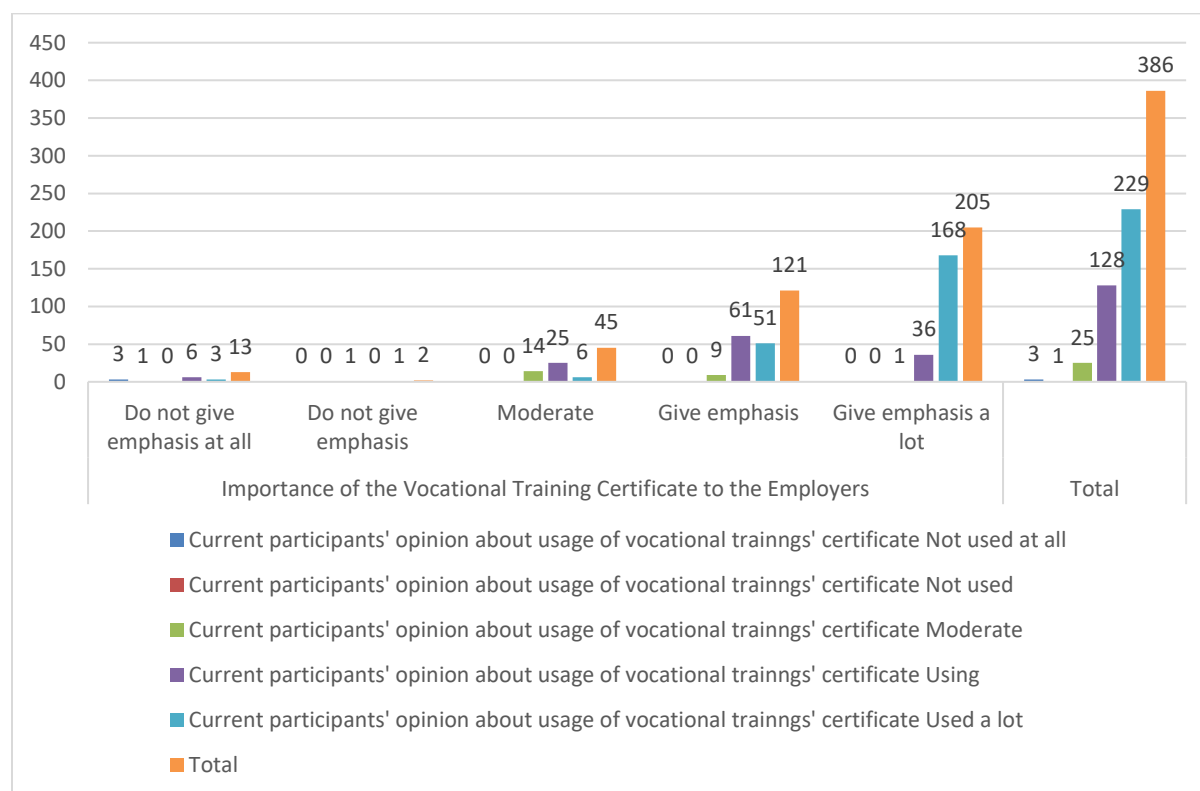
FIGURE 66

said after completing the vocational trainings opportunities of jobs increased/will increase, 65.3% of the current participants and 63.3% of the graduates said vocational trainings helped the target groups to be self-reliance, 71.5% of the current participants and 56.7% of the graduates said using the skills and competencies of vocational trainings income level of the target groups has been increase/will increase, 78.5% of the current participants and 61.7% of the graduates of vocational trainings said using the skills and competencies of vocational trainings overall quality of our life-leading will be improved/improved, finally 84.5% of the current participants and 62.5% of the graduates said through vocational trainings skills will be increased/increase to resolve problems of regular daily lives (Survey current participants, 2020 & Survey graduates, 2019, Figure 66)

6.6. Usage of Vocational Trainings' Certificate and Its Importance to the Employers from Target Groups' Perspectives

The target groups mainly enrolled in the vocational training programs intending to use the certificate of the training for getting a suitable job. But in many cases the usage of the certificate of the training depend on the level of the importance the employers put into the certificates. In the following graph 35, the survey data with current participants showed that the majority of the current participants (229 out of 386 or 59.33%) said the certificate of the vocational trainings were 'used a lot', similarly the majority number of current participants (205 out of 386 or 53.11%) also said the employers gave 'a lot of emphasis' on the vocational trainings' certificate. Among this 53.11% of the current participants who said employers gave 'a lot of emphasis' on the certificate 168 out of 205 or 81.95% of the participants also said the certificate 'used a lot', 36 out of 205 or 17.56% of the participants said 'used', only 1 out of 205 or .49% of the current participants were 'moderate' and none showed negative opinion about this.

FIGURE 67: Current Participants' Opinion Usage of Vocational Trainings' Certificate and Its Importance to the Employers

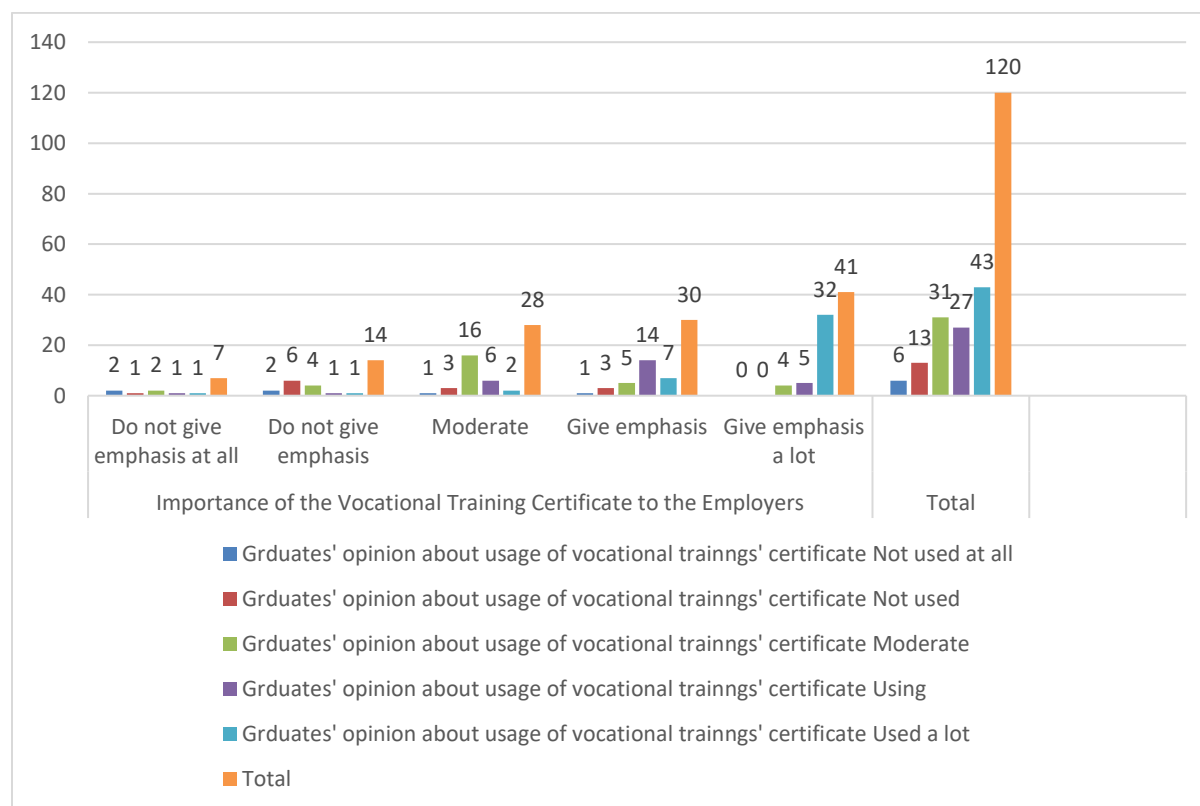


However, 128 out of 386 or 33.16% of the participants also said the vocational training certificates were 'used' and only 25 out of 386 or 6.48% were moderate about this. Regarding importance of vocational trainings' certificate to the employers 121 out of 386 or 31.35% of the participants said employers gave 'emphasis' on the certificate, 45 out of 386 or 11.66% of the moderate and very less participants expressed negative answers in this point (Survey with current participants, 2020, Figure 67).

On the other hand the survey data with graduates showed a different scenario, like, comparatively very less number of graduates (43 out of 120 or 35.83%) said the vocational trainings' certificates 'used a lot' and employers gave 'a lot of emphasis' (41 out of 120 or

34.17%) on the certificates of vocational trainings. Similarly, though it is a small number a fewer graduate said the certificate of vocational training ‘not used’(13 out of 120 or 10.83%) or ‘not used at all’ (6 out of 120 or 5%) and employers ‘do not give emphasis’ (14 out of 120 or 11.67%) or ‘do not give emphasis at all’ (7 out of 120 or 5.83%) whereas none of the current participants mentioned this types of information. The reasons behind this differentiate viewpoints between the current participants and graduates were the current participants just attending the training courses- they didn’t have experience to communicate with the employers but the graduates of the vocational training courses are looking for jobs and to some extent they got the experience to explore the employer’s perspectives about importance of vocational training’s certificates (Field note, April 2020).

FIGURE 68: Graduates’ Opinion about Usage of Vocational Trainings’ Certificate and Its Importance to the Employers

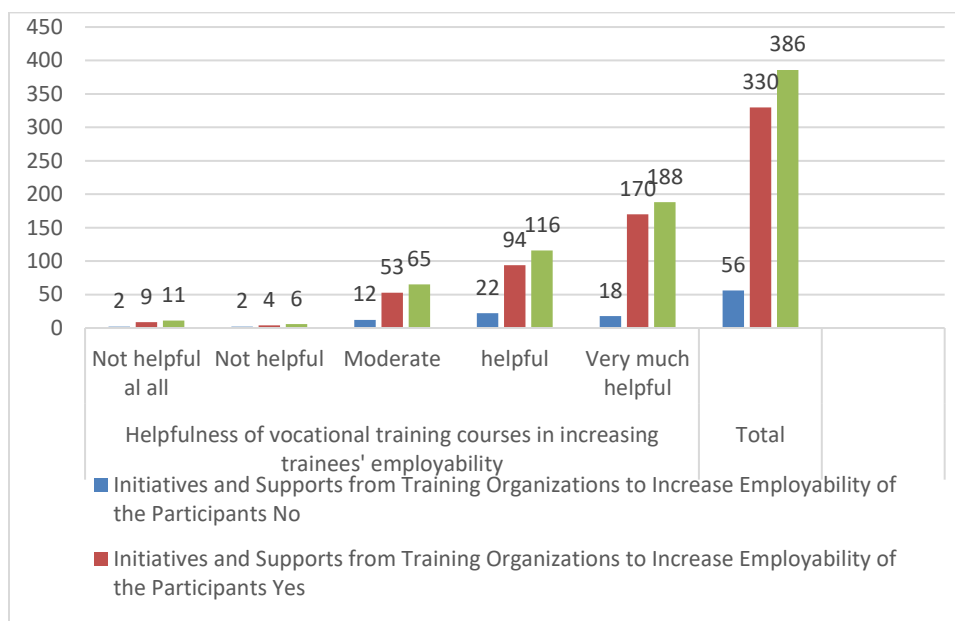


However, 27 out of 120 or 22.5% of the graduates said the vocational training certificates were 'used' and 31 out of 120 or 25.83% were moderate about the usage of vocational trainings' certificate. Only 30 out of 120 or 25% said employers gave emphasis on the certificates and 28 out of 120 or 23.33% of the graduates were moderate about this (Survey with graduates, 2019, Figure 68).

6.7. Contribution of VSD in Increasing Employability of the Participants and Initiatives from Training Organizations in this Regard

The main purpose of the vocational skill development programs or training is to increase the employability of the participants so that they can perform successfully in different kinds of productive works. For this purpose, the training organizations also can play a significant role by taking relevant initiatives and providing necessary supports related to this. In the existing situation of our country the majority number of training organizations used to take different kind of initiatives to support the participants to increase their employability.

FIGURE 69: Contribution of VSD in Increasing Employability of the Participants and Initiatives from Training Organizations in this Regard in Current Participants' Views

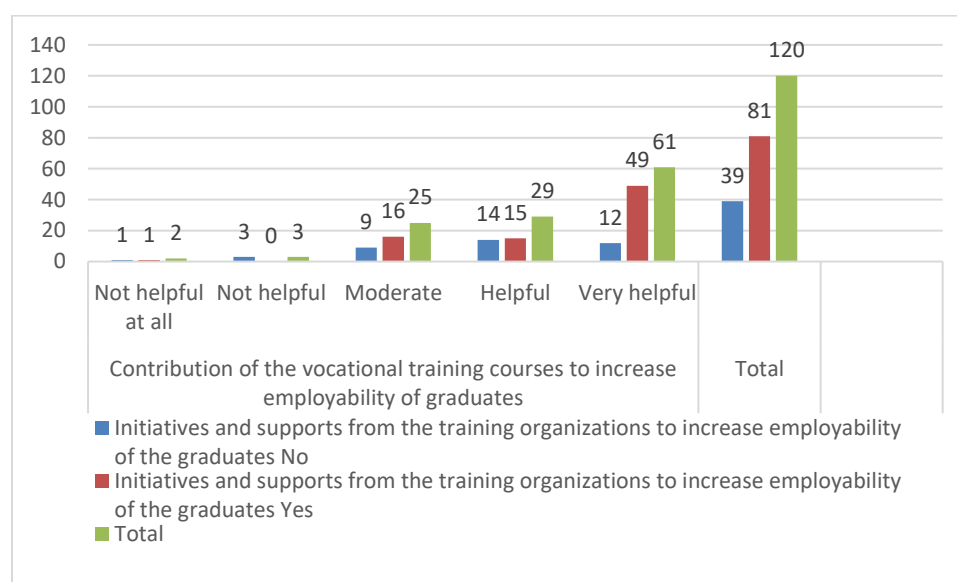


The survey data with current participants showed that majority number of current participants (188 out of 386 or 48.70%) said the vocational trainings are 'very much helpful' to increase their employability, 116 out of 386 or 30.05% of the current participants said 'helpful', 65 out of 386 or 16.84% were moderate and very little number of the participants said 'not helpful' (6 out of 386 or 1.55%) or 'not helpful at all' (11 out of 386 or 2.85%). Similarly, majority number of current participants also agreed that the training organizations play a significant role in this regard, 330 out of 386 or 85.49% of the current participants said the training organizations took different kinds of initiatives to support them for increasing their employability, only 56 out of 386 or 14.57% shared for this purpose there is no any kind of initiative from the training organizations. In detail data analysis it was found that (188 out of 386 or 48.70%) said the vocational trainings are 'very much helpful' to increase their employability and 170 out of 188 or 90.43% said training organizations took different kinds of initiatives to support them for increasing their employability, 18 out of 188 or 9.57% said vocational trainings are 'very much

helpful' for increasing their employability but for this purpose the training organizations did not take any kind of initiatives to support them (Survey current participants, 2020, Figure 69).

The survey data with the graduated of vocational training courses also similar kind of impression about the role of vocational training courses in increasing their employability and training organizations' initiatives in this regard.

FIGURE 70: Contribution of VSD in Increasing Employability of the Participants and Initiatives from Training Organizations in this Regard in Graduates' Views



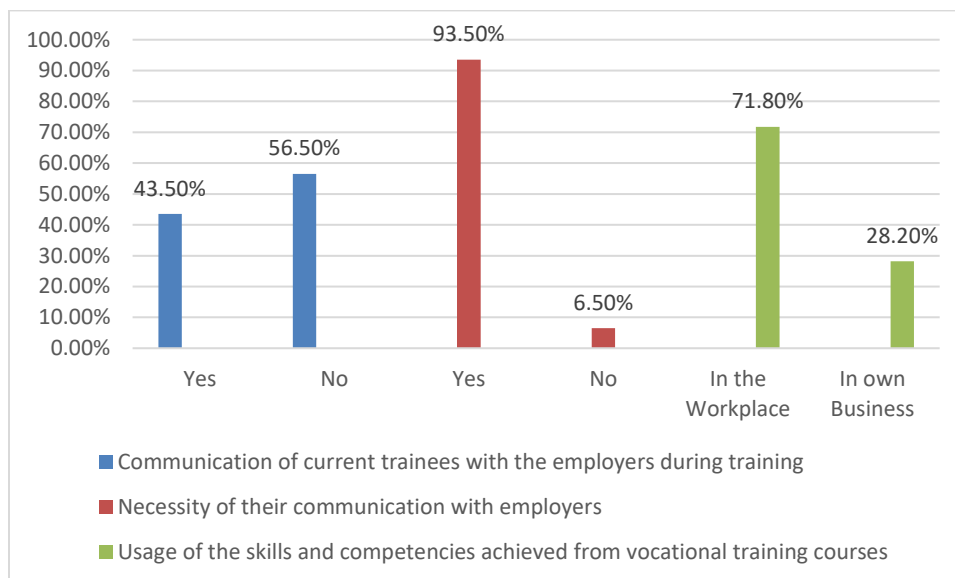
The survey data with graduates showed that majority number of graduates (81 out of 120 or 67.5%) said the training organizations took different kinds of initiatives and provide necessary supports to increase their employability, only 39 out of 120 or 32.5% of the graduates said training organizations did not take any kind of initiatives to support them for increasing their employability. On the other hand regarding contribution of vocational training courses for increasing the employability of the graduates 61 out of 120 or 50.83% of the graduates said these types of trainings are 'very helpful' for increasing their employability and among the 49 out of 61 or 80.33% said training organizations took different initiatives to support them in this regard

and other 12 out of 61 or 19.67% of them said vocational trainings are ‘very helpful’ for increasing employability but training organizations did not take any initiatives to support them for this purpose, 29 out of 120 or 24.17% of the graduates said these types of trainings are ‘helpful’ for increasing their employability and among the 15 out of 61 or 24.90% said training organizations took different initiatives to support them in this regard and other 14 out of 61 or 22.58% of them said vocational trainings are ‘helpful’ for increasing employability but training organizations did not take any initiatives to support them for this purpose. Only 25 out of 120 or 20.83% were moderated on this issue and very fewer number of graduates showed negative notions about this which is not significant or mentionable (Survey graduates, 2019, Figure 70).

6.8. Communication of Participants with Employers and Usage of Vocational Trainings

Mainly the usage of skills and competencies of vocational trainings depend on the requirements of the employers, if specific skills and competencies of vocational trainings match with employers’ requirements then the employers recruit those skilled human resource in their productive work of the companies. So, for a good combination between specific skills and competencies of vocational trainings and employers’ requirements both parties should have a good communication with each other. This communication should happen between training organizations and employers and training participants and the employers as well.

FIGURE 71: Communication of participants with employers and the usage of skills and competencies of vocational trainings



The survey data with the current participants of the vocational training programs showed that 93.50% of the current participants said it is important to have a good communication between employers and participants of vocational training, only 6.5% of the participants said it is not essential to have communication between employers and training participants. But in practice a smaller number of participants (43.5%) have communication with the employers and majority of them (56.5%) didn't have any kind of communication with the employers. However, through the survey it was also found that majority of the participants (71.80%) use the skills and competencies of vocational trainings in their work places and a smaller number of participants (28.20%) use the skills and competencies in their own business (Survey current participants, 2020, Figure 71).

CHAPTER VII

DISCUSSION AND INTERPRETATION OF MAJOR FINDINGS, RECOMMENDATIONS AND CONCLUSION

7.1. Introduction

The main goal of the present study was to explore the practice of vocational trade courses and importance of those trade courses in increasing the employability of the target groups. In regards to practice of vocational trade courses this study explored the pedagogical practice and the practice of designing and developing the syllabus of the vocational training courses. In late 2008 and 2009 the ‘National Technical and Vocational Qualification Framework (NTVQF)’ was developed in Bangladesh which is a comprehensive, nationally consistent and flexible framework for all qualifications in technical and vocational education and training (TVET reform project, 2009). Later in 2011 this NTVQF has also been included in the National Skills Development Policy (NSDP) and based on the NSDP-2011 from 2012 BTEB developed the vocational trade courses under NTVQF intending to implement those courses across the country. So along with the current practice of vocational trade courses this present study also included to explore the current status of implementation of vocational training courses under NTVQF. Apart from the above-mentioned points related to the current practice of vocational trade courses this study also explored how far the existing trade courses are addressing the needs of the employers and supporting the target groups in increasing their employability. For achieving the main goal of the study, the mixed research approach was followed in this study and drawing the major findings both from qualitative and quantitative data analysis the specific research questions of the study has been answered in this chapter. Based on the research questions and major findings

derived from both qualitative and quantitative data analysis this chapter is organized into following sections to draw a clear answer of the specific research questions of the study.

7.2. Section 1: Research Question 1: What is the current practice of some selected trade courses including the pedagogical practice and practice of designing and developing the syllabus of vocational trade courses?

For answering the above research question based on the qualitative and quantitative data analysis major findings have been drawn in the following two areas. The pedagogical practice of vocational trade courses (7.1.1.) included the points like, pedagogical practice of theoretical and practical parts of the vocational trade courses, the current pedagogical practice of vocational training courses gave more emphasis on theoretical part of the course rather than the practical part, CBT & A system should be applied for the assessment of all kinds of trainings ensuring each individual's skills in a particular practical task, etc. On the other hand, in the current practice of vocational trade courses training organizations are offering two categories of vocational trade courses, some are traditional trade courses and some are developed under NTVQF. BTEB is mainly responsible for designing and developing the syllabus of vocational trade courses but for coordination of international demand data BMET is also involved and responsible in this process (MOE, 2011). BTEB developed both the traditional trade courses and the vocational trade courses under NTVQF and BMET developed only the traditional trade courses. So, the practice of designing and developing the syllabus of vocational trade courses (7.1.2.) included the findings related to both traditional trade courses and the vocational trade courses under NTVQF developed by BTEB and BMET, like, the existing vocational trade courses are traditional and these trade courses need to be upgraded according to recent global

and technological changes and in line with NTVQF, the Competency Standards (CS) of the vocational training courses under NTVQF are occupation based and up-to-date and BTEB provided these CS to the training organizations to follow during facilitating the trainings, etc.

7.2.1. Pedagogical practice of vocational trade courses

7.2.1.1. Pedagogical practice of theoretical and practical classes of vocational training courses are different from each other (result section, pg. 177).

In the theoretical sessions the trainers make the participants understand different concepts and narrative descriptions, techniques and ways of a practical work and in the practical sessions the trainees practice the task individually using relevant tools and machineries. Through data support from different sources, it was explored that in terms of delivery mood the theoretical and practical classes are different from each other (result section, pg. 177). The theoretical classes focused on particular content and concepts and the practical classes focused on hands-on activities. The available data of this study also pointed out that there are four stages in the practical classes of vocational training courses: trainer's demonstrations, trainees' query about the demonstration and trainers' answers to the trainees' query, hands-on activity by the trainers and trainees jointly, practicing the hands-on task by the trainees themselves (result section, pg. 177-178). In that case during demonstration for practicing the hand-on activity both the trainers and trainees follow different steps of the 'job sheet' of particular course, like, job number, name of job, objective of the job and materials and equipment required for job (Salek et al., SEIP n.d.).

It is well-acknowledged that considering the nature of the theoretical and practical classes of vocational training courses, the theoretical and practical classes should be different from each

other which the present study revealed from the prevailing pedagogical practice of vocational training courses. Even the practical classes also should be held in a spacious and organized workshop set up with necessary tools and equipment so that the trainees get required opportunities to practice the hands-on activities. As per data support of the present study the four stages of the practical class are also supported by different literature, like, in 2012, Locus & et.al. mentioned that in regards to practical class of the vocational training courses it is important to shift from more transmissive practices to those who are engaging and interactive to ensure the best practical learning achievement (Locus & et.al., 2012). The literature also contends for practical classes which is an authentic process including learning by demonstration the trainees are mainly learning by imitating the trainers.

7.2.1.2. The current pedagogical practice of vocational training courses gave more emphasis on theoretical part of the course rather than the practical part (result section, pg. 180).

Usually, the vocational training courses are divided into two parts: theoretical part and the practical part. In practice the trainers first teach the theoretical contents of the training courses in a regular class setting and then linking with the theoretical concepts go for the practical classes where they mainly facilitate different hands-on activities to support the participants for building their practical skills. The practical skills of the participants are most important to perform better in the industry sector or work places and for developing the employability, the achievement of practical skills and competencies is the first and foremost priority as well. The vocational training courses actually prepared the participants in that way so that they can be able to perform the practical work independently and perform a variety of relevant practical works in different

work environment combining the planning, execution and processes together (Shrestha, 2016). As Shrestha (2016) found in her study that the vocational training courses actually prepared the participants in that way so that they can be able to perform the practical work independently and perform a variety of relevant practical works in different work environment combining the planning, execution and processes together. But the findings from the present study are not consistent with Shrestha as in the current practice of vocational training courses the theoretical part of the training courses is given more emphasis than the practical part of the course. It is evidenced from the available data that certificates have been provided in the vocational training system based on the theoretical assessment which is a usual practice in different general subjects under Social Science discipline (See pg. 180). The collected data of this study also revealed that the trainers were spending more time to teach and explain the theoretical concepts of the vocational training course instead of giving more opportunities to practice hand-on activities. Along with this, the available data also pointed out that in the written syllabuses of the vocational training courses there are more practical part in comparison to theories and concepts, but as the theoretical part itself is also large so in practice it takes much time to complete the theoretical part. As a result, both the trainers and trainees do not get time to do the practical work and it seems the theoretical part is emphasized in the pedagogical practice of vocational training courses (result section, pg. 180). Present study findings are also strongly supported by one of the World Bank studies in 2018, it mentioned that overemphasis on theoretical knowledge during formal education and training created serious lacking of practical and technical competencies among the professionals and workers of Bangladesh (The World Bank, 2018).

However, as a whole the available data of this study suggests to ensure the learning of practical tasks and all the relevant hands-on activities otherwise the vocational trainings will not be

effective. In the data analysis section, it was also explained that theoretical knowledge is not useful in the industry sectors rather the industry sectors require the hands-on practical skills (result section, pg. 182). This is also confirmed through Khan's study as it recommends a continuous upgradation is required in different vocational training programs specially to meet the present and future needs of the industries. Accordingly, for being responsive to the present and future needs of the industries the vocational skills development sector of Bangladesh started to implement the CBT & A system which mainly focused on the demand-driven training for industries (Khan, 2017).

So, from the above discussion, one of the most important point is the syllabus of the vocational trade courses include sufficient amount of both theoretical contents and hands-on practical activities but the trainers spend maximum of the allocated course time in teaching only the theoretical portion. Ultimately it happened that for completing the theoretical part properly the trainers did not get necessary time to take the practical classes. To overcome this situation a couple of things need to be addressed carefully, at first, looking at the whole syllabus of the course both theoretical and practical, the trainers should make a well plan of allocated time how much time he/she will teach the theoretical part and how much time he/she will teach the practical part so that for teaching the practical part he/she gets required time. Secondly, the syllabus of the course should be well thought out in regards to allocating the theoretical content, number of practical activities and required time.

7.2.1.3. CBT & A system should be applied for the assessment of all kinds of trainings ensuring each individual's skills in a particular practical task (result section, pg. 181).

To address the present and future needs of the industry sectors, the vocational training system of Bangladesh started to implement the CBT & A approach. The CBT & A system focused on the demand-driven trainings building strong relationship between the vocational training organizations and industry sectors. This CBT & A system ensures whether the trainees achieved the set of competencies of particular training course and each learner's achievement is measured against occupation-based competency standards instead of measuring the achievement against other learner's achievement (MOE, 2011).

But in our country only for the NTVQF courses this CBT & A assessment system is applied, for the traditional vocational trainings it is not applied whereas majority of the training organizations are offering the traditional vocational courses in large scale. The collected data of this study specifically pointed out that the assessment of the practical work of vocational training courses which is held in our country just like formalities and the scheduled practical classes are not held properly (result section, pg. 181).

So, for ensuring that each and every trainee is achieving the practical skills it is very much essential to apply the CBT & A approach in the assessment procedure of practical part of the vocational training courses. The National Skill Development Policy 2011 also suggested to implement the CBT & A approach in assessing the vocational skill development trainings. Through CBT & A system, the vocational skill development system of Bangladesh become responsive to the present and future needs of industries and employers. CBT & A system giving

more emphasis on the achievement and demonstration of practical skills demanded by industry instead of putting focus on the traditional theory-based approaches (MOE, 2011). In a paper by Government of Bangladesh, Ukaid & SDC it is also mentioned that “CBT &A represents a shift away from theory-based approaches to delivery and assessment by placing greater emphasis on the achievement and demonstration of practical skills required to perform at a specified standard demanded by industry (GOB, Ukaid & SDC, 2011, pg.4).”

If this CBT & A approach can be implemented through out the courses skills gap in the job market will be reduced and in the pedagogical practice trainees will get the opportunities of relevant apprenticeship in the industry sector along with more opportunities for practical hands-on activities. The CBT & A approach is also essential for achieving the skills and competencies which are mentioned in the particular courses, for example, in level 1 and level 2 of the course ‘Sewing Machine Operation’ it is mentioned that one of the generic competencies of the course is ‘communicating in the workplace’ and one of the sector specific competencies is working in the RMG sector (BTEB, 2013) and for achieving those competencies the CBT & A approach is more appropriate one.

7.2.1.4. Practice of teaching-learning in the theoretical sessions of the vocational trade courses

In this study the practice of teaching-learning in the theoretical sessions of the vocational trade courses was observed following an observation schedule which included the observation indicators, like, starting the session, greeting the participants/ building rapport with the participants, introducing the topic with specific learning objectives of the particular session, providing a comprehensive plan of the whole session after briefing the topic shortly,

presentation/explanation of the content of the specific session, illustrating the applicability of the materials, knowledge or practice relating to the participants' context, provide readings, activities or other relevant materials in accessible formats to understand the session/task clearly, providing opportunities for participants to practice and rehearse new skills, providing opportunities for participants to express personal perspectives/to relate the task with their purpose, facilitate opportunities for participants to interact with each other related to the training content/hands on task, supporting participants to completed the task/activity on scheduled time according to written or verbal announcement, providing opportunities for the participants to reflect on learning from the particular session, engage participants in assessment of their acquired knowledge and skills from the specific session, asking questions by the students, answering questions by the trainers, teacher-students relationship, teacher's understanding of the materials, etc. It is well-acknowledged that vocational trainings required to be facilitated in the context of practical work and hand-on activities. So, a high quality of vocational training applied a blend of teaching-learning methods (Lucas, Spencer & Claxton, 2012) which was followed in this study to explore the existing practice of teaching-learning in the vocational training courses. According to the indicators of the training sessions observation the present study revealed the following findings regarding the practice of teaching-learning in the theoretical sessions of vocational training courses:

- 7.2.1.4.1. Majority number of trainers (87.5%) are average level in starting the theoretical part of the vocational training session (Result section, pg. 184, Figure 2).
- 7.2.1.4.2. None of the trainers did an enjoyable warm-up activity in the beginning of the theoretical part of the vocational training session (Result section, pg.185, Figure 3)

- 7.2.1.4.3. Majority of the trainers (62.5%) didn't brief any learning-objective during teaching specific content of the vocational training session (Result section, pg.186, Figure 4)
- 7.2.1.4.4. Prior-learning of the participants is not explored by the trainers and linked with the new knowledge of the particular sessions (result section, pg. 188, Figure 6)
- 7.2.1.4.5. Majority of the trainers (75%) explained the specific content of the session very clearly and in an enjoyable way (result section, pg. 189, Figure 7).
- 7.2.1.4.6. 50% of the trainers explained the usage of the materials, knowledge and skills relating with participants context (result section, pg. 190, Figure 8).
- 7.2.1.4.7. A good number of trainers (37.5%) provided relevant readings and materials in accessible formats (result section, pg. 191, Figure 9).
- 7.2.1.4.8. 37.5% of the trainers did not provide opportunities for practice rather the session was mostly lecture based. 25% of the trainers provided the opportunities to practice but the class environment was not in favour to practice (result section, pg. 192, Figure 10).
- 7.2.1.4.9. There are very less students' involvement in the whole teaching -learning process. Only 37.5% of the trainers created conducive environment and allowed the participants to interact with each other to consult on the specific content of the session but there is very less opportunities for group works or other teaching-learning activities (result section, pg. 193, Figure 11).
- 7.2.1.4.10. 50% of the trainers were very supportive to the participants to complete the class work by the mentioned time (result section, pg. 194, Figure 12).

- 7.2.1.4.11. 50% of the trainers provided opportunities to the participants to reflect on specific content and rest 50% of the trainers did not (result section, pg. 195, Figure 13).
- 7.2.1.4.12. The majority of the trainers (62.5%) did not engage the participants in the assessment procedure rather the assessment procedure was unclear (result section, pg. 196, Figure 14).
- 7.2.1.4.13. In 50% of the sessions- students asked questions when they could not understand and they were very fluent in asking questions (result section, pg. 197, Figure 15). Majority of the trainers (62.5%) also answered the students' questions very cordially and they were very clear, well behaved and supportive to the participants (result section, pg. 197, Figure 15.1).
- 7.2.1.4.14. Almost all the trainers (87.5%) have very good relation with their students (result section, pg. 198, Figure 16).
- 7.2.1.4.15. Majority of the trainers (87.5%) understood the content, concepts and relevant course materials very clearly as they have required academic background (result section, pg. 199, Figure 17).
- 7.2.1.4.16. 37.5% of the training sessions the trainers were clear on teaching concepts/content, participants were involved actively, the trainers monitored and ensured students completed their activities and the trainers also finished the class within specific time (result section, pg. 200, Figure 19).

From the above quantitative data, the present study revealed that many of the important parts of effective teaching and learning were not addressed by the trainers during the theoretical classes of the vocational training courses. For example, for facilitating any kind of a training session 'starting of the session' is very important. When a trainer/teacher starts the session on time,

seems well-prepared and attract the participants in the beginning of the class, the students become very curious and interested to learn. But in the pedagogical practice of vocational training courses, it was found that very less number of (only 12.5%) of the training sessions were 'Excellent' who started the session on time and seemed well-prepared and organized (Result section, pg. 184, Figure 2). Similarly, if the trainers practice an interactive warm-up activity in the beginning of the session then the participants of the training session become active and engaged in learning. But in this study, it was revealed that half of the trainers (50%) are not sincere about greeting the participants in the beginning of the session. On the other hand, rest 50% trainers greeted the participants just for formalities, not in an effective way. Surprisingly, none of the trainers greeted participants cheerfully and did a good and enjoyable warm-up activity (Result section, pg. 185, Figure 3). During starting any kind of a training session, it is also very important to explore the prior- knowledge of the participants and link this with the new knowledge of the particular training session. But in the current pedagogical practice of vocational training courses majority of the trainers (62.5%) did not ask about the prior knowledge of the participants and never try to link the prior knowledge with the new knowledge which is one of the foremost priorities in adult teaching-learning strategies (result section, pg. 188, Figure 6).

Here one of the main reasons behind the above-mentioned situation is the lack of pedagogic training of the trainers, i.e., for lack of pedagogic trainings the trainers were not practicing any kind of interactive activity in the beginning of the session. The qualitative data of the present study also support that the majority of the trainers of vocational training courses don't have required pedagogical trainings (result section, pg. 111). This is also clearly evidenced by the literature that the trainers of the vocational training courses need to have a clear understanding of

the variety of teaching -learning methods based on which they can make effective pedagogical decisions (Lucas, Spencer & Claxton, 2012).

However, the above quantitative data also revealed that majority of the trainers (75%) explained the specific content and concepts of the session very clearly which actually supports the theoretical focus of the vocational training courses that is revealed from the qualitative data of the present study. As a result, as per the available data very few number of trainers provided opportunities to the trainees to practice the hand-on activities rather they preferred to facilitate the session mostly in lecture method. Similarly, the trainees' interaction, reflection, engagement etc. were also less in the prevailing teaching-learning practice of vocational training courses. To overcome this situation or to improve the current teaching-learning practice of vocational training courses all the trainers need to be provided the general pedagogical training. Literature also support to provide necessary trainings to the trainers. e.g. in 2015, ILO mentioned that "...contemporary TVET systems require teacher training programs that are effective, efficient, equitable and innovative and that are furthermore coherent with national and local objectives and the overall policy context (ILO, 2015, pg. xiv)."

In the same paper ILO also clarified that

"...students in TVET system are not identical or replaceable widgets on a linear production line of learning, they are rather dynamic individuals with diverse needs and background. As such, teachers and trainers need to adopt differentiated teaching strategies and inclusive programs that respond to unique student needs and a variety of employment tracks, including the option of entrepreneurship (ILO, 2015, pg. xv)."

7.2.1.5. Practice of teaching-learning in the practical sessions of the vocational trade courses

Like the theoretical session observation, the practical sessions of the vocational training courses were also observed in this study following a specific observation schedule. The observation schedule which was used to observe the practical sessions of the vocational training courses included the observation indicators, like, starting the session with giving the instruction clearly, demonstration of the particular practical task by the trainers, explaining the usage of the materials, knowledge or skills relating to the participants' context, providing instruction of the task and necessary materials to do the hands-on activities, providing opportunities for participants with necessary tools and equipment to practice the hands-on skills, participants shared their individual context and needs and relate the task with their purpose, facilitate opportunities for participants to interact with each other related to the hands-on activities, supporting participants to complete the task on scheduled time, assessment strategies used in the practical sessions, asking questions by the participants and answering those questions by the trainers, teacher-students relationship, teachers' understanding of the practical work and relevant materials, overall teaching-learning activities in the practical class of the vocational training courses, etc. Keeping the points in mind that the vocational training is mainly the hands-on, practical, experiential and real-world activities which involves feedback, questioning, application and reflection (Lucas, Spencer & Claxton, 2012) the practical sessions of the vocational training courses were observed in this present study. According to those observation indicators of the practical training sessions the present study revealed the following findings in regards to the practice of teaching-learning activities in the practical sessions of the vocational training courses:

- 7.2.1.5.1. Majority of the trainers (62.5%) started the practical class on time in the end of the theoretical class. They also gave very clear instruction for doing the job according to the job-sheet and the time plan, i.e., how long the trainees will do the task. To encourage the trainees for doing the job interestingly they also shared the learning objectives of the job from the job-sheet (result section, pg. 202, Figure 20).
- 7.2.1.5.2. The majority number of the trainers (75%) demonstrated the practical task very clearly and all the students understood the task properly (result section, pg. 203, Figure 21).
- 7.2.1.5.3. A good number of trainers (37.5%) explained the usage of the necessary materials, knowledge and skills during giving the instruction and demonstration of the task relating with participants' context but majority of them (50%) didn't relate this with participants context (result section, pg. 204, Figure 22).
- 7.2.1.5.4. 50% of the trainers provided necessary readings and materials to all the participants in an accessible format (result section, pg. 205, Figure 23).
- 7.2.1.5.5. All the training organizations (100%) have sufficient number of tools and equipment which can be provided to each and every individual participant but these tools and equipment were not new and updated (result section, pg. 206, Figure 24).
- 7.2.1.5.6. Majority of the trainers (62.5%) knew about their participants' background and purpose to receive this training and they were very supportive to the participants to relate the practical work with their needs (result section, pg. 207, Figure 25).
- 7.2.1.5.7. 75% of the trainers gave opportunities to the participants to consult with each other and take peer supports in case of facing any difficulty to complete the assigned practical task (result section, pg. 208, Figure 26).

- 7.2.1.5.8. 50% of the trainers were very supportive to the participants to complete the task timely. On the other hand, it was also found that equal number of trainers (50%) did not care enough to the participants to complete the task timely. As a result, most of the participants could not complete the task by the given time. Majority of the participants who could not complete the task shared that they will complete the task in the next practical class taking support from the trainers (result section, pg. 209, Figure 27).
- 7.2.1.5.9. 50% of the trainers asked their participants to reflect on their tasks. On the other hand, 50% of the whole trainers did not create any opportunity to reflect on their learning or task (result section, pg. 210, Figure 28).
- 7.2.1.5.10. 37.5% of the trainers looked at the activities of all participants and somehow, they assessed them including giving necessary feedback for improving the task. Sometimes they return the tasks to the participants with feedback and asked them to resubmit in the next class because these will be preserved as port-folio and will be assessed. Similarly, the same number of trainers (37.5%) assessed participants but they didn't provide any kind of feedback to the participants for improvements. There were also 25% of the trainers who neither assessed not provided any feedback to the participants (result section, pg. 211, Figure 29).
- 7.2.1.5.11. in 37.5% of the classrooms students asked questions to the trainers when they didn't understand anything, the trainers also were very cordial and confident to answer these questions but in the majority numbers of the classrooms very few participants asked questions to the trainers rather many of them seem not clear and uncomfortable in asking questions if they didn't understand any part of the task, even in a small number

- of the classrooms (12.5%) there were hardly any question from the participants and the trainers also didn't encourage students to do (result section, pg. 212, Figure 30).
- 7.2.1.5.12. In the 100% of the practical classroom the teacher-students relationship was very good. The trainers were very supportive and friendly with the participants and participants were also very happy and engaged in doing the practical tasks (result section, pg. 213, Figure 31).
- 7.2.1.5.13. The majority of the trainers (75%) are very confident and knew the procedure of the practical task and use of the relevant materials very well. Only 25% of the trainers understand the procedure of the task but their explanations were not so good (result section, pg. 214, Figure 32).
- 7.2.1.5.14. Only in the 37.5% of the practical classroom the instruction of the practical task was clear, there were sufficient number of tools and equipment were available in the class, students do the task actively and the trainers also ensured the completion of the task by the participants. But in the majority of the classroom (62.5%) it was found that almost all the above points are similar but the trainers did not ensure the completion of the task in the classroom (result section, pg. 215, Figure 34).

From the above data in regards to practical training sessions of the vocational training courses it is found that majority of the trainers (62.5%) started the practical sessions on time as they started the practical training sessions at the end of the theoretical sessions. It is also found that most of the parts of the practical sessions were 'very good', like, majority of the trainers (75%) demonstrated the particular practical task very clearly, there were sufficient tools and equipment in all the training sessions (100%) though the tools and equipment were not new and updated, majority of the trainers (62.5%) knew about the trainees' background, trainers were very

supportive to the trainees but the conclusion of the practical sessions were not up to the level-the assessment of the hands-on task was not held properly. Majority of the trainers (62.5%) did not provide any feedback to the trainees to improve their work and among them a good number of trainers even did not assess their trainees though they seem very confident about the procedure of the practical task.

As a result, majority of the trainees could not complete the assigned task at the end of the practical sessions, the trainers (62.5%) also did not ensure the completion of the task in the classroom. The main reason behind this situation is also lack of required trainings of the trainers- as the majority of the trainers are not well-trained, they are not doing the time-plan of the sessions properly and in the end of the sessions for shortage of time they don't care their trainees to complete the hands-on practical task properly. Whereas as per the guideline of the NSDP-2011 the trainers are supposed to follow the assessment procedure of particular session according to CBT &A approach. The main principles of the CBT &A approach are- "...i) progression through a competency-based training program will be determined by whether the students have met the set standards, and not by the time spent in training. ii) each learner's achievement is measured against job related competency standards rather than against the achievement of other learners (Govt of BD, European Union & ILO, 2013)."

All the trainers also supposed to be trained in CBT & A approach, in 2011 it is mentioned in the National Skill Development Policy that "...all the instructors and trainers will be provided with adequate training so they can develop and implement CBT & A programs (MOE, 2011, pg.19)." In this regard other literature also put emphasis that for building a real understanding of vocational training courses and for achieving the desired outcomes, trainees need to be given some extended explanation and opportunities to practice the hands-on activities for a longer

period of time than they are currently given (Lucas & et.al., 2012). The present study also revealed that the majority of the things in regards to practical classes of the vocational training courses are good but at the end of the practical sessions' trainees are not getting constructive feedback and explanation from the trainers as required.

7.2.2. Practice of designing and developing the syllabus of vocational trade courses.

7.2.1.1. The existing vocational trade courses are old and traditional and these trade courses need to be upgraded according to recent global and technological changes and in line with NTVQF (result section, pg. 99)

The collected data of the present study emphasized that the vocational short courses need to be upgraded to help the trainees to learn new things, to cope with the changing world and to get good job (result section, pg. 99). The available data also supported to include rich and essential contents in the vocational short courses in line with NTVQF addressing the needs of the industries. In the Implementation manual of NTVQF it is also considered that the NTVQF will establish such an approachable qualification mechanism that ultimately will serve the needs of the labour market, individuals and the community as whole (ILO, Govt BD & EU, 2013). In this regard the National Skills Development Policy-2011 mentioned that "...all the Government agencies that deliver vocational skills development trainings will review their curriculum so it aligns with the new NTVQF (MOE, 2011, pg. 16)." Regarding NGOs and other vocational training providers the NSDP-2011 also stated clear direction, like, "NGOs and other providers of non-formal skills training, including the Bureau of Non-Formal Education (BNFE), will also be

encouraged to utilize the new standards and support materials so the skills component of their programs can be nationally recognized (MOE, 2011, pg. 17).”

Finally, if we consider the current changes of the world and industrial revolution including recent technological changes it becomes very urgent to develop the human resources with necessary skills and competencies to cope with the changing situation. So, in the vocational skill development sector of Bangladesh ‘revision of the existing vocational trade courses’ should be considered as a priority one including a proper, realistic and feasible implementation plan. As per data support of the present study a few of the things should be considered carefully during redesigning or revision of the existing vocational short courses, like, during revision of the vocational short training courses the needs, context and background of the target groups should be considered carefully which was not considered before (result section, pg. 124-125), the content level of the course should not be over-packed, in that case the participants’ understanding level and receiving capacity should be considered during selecting the content of the course (result section, pg. 125), the time allocation of the vocational short courses should be well thought out considering the length of the content of the training courses (result section, pg. 125 & 126), less amount of theories and concepts should be included in the vocational trade courses but at the same time it is also essential to increase the practical part and hands-on activities of the training courses (result section, pg. 126). For increasing the employability of the trainees global industrial and technological changes also need to be considered during redesigning the vocational trade courses (result section, pg. 129 & 130). In 2018 one of the important studies by the World Bank also specifically stated that some of the crucial skills gap among the Bangladeshi workers which need to be improved for better coping with the global fast changing economy, like, *higher-order cognitive skills and non-cognitive/soft skills, Practical*

Technical Skills and Knowledge for Jobs, the study explored that overemphasis on theoretical knowledge during formal education and training created serious lacking of practical and technical competencies among the professionals and workers of Bangladesh. *ICT Skills*, in this global age both the professionals and workers should be able use information technologies efficiently and employers also want the employees to be highly skilled in ICT. The study shows that the job opportunities in ICT sector is growing in Bangladesh and considering the high demand in Bangladesh more ICT skills are required to meet domestic and international market demands. *Foundational skills, Job search and Career Development Skills* (The World Bank, 2018). So, during redesigning the vocational trade courses the above-mentioned skills mentioned by The World Bank need to be addressed carefully. Especially both the above literature and available data of the present study specified about over emphasis on the theoretical knowledge during training and employers' demand about employees who are highly skilled in ICT. So, the vocational trade courses need to be redesigned balancing the theoretical knowledge with the volume of practical tasks rather to some extent more practical hands-on activities can be incorporated in the syllabus of the vocational trade course including the ICT skills and other essential skills demanded by the global job market.

On the other hand, most importantly, during developing the vocational trade courses the requirements of the industries were not reviewed, as a result there is a huge skills gap between the training courses and the industries' requirements (result section, pg. 127& 128). So, all the vocational trade courses need to be upgraded in line with the vocational training courses under NTVQF where many of the related things were considered carefully. For example, the National Qualification Framework suggested to ensure that all the graduates of vocational skill development training courses achieved the required skills and competencies that will be able to

fulfill the demands of the industries (Govt of BD, European Union & ILO, 2009). Available data of the present study also supported that in designing the vocational training courses under NTVQF the industries' requirements were considered significantly involving the Industry Skills Council (ISC) (result section, pg. 128), in the whole process the employers were being oriented about the system and as a result the employers feel themselves to contribute to the system anyway (result section, pg. 128), finally the NTVQF vocational training courses also considered the global industrial and technological changes (result section, pg. 130).

7.2.1.2. The Competency Standards (CS) of the vocational training courses under NTVQF are occupation based and up- to- dated (result section, pg. 7) and BTEB provided these CS to the training organizations to follow during facilitating the trainings (result section, pg. 178-179).

By analyzing the collected data, it was found that the people from industries were involved in the development process of CS – as a result those CS were developed as occupation based and up-to-dated which helped to lessen the gaps between supply-side and demand-side of Vocational Skills Development sector (result section, pg. 138). From other data sources it was also revealed that BTEB provided the CS to the training organizations and the trainers facilitate the training sessions following these CS (result section, pg. 178-179). This finding of the present study is found to be matched with the findings of Khan's study which confirms that the main reason behind this fact of CS and initiative is to strengthen the relationship between the industry sectors and the vocational training providers. For this purpose, the Government of Bangladesh has taken initiative to implement a new system of industry competency standards and qualifications which is known as the 'Industry Sector Standards and Qualification Structure'. In this system each

industry will develop competency standards based on specific occupation and then the employers and workers of the specific sector will prioritize the competency standards as per requirements (Khan, 2017). However, "...industry -determined competencies required for effective work performance. Expressed as outcomes and focus on workplace activity rather than training or personal attributes and capture the ability to apply skills in new situations and changing work conditions (Govt. of BD, European Union & ILO, 2013, pg. 18)." As per available data of the present study it is also well-acknowledged that the determined competency standards of the vocational trade courses are available to the trainers and they are following those competency standards in facilitating the trade courses. But for proper implementation of those competency standards a structured monitoring system should be developed by the proper authority involving the relevant industry sector. The competency standards of the particular trade course also need to be measured applying the CBT & A approach in that case opportunity of the exposure in the relevant factory, i.e., apprenticeships can be arranged during the training.

7.2.2. Practice of vocational trade courses and employability from the perspectives of target groups

In the present study two surveys were conducted among the current participants and the graduates of different vocational training courses specially to explore their perspectives about the current practice of vocational training courses, the usage of the vocational trainings in their real-life situation and implications of vocational training courses in increasing their employability for the current job market. Through the couple of surveys, the following findings were revealed from the perspectives of target groups of the vocational training courses:

- 7.2.2.1. 37.05% of the current trainees and 35% of the graduates of the vocational training programs were informed about the training courses through phone or advertisement from the training organizations, 30.05% current participants and 30.83% graduates were informed about the training courses from their current or previous employers (result section, pg. 223. Figures 42 & 43).
- 7.2.2.2. 59.84% of the current participants and 61.67% of the graduates said the vocational training courses were 'very good', 29.27% of the current participants and 22.5% of the graduates said the training courses were 'good' (result section, pg. 224. Figures 44 & 45).
- 7.2.2.3. Almost all the current participants (96.89%) and graduates (94.17%) of the vocational training programs who completed the training courses understood the theoretical part of the training course (result section, pg. 225. Figures 46 & 47).
- 7.2.2.4. The majority of both current participants (54.15%) and graduates (55%) of the vocational training program said the practical classes of the training courses were 'very good' and 34.46% of the current participants and 25% of the graduates said the practical classes were 'good' (result section, pg. 227. Figures 48 & 49).
- 7.2.2.5. Most of the current participants (77.72%) and graduates (76.67%) said there were necessary tools and equipment in the training organizations for facilitating the practical classes (result section, pg. 228. Figures 50 & 51).
- 7.2.2.6. The existing trainers of the training organizations are ready to facilitate the traditional training courses, both the current participants' and the graduates' impression in this regard also positive, like, 64.25% of the current participants and 61.67% of the graduates mentioned the trainers of their training courses were 'very good' and 27.46%

of the current participants and 22.5% of the graduates said the trainers were ‘good’ (result section, pg. 229. Figures 52 & 53).

7.2.2.7. Most of the current participants thought opportunities of exposure in the relevant factories during receiving training is very useful for them though very less number of training organizations have this kind of opportunities (result section, pg. 230. Figures 54). The majority number of current participants (242 from 386 or 62.69% of the current participants) said there was no available opportunities of industrial exposure in the training organizations during training (result section, pg. 230. Figures 54). Though almost all the participants were positive about the exposure in the relevant factory during training (371 from 386 or 96.11% said ‘very useful’ or ‘useful’ or were ‘moderate’) and very fewer number of participants these types of opportunities are ‘not useful’ (10 from 386 or 2.59%) or ‘not useful at all’ (5 from 386 or 1.30%) (result section, pg. 230. Figures 54). On the other hand, 53.33% of the graduates said that during training the exposure in the relevant factory is ‘very useful’ and 28.33% of the graduates said during training exposure in the relevant factories is ‘useful’ (result section, pg. 232. Figures 55).

7.2.2.8. 273 out of 386 or 72.73% of the current participants mentioned there were opportunities of job placement during training and the rest 113 out of 386 or 29.27% said there was no job placement opportunities. Among 273 out of 386 or 72.73% participants 162 out of 273 or 59.34% said the opportunity of job placement during training is ‘very useful’, 82 out of 273 or 30.04% said ‘useful’ (result section, pg. 234. Figures 56). Similarly, majority of the graduates (65 out of 120 or 54.17%) also mentioned there were opportunities of job placement during training and the rest (55 out of 120 or 45.83%)

said this kind of opportunities were not available during training. Whereas 67 out of 120 or 55.83% said 'very useful', 35 out of 120 or 29.17% said 'useful' (result section, pg. 235. Figures 57).

7.2.2.9. 79.74% of the current participants said in the vocational training courses more emphasis should be given on the practical part of the course and only 20.26% of the participants said emphasis should be given on the theoretical part of the training course. Similarly, the majority of participants (80.83%) also shared that in the current practice of vocational training system more emphasis have been given on the practical part of the training course. Very fewer number of participants (19.17%) said in the current practice emphasis given on the theoretical part of the course (result section, pg. 236. Figures 58 & 59).

7.2.2.10. 96.11% of the current participants said the existing vocational training courses need to be redesigned and 92.5% of the graduates mentioned that the existing vocational training courses need to be redesigned (result section, pg. 238. Figures 60 & 61).

7.2.2.11. The highest amount of the trainees (48.45%) wants to be self-reliance after completing the vocational training course, then 37.05% of the trainees are receiving the vocational training course to get comparatively a better job and the rest of the trainees are receiving the training course to get any kind of a job (7.00%). Similarly, 36.67% of the graduated received the vocational training courses to be self-reliance and almost equal number of people (35.83%) received vocational training for getting comparatively a better job. (result section, pg. 240. Figures 62 & 63).

7.2.2.12. Almost all the current participants (383 out of 386 or 99.22%) shared changes happened in their lives using the vocational trainings. Simultaneously, 383 out of 386 or 99.22% shared positive opinion about the usefulness of the vocational training courses, for example, 210 out of 386 or 54.40% of the current participants said vocational trainings were 'very useful', 123 out of 386 or 31.87% of the participants said 'useful' and 50 out of 386 or 12.95% were 'moderate' in this regard (result section, pg. 241 Figures 64). Similarly, almost all the graduates (111 out of 120 or 92.5%) of vocational training courses also shared changes happened in their lives using vocational trainings. In addition, majority number of graduates also shared vocational training were 'very useful' (60 out of 120 or 50 %) and 'useful' (28 out of 120 or 23.33%) for getting a job or in the workplaces (result section, pg. 242, Figure 65).

7.2.2.13. 71.5% of the current participants and 88.3% of the graduates shared 'competencies and skills increased/ will increase' using the vocational trainings, 75.6% of the current participants and 70% of the graduates said 'motivation increased/will increase to join a suitable work or workplace after completing the vocational training courses, 76.4% of the current participants and 67.5% of the graduates said through vocational trainings willingness to work will increase/increased, 71.5% of the current participants and 58.3% of the graduates said vocational trainings were helpful to increase the amount of work in the workplace, 78.8% of the current participants and 67.5% of the graduates said after completing the vocational trainings opportunities of jobs increased/will increase, 65.3% of the current participants and 63.3% of the graduates said vocational trainings helped the target groups to be self-reliance, 71.5% of the current participants and 56.7% of the graduates said using the skills and

competencies of vocational trainings income level of the target groups has been increase/will increase, 78.5% of the current participants and 61.7% of the graduates of vocational trainings said using the skills and competencies of vocational trainings overall quality of our life-leading will be improved/improved, finally 84.5% of the current participants and 62.5% of the graduates said through vocational trainings skills will be increased/increase to resolve problems of regular daily lives (result section, pg. 244, Figure 66).

7.2.2.14. The majority of the current participants (229 out of 386 or 59.33%) said the certificate of the vocational trainings were ‘used a lot’, similarly the majority number of current participants (205 out of 386 or 53.11%) also said the employers gave ‘a lot of emphasis’ on the vocational trainings’ certificate. (result section, pg. 246, Figure 67). On the other hand, very less number of graduates (43 out of 120 or 35.83%) said the vocational trainings’ certificates ‘used a lot’ and employers gave ‘a lot of emphasis’ (41 out of 120 or 34.17%) on the certificates of vocational trainings. The reasons behind this differentiate viewpoints between the current participants and graduates were the current participants just attending the training courses- they didn’t have experience to communicate with the employers but the graduates of the vocational training courses are looking for jobs and to some extent they got the experience to explore the employer’s perspectives about importance of vocational training’s certificates (result section, pg. 247, Figure 68).

7.2.2.15. Majority number of current participants (188 out of 386 or 48.70%) said the vocational trainings are ‘very much helpful’ to increase their employability, 116 out of 386 or 30.05% of the current participants said ‘helpful’, 65 out of 386 or 16.84%%

were moderate. Majority number of current participants also agreed that the training organizations play a significant role in this regard, 330 out of 386 or 85.49% of the current participants said the training organizations took different kinds of initiatives to support them for increasing their employability (result section, pg. 249, Figures 69).

7.2.2.16. Majority number of graduates (81 out of 120 or 67.5%) said the training organizations took different kinds of initiatives and provide necessary supports to increase their employability. Along with this regarding contribution of vocational training courses for increasing the employability of the graduates 61 out of 120 or 50.83% of the graduates also said these types of trainings are 'very helpful' for increasing their employability (result section, pg. 250, Figures 70).

7.2.2.17. 93.50% of the current participants said it is important to have a good communication between employers and participants of vocational training. But in practice a smaller number of participants (43.5%) have communication with the employers and majority of them (56.5%) didn't have any kind of communication with the employers. However, through the survey it was also found that majority of the participants (71.80%) use the skills and competencies of vocational trainings in their work places (result section, pg. 252, Figures 71).

The above data from both the current participants and graduates of the vocational trade courses it is revealed that majority of both current participants and graduates showed very positive impression about the vocational training courses and the practice of those courses, like, they said the vocational training courses are 'very good' (59.84% of current participants & 61.67% of graduates), they understood the theoretical part of the courses (96.89% of current participants & 94.17% of graduates), there were necessary tools and equipment in the training organizations

77.72% of current participants & 76.67% of graduates), trainers of their training courses were ‘very good’ (64.25% of current participants & 61.67% of graduates) etc. but comparatively less proportion of target groups (54.15% of current participants & 55% of graduates) said the practical classes were ‘very good’ which is the core/main part of the vocational skill development programs and achieving the learning outcomes of vocational training courses also mostly depend on the practical work of the courses, like, couple of the learning outcomes of ‘Sewing Machine Operation’ course are “...identifying basic tools and equipment used in machinery maintenance and repair, implementing important repairing machineries, etc. (BMET, n.d. pg. 1).” Similarly, the competency standards which are mentioned in the vocational training courses all of the competency standards also mainly practical and hands-on activity-based, like, a few of the competencies of the level 1 and level 2 of SMO course are “...working in RMG sector, using hand tools and power tools for the RMG sector, operating single needle and double needle lock stitch machine, operating single and double needle chain stitch machine, etc. (BTEB, 2013, pg.11).” In fact, the achievement of learning outcomes and competencies of any kind of vocational trade courses in any trade mainly depend on the practical works. So, the prevailing practice of vocational trade courses should give emphasis on practical part of the course. Supporting this fact in 2014 in a study Ogundele & et.al. stated firmly that skill acquisition is essential in the education sector because it contributes to develop the nation as human capital and prepared one for relevant employment. The skill acquisition prepared young people for particular job as per market demand and creates lifelong opportunities for self-development because skill acquisition includes competency and prepared the skilled person to carry out a job effective and efficiently for higher productivity. But as there are different shortcomings in the existing practical part of the vocational trade courses the vocational training programs of our country

could not be able to meet the required demand of skilled workforce. The total workforce of the country has serious lacking of necessary technical vocational trainings, data from a survey in 2012 showed that "...approximately 80% of the workforce had not received any training and among the 20 % that had, only 11% received training which was justifiable under the National Technical Vocational Qualification Framework (NTVQF)" (USAID et al., 2015, pg. 2). Not only this even statistical evidence indicates that the skills imparted by much of the TVET system are not those that the market requires (ADB & ILO, 2016). One of the studies by the World Economic Forum also noted that in practice there are already large mismatches between the actual supply and demand of key work-related skills. "...with 38%of employers reporting difficulties in filling jobs in 2015, according to Manpower Group's most recent Talent Shortage Survey (World Economic Forum, 2016, pg.24)." So, for reducing the skill gap it is very essential to give emphasis on the practical and hands-on activities creating opportunities of exposure in the relevant factories where necessary. This is also supported by both the current participants and graduates of vocational trade courses through the above-mentioned data. In addition, both the groups agreed that there were job placement opportunities in the vocational training courses which are being offered under different Government project. But this types of 'job placement opportunities' should be arranged in all sorts of vocational training courses whether it is a regular course or a course under a project.

7.3. Section 2: Research Question 2: What is the current status of implementation of vocational trade courses under NTVQF?

National Skills Development Policy 2011(NSDP-2011) of Bangladesh is one of the major initiatives to improve the coordination and delivery of skills development programs in Bangladesh. The NSDP-2011 is guiding all kinds of skills development programs and coordination of all elements of skills trainings and other areas of skills development. In Bangladesh the scope of skills development is very diverse. Different types of skills training providers use their own ways in providing the trainings instead of unifying the vision. The NSDP-2011 suggested to put the whole system under a single regulatory framework to rationalize diverse efforts and to provide a unified direction to the diverse group of training providers. In practice the major challenges for skill development system are to address the needs of large population enhancing employability and securing safe and decent work (MOE, 2011). So NSDP-2011suggested to revise and update the competency standards of Vocational Skills Development (VSD) programs introducing a new National Technical Vocational Qualification Framework (NTVQF).

NTVQF will integrate the available skills trainings in community organizations, schools, training institutions and the workplace providing a common national benchmark for naming and levelling the skills qualifications both nationally and internationally (MOE, 2011). All the government agencies offering the conventional vocational training courses or short courses of 360 hours, all of them will review their curriculum to align the courses with NTVQF. Taking direction from National Skill Development Council (NSDC), the Bangladesh Technical Education Board (BTEB) will be responsible for the implementation and periodic review of the

vocational training courses under NTVQF. This initiative, i.e., and the vocational training courses under NTVQF will help the participants to achieve nationally and internationally recognized qualifications which are related to national industry skill standards. Regarding development and implementation of vocational trade courses under NTVQF this study revealed the following significant findings:

7.3.1. Implementation status of vocational trade courses under NTVQF

7.3.1.1. Very small amount of training organizations started to offer the vocational training courses under NTVQF, in many cases they are just offering only the RPL courses (result section, pg. 101-102).

As per available data it was found that for offering the vocational training courses under NTVQF different types of challenging issues emerged in the training organizations and the training organizations are not ready to overcome those challenging issues, for example, the challenging issues are lack of qualified trainers, lack of sufficient tools and equipment, infrastructural problem, lack of connectivity with the employers, etc. (result section, pg. 102). Though all the public vocational training organizations are supposed to review their curriculum to align these with the NTVQF and all private skills training organizations are also encouraged to use the NTVQF standards for getting national recognition of their training programs and initiatives. In addition, NTVQF also will be gradually implemented in the industry sectors to develop new standards and qualifications for occupation and skills in demand (MOE, 2011). The vocational training courses which BTEB developed under NTVQF is really high quality and demand-driven which ensure high quality skill development for individual's employability and increased productivity, so for proper implementation of those NTVQF courses need to develop a well-

thought out implementation plan ensuring all sorts of essential facilities which is mentioned above, like sufficient and updated tools and equipment for doing the practical work properly, well-trained trainers, infrastructural facilities and opportunities to create good connectivity between training providers and relevant industry sectors need to be developed and in that case Government and relevant authorities, like, BTEB, NSD & A should play the main role.

So, at present the training organizations just offered RPL through which they just assessed the prior learning of the participants and based on the existing knowledge and skills of the participants they certify them in a level of NTVQF (result section, pg. 102). Prior learning encompasses formal learning, non-formal learning and informal learning which is given value, identified, assessed and acknowledged in the RPL. RPL give value to all learning, no matter how that learning is achieved, RPL mainly provide opportunities to the individual for access, transfer and moving forwards to education and training achieving an acknowledged award (BTEB, Operational Guideline for RPL, 2012). In fact, RPL is not a comprehensive course under NTVQF, it is just a formal assessment of prior knowledge of the participants and based on this assessment the training organizations are used to give a level to the participants comparing with the eight levels of NTVFQ. The National Skill Development policy clarify that “...the RPL system will officially recognize prior learning (skill and knowledge) so that individuals can enter or re-enter formal training institutions and thus enhance their employability (MOE, 2011).” So, the legal authority and the training organizations should give priority and put proper emphasis on the implementation of the vocational training courses under NTVQF addressing all the above-mentioned challenging issues instead of just offering the RPL courses. Data also supported that considering different occupational issues the vocational training courses are being implemented up to level 4 of NTVQF and it will take time to implement all the levels of NTVQF (result

section, pg. 102). But data supported that the vocational training courses under NTVQF need to be implemented in the whole country instead of offering a few of the vocational training courses under NTVQF and for this purpose trainers need to be developed (result section, pg. 113-114).

In addition, the collected data of this study also suggested that BTEB should play significant role developing some rules and regulations in this regard, like, if CBT & A approach is made a compulsory pedagogy for all the training organizations then all the training organizations will be compelled to follow the CBT & A approach during facilitating the vocational training courses. BTEB also can create a separate monitoring cell, implement a strategic workplan, develop human resources to ensure the CBT & A approach in training facilitation. All those initiatives of BTEB also need to be disseminated properly across the whole country.

7.3.1.2. Most of the training organizations are not well equipped with necessary tools and equipment required for practical classes of the vocational training courses under NTVQF (result section, pg. 106).

One of the most important goals of vocational trainings is to develop human resources for fruitful employment in the job or labour market. To achieve this major goal of vocational trainings along with a relevant and comprehensive curriculum a well-equipped training organization with updated tools and equipment is an urgent necessity (Rufai, et al., 2013). But in the present study data from different sources represented that the training organizations don't have sufficient and updated tools and equipment for facilitating the practical classes properly as per CBT & A approach (result section, pg. 106). But after initiating the NTVQF in 2008 and formulation and implementation of NSDP-2011, from 2012 BTEB developed vocational training courses of different trades under NTVQF and introduced CBT & A approach to deliver them.

In this regards the National Skill Development Policy very clearly mentioned that for implementing the vocational training courses under NTVQF and following the CBT & A approach “...considerable investment will be made to upgrade the facilities and equipment of training institutes so that they can deliver the new industry endorse qualifications (MOE, 2011, pg. 19).” As the vocational training courses under NTVQF and CBT & A delivery approach intended to ensure the achievement of skills and competencies by each and every student confirming the individual assessment, so necessary steps need to be undertaken to equip the training organizations with new and updated tools and equipment which are required for proper implementation of the NTVQF courses. In the National Skill Development Policy-2011, it is very clearly mentioned that the facilities and equipment of the training organizations will be upgraded to deliver the new industry endorse qualifications but only the declaration in the policy is not enough, its proper implementation is an urgent necessary to facilitate the vocational training courses as per NTVQF and CBT & A approach. For implementing all the policy plans related to NTVQF and CBT & A approach BTEB can develop and follow a feasible implementation plan including a specific target.

From the available data support of the study, it is also found that different Government projects are already providing tools and equipment support to the training organizations but it is also explored that though SEIP project is providing support in this regard but these are not sufficient (result section, pg. 108). There are also some limitations regarding the project’s supports, like, the projects do not have any budget for repairing the machineries if any does not work or the projects are not flexible to buy updated tools and equipment, rather they are fixed on buying particular categories of machineries (result section, pg. 109). However, now a days Government and TTCs just started to take initiative to involve industries to contribute providing tools and

equipment for developing the skilled human resources as their requirements (result section, pg. 108). For making all sorts of initiatives more efficient, the project's plan can be reviewed based on the learning and experience collected from different stakeholders, like, nobody can say the tools and equipment will work for ever, so the project should be flexible and allocate necessary budget to repair the tools and equipment as required. Otherwise, all other attempts will definitely become a great misuse of the project's fund because while a machinery does not work and if there is no allocated fund to repair this, then the training organizations also don't think to repair this using any other fund. As a result, ultimately the tools and equipment remain useless day after say and after a certain time the training organizations discard these considering disordered tools and equipment.

7.3.1.3. The existing trainers of the training organizations are ready to facilitate the vocational short training courses but they are not ready to facilitate the vocational training course under NTVQF (result section, pg. 111).

According to the collected data of the present study current participants of different vocational trade courses supported that the trainers are experienced in facilitating the training sessions. This was also supported by data from other sources (Principals, Trainers) but they are not well trained to facilitate the vocational training courses under NTVQF following CBT & A approach. They have only the academic background but they don't have any kind of pedagogic training (result section, pg. 111). But a well-trained cadre of instructors and trainers is the backbone of any effective skills development system, the trainers' group who are responsible for facilitating the vocational skills training must need to have the necessary up-to-dated technical skills with proper

certification (MOE, 2011). Regarding facilitating the vocational training courses under NTVQF the National Skills Development Policy 2011 also declared that all the instructors employed by the Government will be trained and certified under the new system, regarding the private sectors' trainers the policy also mentioned that all the trainers delivering the vocational training courses under NTVQF must be certified under the new system (MOE, 2011). In line with this the available data of the present study also suggested that the trainers need to complete all the levels of particular training course according to NTVQF, they need to have the certificate on particular NTVQF courses including the certificate of pedagogical approaches. (result section, pg. 112).

In support to this, in 2015, one of the studies by ILO also mentioned that trainers should not be viewed just as implementors of the policy or initiatives rather they should be representing as national and regional expert groups in skills development reform, so it is very essential to provide training to the trainers to complement their core competencies as trainers (Axmann et al., 2015). However, both from the literature and available data support of the present study it is very clear that the trainers of the vocational training courses need to provide basic pedagogical trainings and the training on CBT & A approach, only good academic background or subject based knowledge is not enough to facilitate a vocational training session effectively. In that case BTEB should arrange the required training on CBT & A approach which is an urgent necessity for the trainers for facilitating the vocational training course under NTVQF. On the other hand, for following the CBT & A approach in facilitating the vocation trade courses under NTVQF, the trainers also need to have at least the basic pedagogic knowledge to plan and apply an effective teaching method in their teaching practice. For arranging and ensuring the basic pedagogical trainings for the trainers BTEB can build a good partnership with the educational institutes who mainly work for the teachers' professional development.

7.3.1.4. The assessment procedure of both traditional and vocational training courses under NTVQF is being done in the presence of external assessors from BTEB but the trainers don't have positive impression about this assessment procedure (result section, pg. 115).

The assessment of the vocational training courses under NTVQF will competency-based assessment and in this competency -based assessment system each and every individual's performance will be assessed against defined qualifications. The trainers can not conduct the assessment of their own trainees for ensuring the completion of the training course. In that case the assessment must be conducted by a Registered Competency Assessors who are not involved in the training facilitation process. The registered competency assessors will have two years relevant industry experience and will be certified as competent in the competency standards that they will assess. They must also be certified as competent in assessment by achieving the competency standards and qualifications specified by BTEB (ILO, EU & Govt of BD, 2012).

In this regard available data analysis of the present study also revealed that the external assessors assessed the participants following a specific guideline from BTEB and based on the guideline they just asked some selected questions for assessment. Sometimes these specific set of questions don't cover the whole content which the trainers taught in the training sessions. (result section, pg. 115-116). Through different data it was also pointed out that as those specific set of questions are memorization-based trainees always can not perform properly to specific answers and in that case the assessors gave the trainees 'not yet completed', showed power exercise as they were nominated from BTEB and showed very negative attitude towards the training organizations.

So, in that case BTEB should be very transparent and strict in assessment validation, moderation and monitoring. Not only this, BTEB also should put emphasis on developing individual assessment tools considering the overall content of a specific course so that the assessment tools can be considered as a valid one to assess and measure the achievable skills and competencies of a particular course. Similarly, in developing the test items of assessment tools it is needed to be considered carefully that the selected test items are not memorization based rather the test items are developed considering 'Bloom's Taxonomy' and maintained the hierarchy of the test items accordingly. Even BTEB can initiate to provide necessary trainings on 'assessment tools and test items development' to the people who are responsible to develop the assessment tools.

7.3.1.5. Only the public training organizations availed the necessary supports and facilities from Government but the private training organizations are completely self-directed and depend on their own funding and facilities (result section, pg. 117).

Through available data of this study, it was pointed out that it is mainly Government responsibilities to implement the vocational training courses under NTVQF across the country. So, with own initiatives and investments the private technical training organizations will not support Government to complete its responsibilities properly rather many of the private training organizations are reluctant in this regard (result section, pg. 117). In conclusion the available data suggested that for the private training organizations a support system should be developed by Government and in that support system the trainers of the private training organizations should be provided necessary trainings, similarly necessary tools and equipment can be provided to those private training organizations. (result section, pg. 116-117). The National Skills

Development Policy 2011 also acknowledged that private training providers provide a significant amount of training in our country and they are really important contributors to the local skill development sector. So, the national policy assured that to strengthen their role, Government will promote and support the expansion of diverse training options including supporting the trainees through micro-credit scheme (MOE, 2011). As it is mainly the responsibilities of the Government to implement the National Skill Development Policy -2011 and provide the vocational skill development courses under NTVQF across the country as per different policy declaration, so for proper implementation of the policy Government should bring all the vocational training providers under one umbrella building strong partnership with all the relevant private training institutions. Especially, for ensuring the quality of the vocational training courses, the trainers of the private training institutions also need to be included in different trainers/teacher's development programs initiated by Government. If this can be done, trainers from both the public and private training institutions will be able to facilitate the vocational skills development trainings in a uniform way avoiding all sorts of discriminations.

7.3.1.6. The training organizations did not follow the 'Academic Regulation' of BTEB properly (100%) as a result all the content of the training course syllabus are not taught in some cases (result section, pg. 118).

In the result section (pg. 118) the data analysis showed that in the practice of training organizations there were some gaps, the instructions from BTEB about assessment and training delivery mood were not followed properly by the training organizations, sometimes it's happened that three hours of scheduled class is being completed by two hours and as a result all the contents of the training course are not taught or covered. In this regard available data analysis

also explained that as a few of the contents are not taught the trainees missed to achieve some of the Competency Standards (CS). But in case of vocational training courses each and every part is important as most of the things are related to practical work, for doing a complete practical task the trainees need to have a comprehensive knowledge about the whole task otherwise it will not be possible for them to complete a hands-on practical task. For example, one of the learning outcomes of 'Sewing Machine Operation' trade course is 'techniques of assembling and installing attachments' (BMET, n.d.), the sector specific and occupation specific competencies of the level-wise NTVQF course are operating single needle lock stitch machine, operating double needle lock stitch machine, operating single needle chain stitch machine, operating double needle chain stitch machine, operate Four Thread Over Lock Machine, Operate Five Thread Over Lock Machine, operate Bottom Covering Chain Stitch Machine, Operate Top and Bottom Covering Chain Stitch Machine, Operate Kansai Special Machine, etc. (BTEB, 2013). For achieving these types of competencies and learning the hands-on activities skillfully the trainee must need to understand each and every step of operating a machine, there is no scope to skip a few of the steps rather is he/she does not know a single step he/she will not be able to operate the particular machine. As per the available data support of the present study it is revealed that sometime the trainers don't complete to teach the whole class, trainees missed to achieve a few of the competencies, as a result the trainees remain inefficient for doing the hands-on activities which ultimately create the limitations to fulfill the demand of the job market.

To avoid this kind of gap data supported to maintain a record book by the trainers and trainees (result section, pg. 118). In addition, data also suggested to review the 'Academic Regulation' of BTEB for ensuring the quality of the vocational training courses. In this regard BTEB also needs to strengthen its monitoring cell which is suggested by the NSDP-2011.

7.3.1.7. Opportunities of attachment of participants with relevant industries and job placement during training is very much helpful for the participants but in our country, there is very less opportunities to work in the industries as part of the vocational training courses (result section, pg. 122).

Along with the Principals and Employers especially the current participants supported this point giving their views from different perspectives, like, in the vocational training courses they are learning hands on practical work, so if they get the opportunity to visit relevant factory or can work in the factory for short time as part of the training course, this will be a great help for them (result section, pg. 121-122), real environment of the factory will help them to learn the hands-on practical activities properly using the appropriate materials (result section, pg. 122). But in our country, there is lack of opportunities to be attached with the factory during training as part of the vocational training courses.

Through data analysis it was also explored that exposure in the relevant factories during training courses depend on the good relation and understanding between training organizations and employers which is just started in our country. To some extent there is lack of communication between the training organizations and employers (result section, pg. 123)

In this point the NSDP-2011 also drew a context of Bangladesh which is aligned with the collected data of this present study. The NSDP-2011 clarify that apprenticeships or attachment of the trainees with relevant factory during receiving particular training is an effective way for the young group to move to the world of work by achieving work experience. But in our country this system is not well-supported by government or relevant industry. So, during offering different

vocational training courses the training providers also face difficulties industrial placement for trainees. As this apprenticeships system is considered as an effective way so the NSDP suggested to strengthen and expand this so that more employers, industrialists and the trainees themselves can be benefited from this (MOE, 2011). However, in this regard, for increasing the exposure to the relevant industries during vocational training both the training organizations and industry sectors need to play significant role, like, the training organizations need to take different sorts of initiatives to engage the industry sectors in the whole vocational skill development process so that they become well-known about the types of competencies of the vocational training courses. Similarly, the industry sectors also need to respond proactively to different initiatives taken by the training organizations creating necessary opportunities for the trainees to learn and get exposure to different realistic practical tasks of the industries.

7.3.1.8. The training organizations were aware and willing to implement the vocational training courses under NTVQF following CBT & A approach but majority of them are mostly offering the traditional vocational trade courses without having required equipment and qualified trainers (result section, pg.107).

According to available data all the principals and trainers (100%) appreciated the CBT& A approach. They are very much committed and bold about the good impact of CBT& A approach, i.e. vocational training courses under NTVQF (result section, pg. 107) but the required facilities are not available in the training organizations for providing those vocational training courses under NTVQF. In the vocational training system under NTVQF the trainees qualify the particular training course based on the industry requirements which ultimately provide high

quality outcomes maintaining each individual's employability and increasing their productivity (Govt of BD, ILO & EU, 2013). For achieving these high-quality outcomes through NTVQF vocational training courses Government is currently implementing the CBT & A approach in the vocational training system. This CBT & A actually a shift away from traditional theory-based approaches to delivery and assessment by giving emphasis on the achievement and demonstration of practical skills by each and every individual trainee which require sufficient number of tools and equipment (MOE, 2011).

But the available data of the present study also showed that the training organizations have a good number of tools and equipment but these existing tools and equipment are not new and updated according to the changes in the industry sectors and global age. As a result, they could not offer the vocational training courses under NTVQF following the CBT & A approach. Rather data analysis of the present study showed that the training organizations are continuing to offer only the traditional vocational trade courses with having limited and old tools and equipment because for offering those vocational traditional courses don't require individual performance in the practical tasks (result section, pg. 107).

7.4. Section 3: Research Question 3: What is the existing communication between vocational training organizations and industry sector and how far the trade courses are relevant to address the needs of the employers?

7.4.1. The industry sectors don't have any kind of communication and connection with the vocational training organizations, even for recruitment they don't communicate with the vocational training organizations (result section, pg. 131).

Data from different sources especially from employers and trainers supported this existing situation. From the employers' side it was mentioned that based on the advertisement they used to recruit essential staff from their industries, they don't have any kind of communication with the vocational training organizations (result section, pg. 131).

But both the literature and data from other sources supported that it is very essential to have a very good connection between the employers/industries and the training organizations because ultimate place of using the skills and competencies of the training courses is the industries (result section, pg. 131-132). In a study about collaboration between TVET institutions and industries in Bangladesh adequate collaboration between vocational training organizations and industries lead to create provision of relevant practical skills for industrialization (Raihan, 2014).

In this regard the available data explained that the requirements of the main demand side, i.e., industries should be considered carefully otherwise produced products through different

vocational training courses will be meaningless (result section, pg. 132). However, currently BTEB is giving emphasis on this point and reviewed all types of traditional trade courses in line with NTVQF which is giving a clear instruction to the TTCs to build a strong connection/linkage with the employers and industries (result section, pg. 132). BTEB independently established the ISC under corporations Act which is endorsed by the NSDC. For developing the network of ISC the Government of Bangladesh will work with the industry and relevant development partners to make their operations and planning sustainable and established in the industry skill issues of the country (MOE, 2011).

Training organizations also started to form ‘Employers’ Committee’ and took other initiatives to involve the employers with the vocational training system (result section, pg. 132-133). In this regard it is considered that the industries, training organizations and trainees all are inter-related. For example, for recruitment the industries should inform the training organizations that they need these types of people, then the fresh and trained people will be developed through different kinds of training (result section, pg. 134). Data also suggested to attach the trainees with relevant industries and factories and in that case, industries should play significant role providing different support to the training organizations, like, they should inform BTEB and training organizations about their real requirements and recent changes in the machineries and production process (result section, pg. 134-135).

On the other hand, as per employers’ views the training organizations also can play significant role in this regard, asking the industries about their requirements and ensuring the industries that they would provide trained and skilled people as per industries requirements (result section, pg. 135). Data also suggested to make the strongest collaboration between training organizations and industries, for example, the industry can say the TTCs that we are using these machines for

production, so we are giving you few number of this categories of machine, you train people on using these machine and after the training send those people to us, we will give them relevant job (result section, pg. 136), if there is any potential trainer among the employers they can support the training centers facilitating relevant training sessions as guest lecturer (result section, pg. 136), in some cases creating scope for formal communication between the employers and trainee (result section, pg. 136-137).

7.4.2. There is gap between supply-side and demand-side of vocational trainings and relevant skills (result section, pg. 137-138).

Through available data it was explored that there are so many vocational trainings in the vocational skill development sector but these trainings are not target oriented; the trainees are not confirmed about the use of the trainings. The data pointed out that the main reason behind this gap is not considering the requirements of the employers in designing and offering the trade courses (result section, pg. 138). In practice mainly ‘the academician’ designed and developed the syllabus of the vocational training courses who don’t know about the changes happened in the industry sectors. On the other hand, the industry people who usually use the skilled human resources in the industry sector don’t know about the vocational training courses, i.e., what sorts of skills are being developed through different vocational trainings. As a result, huge gap remained between these two sectors. However, in the result section it was also found that recently BTEB developed the CS of NTVQF vocational training courses considering the requirements of the industries, people from industries were involved in developing the CS of NTVQF trade courses (result section, pg. 139).

But through data support it was also revealed that still there are scope to remain the skills gap. For example, data analysis supported that according to NTVQF the training certificates are valid

up to five years which means the demand of the industries will be changed day by day and according to the changes the curriculum of the vocational training courses and the competency standards need to be up-dated. Similarly, according to the changed curriculum and CS the instruments, course materials, necessary tools and equipment also need to be up-dated. So, the person who received training on the NTVQF courses he/she also need to update his/her skills and competencies as per the changes happened in the specific sector and occupation (result section, pg. 140). But in this global and technological age so many changes will be happened in the industry sectors by this five year, so they should be up-dated again according to the new changes otherwise again the skills gap will remain in this sector (result section, pg. 140). In a report by the World Bank in 2018 it was explained that employers are not satisfied with skills attributes of Bangladeshi youth to meet the needs of the current dynamic business environment, and graduates not fully equipped to cope with fast-changing world of work. Major areas of skills gap identified there are higher-order cognitive skills and soft skills, practical technical skills and knowledge for job, information technology skills and in some cases the foundation skills (World Bank, 2018).

So for ensuring quality and successful implementation of vocational training courses these two categories/group of people (academicians & industry people) and organizations (training centers & industries) should work together increasing the communication in many ways, like, increasing the communication between ‘the academicians’ and ‘industry people’, arranging frequent visit and exposure visit of the employers to the training organizations through employers’ committee meeting, job fair, etc. There is no way to disagree that the garments and the training organizations should have a good relation and positive co-operation, the training organizations need the industries supports and on the other hand the industries need the supports from the training organizations. Otherwise, the current situation of the vocational trainings will

not be improved. For this purpose, during training, the training organizations can hire people from the industries for facilitating a few sessions, giving some incentives to them, then the relationship between industries and organizations will be improved and overall situation will be improved as well (result section, pg. 141).

The available data supported that to make the collaboration between industry sector, training centers and trainees the Government also can be involved, Government can regulate some rules to pressurize the industry people that for the development of the country, especially in the vocational skills development sector you have to contribute, you have to be involved with the technical training system, you inform the training centers about your skills demand and support them to provide the training addressing your demand (result section, pg. 141). In this way if Government can develop some strategies the whole vocational technical training system will be developed

7.5. Section 4: How can the vocational skill development trainings provide help to the industry sector?

7.5.1. During recruitment the industry sectors don't give priority on vocational trainings rather they give priority on particular skills which they require to run their own machineries and other production related in-house activities (result section, pg. 142).

Data from different sources supported this situation pointing out that the vocational training or the certificate of the vocational trainings is not the issue to the employers rather for them the main issue is how far one can perform a particular activity. Even during recruitment, they just

assess how far one can run a machine instead of looking at the certificate of vocational training courses. In many cases the factory recruits the people based on the references and information from the senior and experienced staff (result section, pg. 143).

In this regard there were also some controversial data which mentioned that now-a-days factories especially the garments sector is not recruiting anyone without vocational trainings (result section, pg. 143). But majority of the collected data in this regard supported the existing situation, i.e., one of the important recruitment criteria is work experience rather than any kind of vocational training and for higher level recruitment they considered the educational qualification (result section, pg. 143-144), there is no use of vocational training courses in the industries (result section, pg. 144). It has been reported by the job market operators that sometimes the graduates and trainers of different vocational training programs showed unrealistic expectations about the current industries and work environment, they have limited understanding about qualifications and required skills in the job market (World Bank, 2018). So, in a case study conducted by UNICEF in 2017 it was found that "...employers emphasized work experience rather than TVET, as an important criterion for hiring, regardless of whether the experience was gained through apprenticeships, internships or a full-time position (Dewan & Sarker, 2017)".

Actually, on this issue there are two clear parties- one is supply-side, i.e., vocational training course developers, designers, BTEB, the training organizations and trainees and the other one is the demand-side, i.e., the factories and the industries. So, about the usage of the certificate of different vocational training courses the supply-side placed different arguments with significant data, like, they pointed out that the people who completed a training course and have a certificate they have better knowledge and skills than the others who don't have any kind of training course. So, in that case the employers should recruit those trained and certified people instead of giving

priority to the references from higher level (result section, pg.146). On the other hand, the demand-side also placed their arguments that the performance of an experienced people from factory is better than a trained people from training centers (result section, pg. 146). Though the supply-side, especially the trained people are very much hopeful about the usage of the certificate of the vocational trainings in the job sector (result section, pg.147) and in that case the supply-side present to the industries to take an interview or follow an assessment procedure for recruitment so that the trained people from vocational training organizations can get the opportunities to proof their skills and competencies (result section, pg. 147). They expected that they should be highly evaluated by the employers for their training certificate and for their achieved skills and competencies from the vocational trainings (result section, pg. 159-160). This will be useful both for the industries and trained people, the mal-practice of the recruitment procedure will be removed.

7.5.2. Sometimes the certificates of the vocational training courses are not used for any purposes rather sometimes the trainees received the training as back-up, i.e., if they didn't get any good job using the general educational qualifications in that case, they use the certificate of vocational trainings (result section, pg. 148-149).

The available data supported this point/finding by explaining that there is a small number of participants who assumed that they might not get a good job using their general educational certificates or the salary of the availed job may not be satisfactory. In that case they will start their own business using their vocational trainings/certificates (result section, pg. 148-149). So sometimes it's happened that they got a good and satisfactory job with their general educational

qualifications and didn't use the certificate of vocational training courses anywhere. It was very apparent that sometimes a small group of participants received the vocational trainings for the purpose where they considered the certificates of the vocational trainings as back-up for starting an income-generating work. The South Asia Region, Education Global Practice mentioned that "Many students come to short-term training while waiting for admission to a higher level of education. Indeed, 38 percent of the graduates of the short-term training courses continue studying at upper levels of education (Education Global Practice, 2015)". As a result, the certificate of the vocational training courses is not used by a significant number of trainees. But this is not a good practice all the vocational trainings should be used in the relevant field, especially the trainees who enrolled in the vocational training courses they should be target oriented and sincere in using the particular training properly. For avoiding this type of unexpected practice and misuse of the vocational trainings the training organizations can play a significant role applying specific rules and requirements for enrolment in the course, the young group who are already studying in general education, the training organizations should pay very close observation/query about the usage of their trainings, if anyone seems not sincere and doesn't inform clear intention of taking the vocational training courses better not to enroll them in the training courses.

7.5.3. The people who are completing the vocational training courses under NTVQF are getting the international recognition but those who are completing the traditional vocational training courses are not getting this kind of recognition (result section, pg.160).

The available data of the present study supported that this fact also has significant impact on graduates' profession and income, i.e., the people who completed different levels of vocational training courses under NTVQF he/she got equal levels in his/her profession anywhere in the world, his/her salary and other facilities also be structured in that level. But for other who are completing the traditional vocational training courses this kind of implication is not applicable for them. The South Asia Region, Education Global Practice pointed out that many of the participants of the vocational training courses come to receive the training courses for the purpose of achieving necessary skills for getting a good and suitable employment but half of the trainees who came to different vocational training courses experienced difficulties in finding a job (Education Global Practice, 2015).

So, considering overall implications of the traditional vocational trade courses BTEB planned to review all the traditional short courses in line with NTVQF (result section, pg.160). There is also good example that the people who completed the vocational training courses under NTVQF they are more skilled than the people who completed the conventional vocational courses. The industries also preferred the people who have NTVQF certificates (result section, pg.163). In this regard data supported that the people who completed the vocational training courses under NTVQF, they apparently much better than the people who completed traditional vocational training courses in terms of knowledge, skills, attitude, behaviour and productivity (result

section, pg.163). So, Government is planning to implement the vocational training courses under NTVQF across the country, so all the traditional trade courses will be closed soon. Instead of offering the traditional trade courses all the training organizations will offer the vocational training courses under NTVQF. Different levels of NTVQF also cover the SSC voc level, so the two years SSC voc course will also be under NTVQF and after completing SSC Voc students will get the NTVQF level certificate. Using the NTVQF level certificate some students will go for higher education and some will go in the job market and in the job market students will be able to use the NTVQF level certificate (result section, pg.167). However, the syllabuses of the traditional vocational trade courses and the vocational training courses under NTVQF are different in many perspectives which is one of the main reasons behind international recognition of the NTVQF training courses. For example, the traditional short course ‘Sewing Machine Operator’ developed by BMET followed a very simple structure including just the sections, like, course name, course outline and course content. In this course syllabus there is nothing about competencies, the course contents are organized day-wise and separated the content from the theoretical and practical perspectives (Syllabus SMO, BMET, n.d.). But the vocational training courses under NTVQF is divided into five sections: the section 1 is about ‘The Qualification’, the section 2 is about ‘National Competency Standards’ the section 3 is about ‘The Generic Competencies’, the section 4 is about ‘The Sector Specific Competencies’ and the section 5 is about ‘The Occupation Specific Competencies’ and those sections very clearly detailed out each and every unit of generic, sector and occupation specific competencies including title of the unit of competency, unit code, unit descriptor, nominal hours, elements of competencies, performance criteria for each element of competencies, range of variables, evidence guide and accreditation requirements (Syllabus SMO under NTVQF, BTEB, 2013). Apart from this the

delivery mood and assessment procedure are also completely different from each other vocational trade courses. So, considering the output and overall quality of the vocational training courses Government should take necessary and effective steps to implement the vocational trade courses under NTVQF all over the country.

7.5.4. People are not getting suitable and relevant job after completing vocational training courses even people who completed vocational training courses under NTVQF they also face difficulties in getting a suitable job (result section, pg.163).

As per data analysis of this study the main reason behind this situation is the people of our country including the employers don't know about these types of vocational trade courses (result section, pg. 163). Apart from this another important reason of this situation is the information of NTVQF courses are not mentioned in the recruitment procedure or in the advertisement system as criteria. As a result, the people who completed the training courses under NTVQF, they are not getting proper value during recruitment, even to some extent the employers don't want to show their certificate in the recruitment board as these are not required in the advertisement (result section, pg.163). Data also supported that this is also true for all other kinds of vocational training courses, for lack of dissemination and not including in the advertisement of recruitments as criteria the employer's groups don't consider and value the certificates of different vocational trainings during recruitment (result section, pg.163). Even for this reason the people who completed different levels of NTVQF vocational training courses are not getting salary structure as per NTVQF levels (result section, pg.166).

In this regard the available data also suggested that it is very important to disseminate the information of the NTVQF courses across the country, especially to the employer's groups so that they can include the NTVQF vocational training courses in the advertisement and recruitment system as criteria (result section, pg. 164). Though as per data support it was also found that BTEB started to work on this point but NSDC or National Skills Development and Authority (NSDA) is the main responsible body to disseminate these things across the country including all categories of employers (result section, pg.164). However, it is very important to revise the advertisement of new recruitment and promotion including the different levels of NTVQF course as criteria. If this can be implemented soon which was discussed in the workshop of BTEB, all people (trainees of vocational training courses) will be interested to do different levels of NTVQF vocational training courses. On the other hand, all the training centers will also be compelled to offer only NTVQF training courses stopping offering the traditional trade courses (result section, pg.166).

Though the study revealed some contradictory data in this regard. Data from different sources it was supported that in the industry sector a skilled and vocationally competent person is highly evaluated than a person with general education (result section, pg.169). The detail data analysis explained that if a person is vocationally skilled, he/she gets a good job easily as he/she knows different hands-on practical works. But in our country usually people prefer general education, the mindset of the society is not positive towards vocational trainings. So, in practice students also focused on the general subjects, like, Bangla, English, Social Science and so on. As a result, they can not learn the skills and competencies very well (result section, pg.168-169). This types of context of our country and mind set of the people is also supported by different literature, in 2013, one of his studies Newaz explored that the general people are not much aware and

motivated about vocational trainings, many of the people's mindset is that going for vocational trainings means narrowing down vast opportunities of education, their believe is there will have a lot of opportunities if they go for general education (Newaz, 2013). The study showed that as result of this kind of unawareness and mindset of the people a few social dilemmas has been created in regards to vocational skill development trainings, like, only weaker students participate in the vocational trainings and they are not capable enough to continue general education, after completing vocational trainings they will get very limited job opportunities. Considering the current global changes this sort of mindset must need to be changed and for this purpose the relevant authority can take sufficient amount of advocacy and motivational initiatives to the general mass people.

7.5.5. The vocational training courses which are being offered under different Government projects supported the trainees to get a relevant job after completing the vocational training courses (result section, pg. 161-162).

Through analyzing the collected data of this study, it was explored that under particular project there was a recruited 'Job Placement Officer' who mainly supported the trainees for getting a good job providing necessary information about the employers and making them connected with the employers who circulated to recruit people (result section, pg.161-162). Data from different sources, like, principals and current participants also supported that the training organizations are ensuring jobs for 70% of the participants who are completing the vocational training courses under SEIP project (result section, pg.164). The graduates from different vocational training courses also gave emphasis on this point mentioning that it is very important to arrange jobs for all the trainees after completing the training, if this can be done then our country will go ahead,

will be developed quickly (result section, pg.165). The available data of the present study support that the vocational training courses which the training organizations are offering under different projects have the scope for job placement but this type of opportunities are very limited or not available in other categories of vocational training courses. The main reason behind lacking of this kind of opportunities is no communication between the training organizations and industry sectors, in 2015 in a concept note on 'Education for Employment' USAID mentioned that there is huge communication and coordination gap between the employers and the trainings providers, specially they don't know what to train, how to train and for whom to train, they don't identify the industries need and how to train the people for fulfilling the need (USAIED et al., 2015). For minimizing this gap between the training organizations and industry sector, in all sorts of vocational training courses there should have the 'Job Placement Officer' who main responsibility would be to build well link between them conveying all necessary information to both the parties, i.e. to the industry sectors and to the training organizations.

7.5.6. People are not stable in continuing a particular job rather after working a few days they left the job and find out better opportunities (result section, pg.165-166).

From the available data it was pointed out that the main reason behind this situation is the wages of the workers is very low (result section, pg.165, 168), as a result they find out other jobs or other trainings for creating other opportunities. Data also supported that the expectation of the trainees or fresh people is also much more ambitious. They used to explore the market value and demand to prepare themselves so that they can get a good job with high salary (result section, pg.165-166). In addition, participants were also conscious enough in this regard, as per their skill

level and qualification if they get a smart salary they will do and continue the job (result section, pg.167).

So, in this regard the available data suggested that if the employers provide satisfactory salary to the workers, it is possible to supply human resources as per their demand (result section, pg.167).

In that case from the employer's perspective, it is important to increase workers' salary and Government should develop a standard rules and regulation regarding salary structure of the workers for all the industry sectors (result section, pg.167-168). If Government can fix a salary structure for all other industry sectors the employers will also feel to use the workers' skills and competencies properly. Even if necessary, they will train the recruited workers to fulfill their needs (result section, pg.168).

7.6. Research Question 5: To what extent are the vocational skill development trainings increasing the possibilities of employability of the target groups?

7.6.1. Usually, the unemployed people who need a job urgently or have not the ability to continue their general education enrolled to receive the vocational training courses (result section, pg.149-150).

Mainly the data source who were involved in the admission procedure supported this finding regarding the target groups of the vocational training courses. They reinforced this point by sharing that most of the participants of the vocational training courses are those who need any kind of a job urgently, most of them are unemployed and have not the ability to study in the general mainstream education system. They come from those types of families whose financial condition is not good and need to start an income generating work as early as possible (result section, pg. 150).

However, through different data support a mal-practice revealed in this regard and that in the vocational training courses under the SEIP project the targeted unemployment people are not enrolled rather different types of young groups and current students of different education institutions are enrolling in the training programs (result section, pg.150-151). The available data also pointed out that the most important reasons behind this situation is the socio-economic background of the enrolled trainees (result section, pg.151).

In Bangladesh usually a large number of students who are studying in different national colleges and universities came from the insolvent socio-economic back ground of the rural areas. So, they faced economic problems to lead their regular lives and enrolled in the vocational training programs under SEIP to avail the allotted fund from SEIP (result section, pg.151). In this regard data also revealed that after completing the training they are getting the fixed money and taking the money they go for another kind of job; they don't have any kind of intention to use those training in their profession. Actually, they want the money, so they come and enrolled in the training program. But the training is not for them, they do not receive the training attentively, they don't have any purpose to use the training, the main target people of the training is unemployment people of the society, as a result the purpose of the training is fulfilled, the training is not considered as an effective one. Not only this for this malpractice, there are some other negative impact on the practice of training courses too, like, students drop out, irregularity, absenteeism, not appearing in the final assessment, etc. (result section, pg. 152).

In this regard the training organizations can play a significant role to lessen this kind of malpractice, especially, by maintaining a rigorous and transparent system in the admission procedure of the training programs. They should address the right target groups of the project. The students who are enrolled in the training programs, it is apparent that they are students, the

training organizations should identify them and they should be strict in the position that they are targeting the unemployed people of the society and should not allow the students to be enrolled just for getting the project money (result section, pg.153).

The advertisement process of the admission test also should be efficient to get the proper target group; it should be circulated in that manner so that the main targeted people can get the message. Here one of the important facts is that might be the sources of information, like, phone or advertisement from the training centers, newspapers, TV or other kind of information is not available to the main target group, the unemployed people of the society, in that case for reaching the message to the main targeted unemployed people the training organizations can take some initiatives. For example, they can initiate to conduct household survey to find out those types of target groups (result section, pg.153-154).

Apart from this the participants who enrolled in the vocational training courses they are not target oriented, they are not confirmed about their learning achievement rather they attended the training course to get any kind of a certificate (result section, pg. 154). The available data from different sources supported that the participants who attend the vocational training courses, they mainly need a certificate to apply for any kind of job, so they attend the vocational training course (result section, pg.154). This types of tendency of the participants actually hampered the quality the vocational training programs and make the training courses ineffective. Mainly the certificate should not be given the priority rather the trainers should be focused what types of skills they really need to achieve for a particular job or profession (result section, pg.155). However, in this regard some contradictory data also found through which it was supported that the main reason of attending this vocational training course is to be skilled increasing the employability and use these skills in the relevant profession (result section, pg.156).

7.6.1.1. The majority number (81.61%) of current participants of the available trade courses are male and very less number (18.39%) of females are attending the vocational training courses. It is to be mentioned here that it depends on the nature of the trade courses, for example, in the garments related training courses almost all the participants are female but comparing with the whole it becomes very less (result section, pg. 218, Figure 35)

7.6.1.2. The majority of the current trainees (73.58%) of vocational trainings is in between 16-25 years but many of them are not unemployed rather many of them are students. Similarly, the majority number of the graduates (87.5%) are in between 15-25 years old (result section, pg. 219, Figures 36 & 37).

7.6.1.3. 80.57% of the current participants are students and 15.54% of the current participants are unemployed, i.e., they are neither student nor doing any kind of a job. Similarly, 41.67% of the graduates are still students, 30.83% of the graduates are doing a relevant job and 27.5% of the graduates are unemployed looking for a job (result section, pg. 220, Figures 38 & 39).

7.6.1.4. Majority number of the trainees (74.87%) are attending the training course after completing a certain level of general education, like, JSC or SSC or HSC (result section, pg. 221, Figures 40 & 41)

7.6.2. For increasing the employability of the participants, the vocational training courses are very much helpful (result section, pg.157-158).

In the data analysis section of this study, it was found that the participants expressed highly satisfactory opinions about contribution of the vocational training course in increasing their employability (result section, pg. 157-158). They made a very clear distinction between general

education and vocational trainings and mentioned that the skills and competencies of the vocational training courses are totally different from general line and very much relevant with the industry sectors which helps a lot for increasing the employability of the participants (result section, pg.158). Data also supported that through vocational trainings the participants learnt lots of hands-on activities which helped them to increase their self-confident (result section, pg. 158). In this regard in 2016, Sreshtha also mentioned that the ultimate objective of vocational skills development trainings is not only to enable the learners to acquire skills in different hands-on activities but also to help them to be confident to competently apply it on the job (Sreshtha, 2016).

On the other hand, data from other sources, like, from training organizations and trainers also strongly supported that vocational training courses helped the participants to increase their employability (result section, pg. 158 & 159). Though there are some contradictory data where trainers of the vocational training courses are not much confident whether the vocational training courses are helpful for increasing the employability of the participants (result section, pg.159). To some extent they placed their arguments that before going to the field and starting to work in the industries it is difficult to realize how the training course will help us in our workplace and in increasing our employability (result section, pg.159).

7.6.3. Vocational skill development trainings are very important to make the people self-reliance and self-independent both in their profession and resolving different problems of their regular lives (result section, pg.170).

Data from different sources supported that vocationally trained people become self-independent to resolve different technical/technological problems of their regular lives. They also become self-reliance starting to work on different orders or starting a good job or their own business (result section, pg.170).

Especially the available data of this study supported that for the female participants the vocational training courses are very important for solvency and self-reliance. Many of the female from under-privileged families enrolled in the vocational training courses and ultimately, they become benefited using the skills and competencies achieved from the training (result section, pg.171). In many garments' factories, more than 80% of the workers are women, to some extent they gave guarantee to the female applicants for job (GWA, 2014). In addition, vocational trainings and trade courses are also very essential to develop human resources to work in the field and factory level of the industries (result section, pg.172-173).

7.6.4. For increasing the employability of the participants', communication between training organizations and employers need to be increased
(result section, pg.157).

In this regard the available data strongly supported that the vocational training courses would be 100% helpful to increase the employability of the graduates if the TTCs trained the people as per industry's need using the updated machineries relevant with the industries and without regular communication it is not possible with the training organizations to know about industries' needs, context and recent changes in the machineries (result section, pg. 157). According to World Bank the reputation of vocational training providers depends on whether they produced qualified skilled human resources immediately required for the work place (as cited by Raihan, 2014).

So the vocational training organizations should strengthen the relationship with the relevant industry sectors to create a strong network between academician and industries to understand each other needs, to specify their standards and to develop their own curriculum (Raihan, 2014).

7.7. Section 6: Recommendations, Conclusion and Implication of the Study

7.7.1. Recommendations of the Study

The present study was carried out to find out answers of several research questions which were related to current pedagogical practice of vocational trade courses, practice of designing and developing the syllabuses of vocational trade courses, current status of implementation of vocational trade courses under NTVQF, existing communication of vocational training organizations and relevant industries, whether the vocational trade courses are addressing the needs of the employers or not, usage of vocational trade courses in the industry sectors and in increasing the employability of the target groups of vocational training courses. Through analyzing the collected data, the study revealed some of the significant findings in those areas, like, the current pedagogical practice of vocational training courses gave more emphasis on theoretical part of the course rather than the practical part, the existing trainers of the training organizations are ready to facilitate the vocational short training courses but they are not ready to facilitate the vocational training course under NTVQF, etc. Based on those findings the study present the following recommendations which ultimately contribute for the betterment of the Vocational Skill Development Sector.

7.7.1.1. The current practice of vocational trade courses should give more emphasis on the practical part of course instead of giving more emphasis on the theoretical part of the vocational training courses.

One of the important findings of this study is ‘the current pedagogical practice of vocational training courses gave more emphasis on theoretical part of the course rather than the practical part’ (finding 7.1.1.2. pg. 257). But for fulfilling the requirements of the industry sectors and for increasing the employability of the target groups, the vocational trade/training courses should be offered to help people to develop their practical skills. For this purpose, the assessment procedure of the vocational training courses should give emphasis to ensure the achievement of practical skills by each and every participants of the training programs and the certificates of the vocational training courses should not be provided only based on the theoretical assessment. CBT & A system should be applied for the assessment of all kinds of trainings ensuring each individual’s skills in a particular practical task.

In the pedagogical practice of vocational training courses trainers should give more opportunities to the participants to practice hand-on activities instead of giving more emphasis on teaching theoretical part of the vocational training course. The revision of the syllabus of the vocational training courses also important in this regard. Considering the time allocation of the whole course the theoretical and practical parts of the course should be well balanced so that the trainers get expected and sufficient time to teach the theories and concepts of the course giving more opportunities to the participants to practice the hand-on activities.

7.7.1.2. All the trainers of the vocational training courses should have the pedagogical training including having required academic and educational qualifications.

In the findings related to teaching-learning practices of vocational training courses the present study revealed that very small number of trainers were well-prepared, well-organized and started the sessions on time and did a warm-up activity in the beginning of the session. Similarly, it is also very important to brief the learning-objectives of the specific content of the session exploring the prior-learning of the participants. But during taking the training sessions majority of the trainers did not do these types of things in the beginning of the session. The study also revealed that for lack of pedagogic training the trainers were not practicing doing this kind of interactive activities in the beginning of the session. So BTEB and the training organizations should ensure the pedagogical trainings for all the trainers of the vocational training courses. It is to be mentioned here that the pedagogical training is also very essential for the trainers for facilitating the whole training session effectively. The pedagogical training helps the trainers to ensure active participation of the participants throughout the session making the session more interactive and enjoyable. In addition, the pedagogical training of the trainers should be given priority during recruitment or it can be considered as one of the important criteria for recruitment along with the academic and educational qualifications.

On the other hand, the study also explored that ‘the existing trainers of the training organizations are ready to facilitate the vocational short training courses but they are not ready to facilitate the vocational training course under NTVQF (finding 7.2.1.3. pg. 281).’ They have only the academic background but they don’t have any kind of pedagogic training. But as Government is planning to implement the vocational training courses under NTVQF across the whole country,

so it is also very important to prepare sufficient number of trainers providing particular training on all the levels of NTVQF courses which also includes the training on pedagogical approaches.

7.7.1.3. The existing vocational trade courses should be up-graded according to recent global and technological changes and in line with NTVQF.

In the current practice of vocational training courses, the training organizations are offering two categories of vocational training courses getting registration from BTEB properly. Some of these are vocational short trade courses and some of them are the vocational training courses under NTVQF which are being offered from 2012 in different level as per NTVQF. But the present study indicated that the existing vocational short training courses are old and traditional and these short vocational training courses need to be redesigned including rich and up-dated contents in line with NTVQF and addressing the needs of the recent global and technological changes. During revision of the vocational short training courses the needs, context and background of the target groups should be considered carefully which was not considered before, the content level of the course should not be over-packed, in that case the participants' understanding level and receiving capacity should be considered during selecting the content of the course, the time allocation of the vocational short courses should be well thought out considering the length of the content of the training courses, less amount of theories and concepts should be included in the vocational short courses but at the same time it is also essential to increase the practical part and hands-on activities of the training courses. For increasing the employability of the trainees global industrial and technological changes also need to be considered during redesigning the vocational short training courses.

In redesigning the vocational short trade courses the requirements of the industry sectors also need to be considered significantly and in this regard the Industry Skill Council (ISC) can play significant role.

7.7.1.4. All sorts of vocational training courses, i.e., vocational short trade courses and vocational training courses under NTVQF should bring under one umbrella or a single regulatory framework NTVQF to provide unified direction to the diverse group of training providers of the country.

At present all the vocational training organizations of the country both public and private are offering different kinds of vocational short training courses along with offering very few levels of the vocational training courses under NTVQF in a scattered way. One of the important findings of the present study is ‘very small amount of training organizations started to offer the vocational training courses under NTVQF, in many cases they are just offering only the RPL courses (finding 7.2.1.1., pg.278). So, in practice majority of the vocational training courses are vocational short trade courses and a few of them are the vocational training courses under NTVQF. The training organizations are offering just a few levels of the NTVQF vocational training courses. But as the vocational short training courses are not much updated as per the recent global changes so the vocational training courses under NTVQF should be implemented across the country providing a uniform direction to all the vocational training organizations. In this regard BTEB should play the significant role providing some specific rules and regulations to all the training providers. For example, BTEB can establish a formal regulation for all the training organizations making it mandatory to offer only the vocational training courses under NTVQF. BTEB also can create a separate monitoring cell, implement a strategic workplan, develop human resources and qualified trainers to ensure the CBT & A approach in training

facilitation. All those initiatives of BTEB also need to be disseminated properly across the whole country.

7.7.1.5. According to the recent global and technological changes the updated tools and equipment should be provided to the vocational training organizations so that all the vocational training organizations can offer the vocational training courses under NTVQF ensuring all sorts of practical tasks required for the course.

The present study revealed that the training organizations are not offering the vocational training courses under NTVQF for lack of sufficient and up-dated tools and equipment required to ensure all sorts of practical activities. Through different projects' initiatives Government should ensure all necessary supports in this regard so that all the vocational training organizations can offer all the levels of NTVQF vocational training courses in a regular manner. During arranging the projects' supports regarding providing necessary tools and equipment to the training organizations Government also should address some of the limitations of current projects' supports carefully, like, in the project should have a budget allocation for repairing the machineries if any does not work, the project should be flexible to buy the updated tools and equipment instead of being fixed on buying some particular categories of machineries.

7.7.1.6. The training organizations and the industry sectors should have a very good relation and understanding maintaining an effective communication in a regular manner.

One of the important findings of the present study is 'the industry sectors don't have any kind of communication and connection with the vocational training organizations, even for recruitment they don't communicate with the vocational training organizations (finding 7.3.1.1. pg.287)'. But

it is very essential to have a very good relation and communication between vocational training organizations and industry sectors for many other purposes, like, to know about the industries needs and requirements, to know about the recent changes in the machineries of the industries so that the vocational training organizations can develop and produce the skilled human resources as per the needs and requirements of the industries. In this regard BTEB should play significant role making the Industry Skill Council (ISC) more active which is supposed to work and regularize under BTEB, performing the activities like, monitoring and reviewing skills development practices in the industry sectors, developing industry specific skills development policies and practices, etc. (MOE, 2011). BTEB also should provide proper guidance to the vocational training organizations to make the ‘employers committee’ active in a regular manner. The industries also should play significant role in regards to this by informing BTEB and training organizations about their real requirements and recent changes in the machineries and production process, if there is any potential trainer among the employers, they can support the training centers facilitating relevant training sessions as guest lecturer, in some cases creating scope for formal communication between the employers and trainee. These kinds of initiatives between the industries and training organizations will also be helpful to lessen the existing gap between the supply-side and demand-side of vocational trainings and relevant skills.

7.7.1.7. As part of the vocational training courses the opportunities of ‘apprenticeship’ and ‘job placement’ should be increased during offering the vocational training courses.

In the existing practice of vocational training courses there is no opportunities to attach the participants with the relevant industries during training as part of the training course. Though the National Skill Development Policy 2011 suggested to strengthen the apprenticeship to ensure the

active participation of employers, master craft persons and trainees in the new vocational training system (MOE, 2011).

In the current practice the opportunities of 'job placement' is very limited, the vocational training courses which are being offered under different projects only those training courses have the 'job placement opportunities' but as the main purpose of vocational trainings is to prepare the trainees for particular job, so all sorts of vocational trainings need to have this kind of job placement opportunities. Like the vocational training courses which are being offered under different Government project, for all sorts of vocational training courses, a 'job placement officer' can be recruited to support the trainees' to be connected with relevant employers groups and finding out a suitable job. However, as per the NSDP-2011 and NTVQF guideline the opportunities of 'apprenticeship' and 'job placement' should be increased. For this purpose, the communication and understanding between the training organizations and employers/industries need to be improved and, in this regard, the ISC of BTEB should play significant role.

7.7.1.8. During recruitment the industry sectors should give priority on vocational trainings instead of recruiting the people based on their internal references.

The present study revealed that during recruitment the industry sectors don't give priority on vocational trainings rather they give priority on particular skills which they require to run their own machineries and other production related in-house activities (finding 7.4.1.1. pg.292). In many cases the factory recruits the people based on the references and information from the senior and experienced staff.

But as the vocational training sector is a large sector in Bangladesh and so many vocational training organizations of our country are offering vocational training courses in a large scale- this sort of practice by the industries should be minimized by establishing a mutual understanding between industry sectors and vocational training organizations. For this purpose, the industry sectors should inform the vocational training organizations about types of skilled people they required so that the vocational training organizations can developed those skilled people through different vocational training courses. To some extent the industries can inform the recruitment criteria to the vocational training organizations to consider these during providing vocational training courses so that they can recruit those trained and certified people instead of giving priorities to their internal references. The industries also can practice to take an interview or follow an assessment procedure for recruitment creating an opportunity for the vocationally trained people to proof their skills and competencies achieved from the vocational training courses.

7.7.1.9. The information of both NTVQF vocational training courses and the vocational short training courses should be mentioned in the advertisement of relevant recruitment as required criteria.

As one of the important findings the present study revealed that people are not getting suitable and relevant job after completing vocational training courses even people who completed vocational training courses under NTVQF they also face difficulties in getting a suitable job (finding 7.4.1.4. pg. 296). One of the important reasons behind this situation is the information of vocational training courses both NTVQF vocational training courses and the vocational short training courses are not mentioned in the recruitment procedure or in the advertisement system as criteria. The study also pointed out that for lack of dissemination and not including in the

advertisement of recruitments as criteria the employer's groups don't consider and value the certificates of different vocational trainings during recruitment. So, the relevant stakeholders and authority should take proper initiatives to disseminate the information about both the vocational training courses under NTVQF and vocational short training courses across the country so that all sorts of vocational trainings can be included in the advertisement of relevant recruitment as required criteria. In this regard BTEB and NSDA should play significant role to disseminate that information across the country along with revising the advertisement of new recruitment and promotion including the information of all sorts of vocational training courses as criteria.

7.7.1.10. It is important to increase workers' salary and Government should develop a standard rules and regulation regarding salary structure of the workers for all the industry sectors.

The present study revealed that people are not stable in continuing a particular job rather after working a few days they left the job and find out better opportunities (finding 7.4.1.6. pg. 299). The main reason behind this situation is the wages of the workers is very low. But this existing situation is not expected because unless the people will be stable in their particular job, the skilled and experienced people will not be developed and the job market will not be stable as well. To mitigate this situation the employers should provide satisfactory salary to the workers and Government should develop a standard rules and regulation regarding salary structure of the workers for all the industry sectors. feel to use the workers' skills and competencies properly.

7.7.1.11. A rigorous and transparent admission procedure should be maintained by the training organizations to enroll the trainees in the vocational training courses under different projects where there is a specific fund allocation for the trainees as scholarship.

The present study revealed a mal-practice that in the vocational training courses under the SEIP project the targeted unemployment people are not enrolled rather different types of young groups and current students of different education institutions are enrolling in the particular vocational training programs. In Bangladesh usually a large number of students who are studying in different national colleges and universities came from the insolvent socio-economic back ground of the rural areas. So, they faced economic problems to lead their regular lives and enrolled in the vocational training programs under SEIP to avail the allotted fund from SEIP. They also explored that after completing the training they are getting the fixed money and taking the money they go for another kind of job; they don't have any kind of intention to use those training in their profession. Actually, they want the money, so they come and enrolled in the training program. But the training is not for them, they do not receive the training attentively, they don't have any purpose to use the training, the main target people of the training is unemployment people of the society, as a result the purpose of the training is not fulfilled, the training is not considered as an effective one.

To prevent this sort of mal-practice in regards to enroll trainees under different projects the training organizations should maintain a rigorous and transparent admission procedure. They should address the right target groups of the project not allowing the students to be enrolled just for getting the project money.

7.7.1.12. The participants of different vocational training courses should be target oriented and confirmed about their learning-achievement instead of just attending the vocational training course for getting any kind of a certificate.

In practice it was found that the participants who attend the vocational training courses, they mainly need a certificate to apply for any kind of job, so they attend the vocational training course. But this can not be the purpose of receiving a vocational training course. This types of tendency of the participants actually hampered the quality the vocational training programs and make the training courses ineffective. The target groups should be target oriented in receiving particular vocational training course. They should be focused on what types of skills they really need to achieve for a particular job or profession.

To make the target groups aware in this matter they should be provided a detail orientation about the particular vocational training course. This orientation program can be provided by the training organizations including detail information about the objectives and achievable skills and competencies of the vocational training course. In this regard BTEB also can provide necessary guideline and supports to the vocational training organizations to organize the orientation program effectively.

7.7.2. Recommendations for Further Study

The focused of this present study was mainly the current practice of vocational trade courses including the pedagogical practice and some other important issues related to implementation of the vocational training courses under NTVQF. Simultaneously, the study also focused on existing relation and communication between the vocational training organizations and industry sectors to explore the usage of vocational training courses in the relevant industry sectors and in

increasing the employability of the target groups of vocational training courses. In fact, each of those focused area of the present study can be one individual research initiative and these can be undertaken by any individual body or by the organizations related to vocational trainings. However, the present study recommending for carrying out further studies on the following specific areas:

7.7.2.1. The National Qualification Framework of vocational training sector of our country recommending to follow the CBT & A approach in facilitating the assessing the vocational training courses. The present study is recommending to carry out a further study on this ‘CBT & A approach’ exploring the implementation status of this approach by the vocational training organizations and the challenges and difficulties faced by the vocational training organizations in implementing this approach.

7.7.2.2. One of the important recommendations of the present study is to provide pedagogical training to all the trainers of the vocational training courses. A research initiative can be under-taken focusing on the pedagogical trainings available for the trainers of vocational training courses. This study on ‘the pedagogical trainings available for the trainers of vocational training courses can focus on the types and mood of pedagogical trainings and how far those pedagogical trainings are being implemented by the trainers in facilitating the vocational training sessions.

7.7.2.3. The present study recommended to bring all sorts of vocational training courses, i.e. vocational short trade courses and vocational training courses under NTVQF should bring under one umbrella or a single regularatory framework NTVQF to provide unified direction to the diverse group of vocational training providers of the country. So, a further

study can be undertaken analyzing different levels of NTVQF and effectiveness of NTVQF in guiding the vocational training system. This study can focus on analyzing specific components of NTVQF to explore the effectiveness of NTVQF as whole.

7.7.2.4. A further study can be carried out on different Government's projects and programs currently implementing in the vocational training sector. For example, a study can be undertaken on 'SEIP project' which Government is currently implementing in different vocational training organizations. This study can focus on the implementation strategies of the SEIP project and what is the impact of this project in increasing the employability of the target groups of vocational training courses.

7.7.2.5. Worldwide it is well acknowledged that it is very essential to have a very good relation and communication between vocational training organizations and industry sectors specially to lessen the existing gap between the supply-side and demand-side of the vocational skills sector. The present study recommended that the ISC of BTEB should play significant role in this regard. So, a further study can be undertaken on 'the role of ISC in strengthening the communication between the vocational training organizations and industry sectors. By exploring the important areas of ISC this further study can propose some way forward to make the ISC more active and effective in playing its respective roles.

7.7.3. Implication of the Study

From the discussion and interpretation of major findings it is apparent that the present study revealed some important findings in some of the significant areas of vocational skill development sector, like, pedagogical practice of vocational trade courses, practice of designing and developing the syllabus of vocational trade courses, implementation status of vocational trade courses under NTVQF, reasons behind not implementing the vocational trade courses under NTVQF in full swing, communication between vocational training organizations and relevant industry sectors, usage of vocational trade courses in the industry sectors, usage of vocational skill development trainings in increasing the employability of the target groups and role of vocational trade courses in trainees' employability. So, it is apparent that there are so many implications of the present study. It can be realized from multiple perspectives. They are as follows:

Implication of the study on pedagogical practice of vocational trade courses: Regarding the pedagogical practice of vocational trade courses, the major findings were the current pedagogical practice of vocational training courses gave more emphasis on theoretical part of the course rather than the practical part, CBT & A system should be applied for the assessment of all kinds of trainings ensuring each individual's skills in a particular practical task, in the classroom there are very less interactions, reflections and engagement among the trainees themselves, the trainers don't have required pedagogical training for facilitating both the theoretical and practical sessions, there were sufficient tools and equipment in all the training sessions (100%) but the tools and equipment were not new and updated, majority of the trainers (62.5%) did not provide any feedback to the trainees to improve their work and among them a good number of trainers even did not assess their trainees, the trainers (62.5%) also did not ensure the completion of the

task in the classroom and the main reason behind this situation is also lack of required trainings of the trainers, the trainers are not trained in CBT & A approach, etc. The above-mentioned findings which the present study revealed regarding pedagogical practice of vocational trade courses will contribute to the people who are somehow involved in the teaching -learning process, for example, the people who are involved in developing the syllabus of the vocational trade courses they will be conscious and careful to make a balance between the theoretical and practical part of the courses instead of focusing the theoretical part, similarly during facilitating the courses the trainers will also avoid to focus on the theoretical part, the relevant authority, especially, BTEB and the management of vocational training organizations will take necessary initiatives to provide pedagogical trainings to the trainers and will ensure the CBT &A trainings to all the trainers which ultimately will contribute to improve the overall teaching-learning practice ensuring trainees' interaction in the classroom, proper assessment procedure, etc.

Implication on designing and developing the syllabus of trade courses: In regards to designing and developing the syllabus of vocational trade courses the study identified the findings like, the existing vocational trade courses are old and traditional and these trade courses need to be upgraded according to recent global and technological changes and in line with NTVQF, the Competency Standards (CS) of the vocational training courses under NTVQF are occupation based and up- to- dated (result section, pg. 7) and BTEB provided these CS to the training organizations to follow during facilitating the trainings, etc. Looking at these types of research findings the authority of the vocational skill development sector of Bangladesh, like, BTEB, NSD&A, BMET will consider the 'revision of vocational trade courses' as a priority one including a proper, realistic and feasible implementation plan and addressing the suggestions mentioned in the present study in regards to redesigning the vocational trade courses. These

kinds of research findings will motivate the public and private agencies that provide vocational skill development trainings to review their curriculum including rich and essential contents addressing the needs of the industries and current global demands which is aligned with the NTVQF. Similarly, according to the major findings as the CS are well-acknowledged and available in the vocational training centers- the trainers and the training organizations are following those CS in providing the vocational trade courses yet the findings of the present study will encourage the management of training organizations and relevant officials of BTEB to develop a structured monitoring system for proper implementation and measurement of those CS involving the relevant industry sectors.

Implication on the implementation status of vocational trade courses under NTVQF: The present study also explored the implementation status of vocational training courses under NTVQF and in this regard some of the important finding are-very small amount of training organizations started to offer the vocational training courses under NTVQF, in many cases they are just offering only the RPL courses, the study also revealed that for some challenging issues the vocational training organizations are not offering the training courses under NTVQF, like, lack of qualified trainers, lack of sufficient tools and equipment, infrastructural problem, lack of connectivity with the employers, etc. According to the NSDP-2011 and the NTVQF, all the vocational training organizations are supposed to offer the vocational training courses under NTVQF which is still far behind from the national target and expectations. So, addressing the challenging issues that the present study revealed in regards to implementation of vocational training courses under NTVQF, the training organizations will be able to develop a well-thought-out implementation plan to ensure and increase the implementation of vocational training courses under NTVQF. Especially the present study revealed that most of the training organizations are

not well equipped with necessary tools and equipment required for practical classes of the vocational training courses under NTVQF, the training organizations don't have sufficient and updated tools and equipment for facilitating the practical classes properly as per CBT & A approach, the existing trainers of the training organizations are ready to facilitate the vocational short training courses but they are not ready to facilitate the vocational training course under NTVQF, opportunities of attachment of participants with relevant industries and job placement during training is very much helpful for the participants but in our country, there is very less opportunities to work in the industries as part of the vocational training courses, etc. This kind of findings and identified challenging issues will help the stakeholders (BTEB, vocational training organizations & people involved in different projects and initiatives) to find out the way forward for proper the implementation of vocational trade courses under NTVQF.

Implication on strengthening the communication between the training organizations and relevant

industry sectors: According to the findings of the present study the industry sectors don't have any kind of communication and connection with the vocational training organizations, even for recruitment they don't communicate with the vocational training organizations and there is gap between supply-side and demand-side of vocational trainings and relevant skills. To overcome this existing situation the syllabus of the vocational trade courses should be designed addressing the needs of the industries and the needs of the industries and employers need to be identified involving the industry people in the whole course development procedure. Currently as per the instruction by NSDP-2011 BTEB established the ISC and the vocational training organizations also formed 'Employers' Committee' to address this issue. The findings of the present study will support BTEB and the training organizations to strengthen and make their initiatives more effective. As a result, the industry sectors will be motivated to inform the training organizations

about their needs and the training organizations will also be able to develop the skilled people as per the demands of the industry sectors which ultimately will reduce the skill gap in the job market.

The present study also revealed few other findings in regards to usage of vocational skill development trainings in the industry sectors, like, during recruitment the industry sectors don't give priority on vocational trainings rather they give priority on particular skills which they require to run their own machineries and other production related in-house activities, people are not getting suitable and relevant job after completing vocational training courses even people who completed vocational training courses under NTVQF they also face difficulties in getting a suitable job, people are not stable in continuing a particular job rather after working a few days they left the job and prefer to find out better opportunities, etc. Along with this, through sufficient data supports the present study also explored the reasons behind this situation which somehow will have a positive implication to improve the prevailing situation. For example, as per the suggestions of the present study, if BTEB, course designers and vocational training organizations design the curriculum and syllabus of different trade courses through an expected level of communication with the relevant industry sectors and incorporating the practical work on new and updated machineries of the industry sectors, in that case it will be obvious that the graduates of the vocational trade courses will be efficient to use the updated machineries of industries to complete all sorts of production related activities. On the other hand, while the graduates of vocational trade courses will be skilled according to recent global technological changes, they will be fit in with the global job market as well. Similarly, both the parties, i.e., employers and employees will be satisfied in their positions both in production level and job level which ultimately will create a stable situation in all the relevant areas, like, in the industry

sectors, job market, vocational skill development sector including the vocational training organization and graduates of vocational trainings in different trades.

7.7.4. Conclusion of the Study

Education and vocational skill development have played a crucial role in overall development and economic growth of the country. Bangladesh has greatly improved access to education but the dialogue on vocational skill development much less established in Bangladesh. Though skills are at the core of improving individual's employability and contribute significantly to increase countries productivity and growth still this sector is less explored in Bangladesh (World Bank, 2013). So, the focus of the present study focus was on the vocational skill development sector, especially the current practice of trade courses and their usage in the relevant industry sectors and in increasing the employability of the target groups. Throughout the dissertation the study addressed and explored the current practice of existing vocational training courses including the pedagogical practice and practice of designing the syllabus of vocational training courses, implementation status of vocational training courses under NTVQF, existing communication between vocational training organization and relevant industry sectors, how the trade course are addressing the needs of the employers and finally usage of vocational training courses in the relevant industry sector and in increasing the employability of the particular target groups. Based on the above focused areas of the study the whole dissertation was divided into seven chapters. The first chapter included the context and background of the study including specific research questions, purpose and potential significance and benefits of the study. The second chapter presented the relevant literature review and conceptual framework of the study. Chapter three explained the methodology of the study including proper rationale of the research design and

selection procedure of research sites and participants. Chapter four entitled , “Practice of vocational training courses and development and implementation of vocational training courses under NTVQF”- and this chapter explored the practice of vocational short courses and implementation of vocational training courses in a comparative manner including the factors like, consideration in designing the syllabus of both vocational short courses and vocational training courses under NTVQF, communication between training organizations, trainees and industry sectors, usage of skills and competencies of vocational trainings in the relevant industry sectors of Bangladesh and the importance of vocational trainings in increasing the employability of the target groups. Chapter five specifically focused on the pedagogical practice of vocational training courses and this chapter analyzed the pedagogical practice of theoretical and practical sessions distinctly. Chapter six explored the perspectives of target groups regarding the existing practice of vocational training courses, available tools, equipment and trainers of vocational training organizations, exposure in the relevant industry sectors and opportunities of job placements during and after the vocational training courses. This chapter also included the analysis of importance of vocational training courses in increasing the employability of the target groups and in making the changes in target groups’ lives. Finally, chapter seven interpreted all the major findings revealed from the data analysis of the previous chapters and present some constructive recommendations and way forward to improve the overall situation as per interpretation of the findings. These recommendations and way forward of the study addressed all major factors and issues of the vocational skill development sector of Bangladesh. For example, the current practice of vocational trade courses should give more emphasis on the practical part of course instead of giving more emphasis on the theoretical part of the vocational training courses, all the trainers of the vocational training courses should have the pedagogical

training including having required academic and educational qualifications, the existing vocational short trade courses should be up-graded according to recent global and technological changes and in line with NTVQF, all sorts of vocational training courses, i.e. vocational short trade courses and vocational training courses under NTVQF should bring under one umbrella or a single regulatory framework NTVQF to provide unified direction to the diverse group of training providers of the country, according to the recent global and technological changes the updated tools and equipment should be provided to the vocational training organizations so that all the vocational training organizations can offer the vocational training courses under NTVQF ensuring all sorts of practical tasks required for the course, the training organizations and the industry sectors should have a very good relation and understanding maintaining an effective communication in a regular manner, as part of the vocational training courses the opportunities of ‘apprenticeship’ and ‘job placement’ should be increased during offering the vocational training courses, during recruitment the industry sectors should give priority on vocational trainings instead of recruiting the people based on their internal references, during recruitment the industry sectors should give priority on vocational trainings instead of recruiting the people based on their internal references, it is important to increase workers’ salary and Government should develop a standard rules and regulation regarding salary structure of the workers for all the industry sectors, a rigorous and transparent admission procedure should be maintained by the training organizations to enroll the trainees in the vocational training courses under different projects where there is a specific fund allocation for the trainees as scholarship, the participants of different vocational training courses should be target oriented and confirmed about their learning-achievement instead of just attending the vocational training course for getting any kind of a certificate, etc. The vocational skill development sector is still seemed unexplored in its

different components and by addressing and exploring the above-mentioned major concerns and areas of vocational skill development sector the present study opened and specified the ways to develop this sector radically. Ultimately all those overarching recommendations and findings of the study created related supports for vocational skill development sector of Bangladesh to lessen the existing skill gaps in the current job market increasing the employability of the particular target groups.

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APPENDICES

Appendix-1: The Consent Form

You are invited to take part in a research entitled, “*Vocational Skill Development in Bangladesh: Practice of Some Selected Trade Courses and Employability*”. This study is being conducted by a researcher named Dilruba Sultana, who is a Doctoral Student in the University of Dhaka. You were chosen for the study considering you as one of the most important stakeholders in the vocational skill development sector.

Background Information

The purpose of this study is to explore the practice of vocational trade courses including exploring the existing communication between vocational training organizations and relevant industry sectors in ensuring the proper usages of vocational trainings and increasing the employability of the target groups.

Procedures

If you agree to participate in this study, you will be asked to-

- Read and sign this consent form
- Participate in an individual interview/FGD approximately for one hour, at a convenient location.

Voluntary Nature of the Study

Your participation in this study is voluntary. This means that the researcher will respect your decision of whether or not you want to participate in this study. If you decide to participate the study now, you can still change your mind during the study. If you feel stressed during the study you may stop at any time. You may skip any questions that you feel are too personal.

Benefits of being in the study

The study may provide helpful information to the policy makers and curriculum developers of the vocational skill development program, administrators of vocational training organizations, trainers and employers to ensure the proper usage of vocational trainings in the relevant industry sectors and in increasing the employability of the target groups.

Confidentiality

Any information you provide will be kept confidential. The researcher will not use your information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in any reports of the study.

Contacts and Questions

The researcher’s name is Dilruba Sultana. You may ask any questions you have now. Or if you have questions later, you may contact the researcher via 01819961458 or dilrubaied@yahoo.com.

Statement of Consent

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below, I am agreeing to the terms described above.

Name of the participants	
Date of consent	
Signature of the participant	
Signature of the researcher	

Appendix-2: The interview Guideline for Higher Officials from BTEB

1. আমাদের দেশের প্রেক্ষাপটে VSD এর জন্য বিভিন্ন রকম ট্রেড কোর্স অফার করা কতটা প্রয়োজনীয় এবং গুরুত্বপূর্ণ বলে আপনি মনে করেন?
2. BTEB এর অনুমোদনক্রমে বর্তমানে বাংলাদেশে যে সমস্ত ট্রেড কোর্স অফার করা হচ্ছে সেগুলিকে কতটা সমরোপযোগী বলে আপনি মনে করেন?
3. বর্তমানে BTEB কর্তৃক অনুমোদনকৃত প্রচলিত ট্রেড কোর্সসমূহ কবে, কী প্রক্রিয়া অনুসরণ করে design করা হয়? উল্লিখিত ট্রেড কোর্সসমূহের ডিজাইনে কারা সম্পৃক্ত ছিল?
4. বর্তমানে BTEB কর্তৃক অনুমোদনকৃত প্রচলিত ট্রেড কোর্সসমূহ ডিজাইনের সময় participants group দের চাহিদা কীভাবে analysis/consider করা হয়েছে?
5. বর্তমানে BTEB কর্তৃক অনুমোদনকৃত প্রচলিত ট্রেড কোর্সসমূহ ডিজাইনের সময় employer দের চাহিদা কীভাবে analysis/consider করা হয়েছে? কোর্সসমূহের ডিজাইনে employer দের কি কোন ধরনের সম্পৃক্ততা ছিল? employer দের কী ধরনের সম্পৃক্ততা ছিল?
6. NTVQF এর আওতায় BTEB ট্রেড কোর্সগুলোর যে Improve version (NTVQF courses) তৈরী করছে সেই NTVQF কোর্স সম্পর্কে আপনার মতামত কী?
7. NTVQF কোর্সগুলো খুব সীমিত আকারে খুব অল্প সংখ্যক প্রশিক্ষণ কেন্দ্রে শুরু হয়েছে, উল্লিখিত কোর্সসমূহের practice/offer সম্প্রসারণ সম্পর্কে আপনার মতামত কী?
8. NTVQF কোর্সগুলো পুরনুদমে শুরু করতে চাইলে সংশ্লিষ্ট কর্তৃপক্ষ এবং প্রশিক্ষণ কেন্দ্রসমূহকে কী কী ধরনের উদ্যোগ/প্রস্তুতি গ্রহণ করা প্রয়োজন বলে আপনি মনে করেন?
9. গুণগত মান বিচারে সকল প্রশিক্ষণ কেন্দ্রে প্রচলিত ট্রেড কোর্সসমূহ এবং NTVQF এর আওতায় BTEB কর্তৃক প্রস্তুতকৃত NTVQF কোর্সসমূহের মধ্যে কী কী ধরনের পার্থক্য আছে বলে আপনি মনে করেন?
10. BTEB এর অনুমোদনকৃত ট্রেড কোর্সগুলো বা NTVQF কোর্সসমূহ অফার করার জন্য আমাদের দেশের VSD প্রশিক্ষণ কেন্দ্রসমূহ কতটা well organized বলে আপনি মনে করেন?
11. BTEB এর অনুমোদনকৃত ট্রেড কোর্সগুলো বা NTVQF কোর্সসমূহ যেসব প্রশিক্ষক কর্তৃক পরিচালিত হয় তাদের সার্বিক যোগ্যতা ও দক্ষতা সম্পর্কে আপনার অভিমত কী?
12. BTEB এর অনুমোদনকৃত ট্রেড কোর্সগুলো বা NTVQF কোর্সসমূহ পরিচালনায় শ্রেণিকক্ষে প্রশিক্ষকবৃন্দ যেসব পদ্ধতি অনুসরণ করেন সেগুলোকে আপনি কতটা effective বলে মনে করেন? অথবা BTEB এর অনুমোদনকৃত ট্রেড কোর্সগুলো বা NTVQF কোর্সসমূহ পরিচালনায় শ্রেণিকক্ষে প্রশিক্ষকবৃন্দ যেসব পদ্ধতি অনুসরণ করেন সেসব পদ্ধতি সম্পর্কে আপনার অভিমত কী?
13. বর্তমানে প্রচলিত ট্রেড কোর্সগুলোর মান উন্নয়নে বা কোর্সগুলোকে আরো effective করার জন্য ট্রেড কোর্সগুলোর কী ধরনের উন্নয়ন করা প্রয়োজন বলে আপনি মনে করেন?
14. বর্তমানে প্রচলিত ট্রেড কোর্সগুলোর participants group সম্পর্কে আপনার মতামত কী? তাঁরা (participants group) কী কী কারণে এ সমস্ত ট্রেড কোর্সগুলো করতে আসে বলে আপনি মনে করেন?
15. যাঁরা এই সমস্ত ট্রেড কোর্সগুলোতে enrolled হয় তাঁরা সবাই কী সুনির্দিষ্ট কোর্স সমাপ্ত করতে পারে? এর (উত্তর হ্যাঁ বা না) কারণ কী কী বলে আপনি মনে করেন?
16. উল্লিখিত ট্রেড কোর্সসমূহ participants group দের জন্য কতটা উপকারী বলে আপনি মনে করেন? সুনির্দিষ্ট ট্রেনিং complete করে যাওয়ার পর তারা ট্রেনিং কোর্সসমূহকে কীভাবে কাজে লাগায় বলে আপনি মনে করেন?

17. সুনির্দিষ্ট ট্রেনিং complete করে যাওয়ার পর উক্ত ট্রেনিং কোর্সসমূহকে বিশেষ কোন কাজে লাগাতে পারে না এমন কিছু participants group আছে বলে কি আপনি মনে করেন? এর (উত্তর হ্যাঁ বা না) কারণ কী কী বলে আপনি মনে করেন?
18. Participants group দের employability বৃদ্ধিকরণে ট্রেড কোর্সসমূহের অবদান কতটুকু বলে আপনি মনে করেন? অথবা Participants group দের employability বৃদ্ধিকরণে ট্রেড কোর্সসমূহকে কতটুকু সহায়ক বলে আপনি মনে করেন?
19. BTEB এর অনুমোদনক্রমে বর্তমানে বাংলাদেশে প্রশিক্ষণ কেন্দ্রসমূহ যে সমস্ত ট্রেড কোর্স অফার করছে কর্মক্ষেত্রে এগুলোর চাহিদা কতটা আছে বলে আপনি মনে করেন?
20. BTEB এর অনুমোদনক্রমে বর্তমানে বাংলাদেশে প্রচলিত ট্রেড কোর্সসমূহ থেকে অর্জিত জ্ঞান ও দক্ষতা প্রশিক্ষণার্থীরা কর্মক্ষেত্রে কতটা কাজে লাগানোর সুযোগ পায় বলে আপনি মনে করেন?
21. আমাদের দেশে প্রচলিত ট্রেড কোর্সসমূহের ডিজাইনার বা সংশ্লিষ্ট কর্তৃপক্ষ এবং employer দের মধ্যে কতটা যোগসূত্র আছে বলে বলে আপনি মনে করেন? এর প্রয়োজনীয়তা সম্পর্কে আপনার অভিমত কী?
22. আমাদের দেশে প্রচলিত ট্রেড কোর্সসমূহ provider (প্রশিক্ষণ কেন্দ্রসমূহ) এবং employer দের মধ্যে কতটা যোগসূত্র আছে বলে বলে আপনি মনে করেন? এর প্রয়োজনীয়তা সম্পর্কে আপনার অভিমত কী?
23. আমাদের দেশে প্রচলিত ট্রেড কোর্সসমূহের ডিজাইনার বা সংশ্লিষ্ট কর্তৃপক্ষ এবং employer দের মধ্যে যথাযথ যোগসূত্র রক্ষার ক্ষেত্রে আপনার সাজেশন কী?
24. BTEB এর অনুমোদনক্রমে বর্তমানে বাংলাদেশে প্রচলিত ট্রেড কোর্সসমূহের মাধ্যমে Participants group দের employability বৃদ্ধিকরণে কোর্স ডিজাইনার গণ কী কী পদক্ষেপ গ্রহণ করতে পারে বলে আপনি মনে করেন?
25. BTEB এর অনুমোদনক্রমে বর্তমানে বাংলাদেশে প্রচলিত ট্রেড কোর্সসমূহের মাধ্যমে Participants group দের employability বৃদ্ধিকরণে সংশ্লিষ্ট কর্তৃপক্ষ কী কী পদক্ষেপ গ্রহণ করতে পারে বলে আপনি মনে করেন?
26. BTEB এর অনুমোদনক্রমে বর্তমানে বাংলাদেশে প্রচলিত ট্রেড কোর্সসমূহের মাধ্যমে Participants group দের employability বৃদ্ধিকরণে employer গণ কী কী পদক্ষেপ গ্রহণ করতে পারে বলে আপনি মনে করেন?
27. BTEB এর অনুমোদনক্রমে বর্তমানে বাংলাদেশে প্রচলিত ট্রেড কোর্সসমূহের মাধ্যমে Participants group দের employability বৃদ্ধিকরণে Participants group দের বিশেষ কোন ভূমিকা রাখার সুযোগ আছে বলে কি আপনি মনে করেন?
28. ট্রেড কোর্স সমূহ অফার করার জন্য প্রশিক্ষণ কেন্দ্রসমূহে BTEB কর্তৃক প্রদেয় কী কী ধরনের নিয়মকানুন /নির্দেশমালা রয়েছে?
29. BTEB এর অনুমোদনকৃত প্রশিক্ষণ কেন্দ্রসমূহ ট্রেড কোর্স সমূহ অফার করার ক্ষেত্রে BTEB কর্তৃক প্রদেয় নিয়মকানুন /নির্দেশমালা কতটা অনুসরণ করে বলে আপনি মনে করেন?
30. বর্তমানে প্রচলিত ট্রেড কোর্স সমূহের গুণগত মান উন্নয়নে প্রশিক্ষণ কেন্দ্রসমূহে BTEB কর্তৃক প্রদেয় নিয়মকানুন /নির্দেশমালায় কোন ধরনের পরিবর্তন, সংশোধন বা পরিমার্জন করা প্রয়োজন বলে কি আপনি মনে করেন?

Appendix -3: Interview Guideline for Principals of TTCs

1. আমাদের দেশের প্রেক্ষাপটে VSD এর জন্য বিভিন্ন রকম ট্রেড কোর্স অফার করা কতটা প্রয়োজনীয় এবং গুরুত্বপূর্ণ বলে আপনি মনে করেন?
2. BTEB এর অনুমোদনক্রমে বর্তমানে বাংলাদেশে যে সমস্ত ট্রেড কোর্স অফার করা হচ্ছে সেগুলিকে কতটা সমরোপযোগী বলে আপনি মনে করেন?
3. আপনি কি কোন ট্রেড কোর্সের ট্রেনিং প্রদান করেন? এ সমস্ত কোর্সের সাথে সম্পৃক্ত আপনার একাডেমিক ও প্রশিক্ষণ Background কি? আপনার অন্য কোন বিশেষ প্রশিক্ষণ প্রয়োজন আছে বলে কি আপনি মনে করেন?
4. আপনি যে সমস্ত কোর্সের ট্রেনিং করান সেগুলোর target group/participants group কারা? আপনি কি মনে করেন যে, participants group - দের need and receive করার capability অনুযায়ী উক্ত কোর্স সমূহ ডিজাইন করা হয়েছে? এ ব্যাপারে আপনার সাজেশন কী?
5. বর্তমানে প্রচলিত ট্রেড কোর্সগুলোর participants group সম্পর্কে আপনার মতামত কী? তাঁরা (participants group) কী কী কারণে এ সমস্ত ট্রেড কোর্সগুলো করতে আসে বলে আপনি মনে করেন?
6. যাঁরা এই সমস্ত ট্রেড কোর্সগুলোতে enrolled হয় তাঁরা সবাই কী সুনির্দিষ্ট কোর্স সমাপ্ত করতে পারে? এর (উত্তর হ্যাঁ বা না) কারণ কী কী বলে আপনি মনে করেন?
7. আপনার প্রতিষ্ঠানের প্রশিক্ষকবৃন্দ/ আপনি কী কী পদ্ধতি অনুসরণ করে ট্রেনিং প্রদান করে থাকেন? উক্ত পদ্ধতিসমূহকে আপনি কতটুকু ফলপ্রসূ বলে মনে করেন?
8. প্রশিক্ষকগণদের/আপনার পরিকল্পনা অনুযায়ী সুনির্দিষ্ট পদ্ধতি অনুসরণ করে ট্রেনিং প্রদান করার জন্য পর্যাপ্ত সুযোগ সুবিধা এখানে আছে বলে কি আপনি মনে করেন? Training session গুলোকে আরো ফলপ্রসূ করার জন্য অতিরিক্ত কি কি ধরনের সুযোগ সুবিধা এখানে থাকা প্রয়োজন বলে আপনি মনে করেন?
9. কোর্স শেষে প্রশিক্ষার্থীরা সুনির্দিষ্ট দক্ষতা ও যোগ্যতাসমূহ অর্জন করতে পারে বলে কি আপনি মনে করেন? কোর্স শেষে প্রত্যাশিত দক্ষতা ও যোগ্যতা আপনি/প্রশিক্ষকগণ কীভাবে মূল্যায়ন করেন?
10. উল্লিখিত ট্রেড কোর্সসমূহ participants group দের জন্য কতটা উপকারী বলে আপনি মনে করেন? সুনির্দিষ্ট ট্রেনিং complete করে যাওয়ার পর তারা ট্রেনিং কোর্সসমূহকে কীভাবে কাজে লাগায় বলে আপনি মনে করেন/ কর্মক্ষেত্রে কী রকম সুযোগ সুবিধা পেয়ে থাকে?
11. সুনির্দিষ্ট ট্রেনিং complete করে যাওয়ার পর উক্ত ট্রেনিং কোর্সসমূহকে বিশেষ কোন কাজে লাগাতে পারে না এমন কিছু participants group আছে বলে কি আপনি মনে করেন? এর (উত্তর হ্যাঁ বা না) কারণ কী কী বলে আপনি মনে করেন?
12. Employer দের সাথে আপনার, প্রশিক্ষকগণের এবং প্রশিক্ষার্থীদের কী কোন ধরনের যোগাযোগ আছে? এর প্রয়োজনীয়তা সম্পর্কে আপনার অভিমত কী?
13. Participants group দের employability বৃদ্ধিকরণে ট্রেড কোর্সসমূহের অবদান কতটুকু বলে আপনি মনে করেন? অথবা
Participants group দের employability বৃদ্ধিকরণে ট্রেড কোর্সসমূহকে কতটুকু সহায়ক বলে আপনি মনে করেন?
14. Participants group দের employability বাড়ানোর জন্য উক্ত কোর্সসমূহের কি রকম উন্নয়ন প্রয়োজন বলে আপনি মনে করেন? কোর্সসমূহের উন্নয়নের জন্য কাদের, কি রকমের সম্পৃক্ততা প্রয়োজন বলে আপনি মনে করেন?
15. আমাদের দেশে প্রচলিত ট্রেড কোর্সসমূহের ডিজাইনার বা সংশ্লিষ্ট কর্তৃপক্ষ এবং employer দের মধ্যে কতটা যোগসূত্র আছে বলে বলে আপনি মনে করেন? এর প্রয়োজনীয়তা সম্পর্কে আপনার অভিমত কী?

16. Employers এবং ট্রেড কোর্সের সাথে সম্পৃক্ত authority, trainers and trainees দের মধ্যে প্রয়োজনীয় যোগসূত্র স্থাপনের জন্য কী ধরনের উদ্যোগ গ্রহণ করা প্রয়োজন বলে আপনি মনে করেন? এক্ষেত্রে কে কী ধরনের ভূমিকা পালন করতে পারে?
17. NTVQF এর আওতায় BTEB ট্রেড কোর্সগুলোর যে Improve version (NTVQF courses) তৈরী করছে সেই NTVQF কোর্স সম্পর্কে আপনার মতামত কী? আপনার প্রতিষ্ঠানে কোন কোন NTVQF কোর্স অফার করা হয়? NTVQF কোর্স অল্প পরিমাণে অফার করার/ অফার না করার কারণসমূহ কী কী?
18. NTVQF কোর্সগুলো খুব সীমিত আকারে খুব অল্প সংখ্যক প্রশিক্ষণ কেন্দ্রে শুরু হয়েছে, উল্লিখিত কোর্সসমূহের practice/offer সম্প্রসারণ সম্পর্কে আপনার মতামত কী?
19. NTVQF কোর্সগুলো পুরনুদমে শুরু করতে চাইলে সংশ্লিষ্ট কর্তৃপক্ষ এবং প্রশিক্ষণ কেন্দ্রসমূহকে কী কী ধরনের উদ্যোগ /প্রস্তুতি গ্রহণ করা প্রয়োজন বলে আপনি মনে করেন?
20. গুণগত মান বিচারে সকল প্রশিক্ষণ কেন্দ্রে প্রচলিত ট্রেড কোর্সসমূহ এবং NTVQF এর আওতায় BTEB কর্তৃক প্রস্তুতকৃত NTVQF কোর্সসমূহের মধ্যে কী কী ধরনের পার্থক্য আছে বলে আপনি মনে করেন?
21. NTVQF কোর্সসমূহের ট্রেনিং করানোর জন্য বর্তমানে BTEB কর্তৃক চালুকৃত CBT approach সম্পর্কে আপনার মতামত কী? আপনি এবং আপনার প্রতিষ্ঠানের প্রশিক্ষকগণ কি ট্রেনিং করানোর সময় CBT approach/method ব্যবহান করেন?
22. CBT approach/method – এ ট্রেনিং করানোর জন্য প্রশিক্ষকদের কিভাবে প্রস্তুত করানো প্রয়োজন বলে আপনি মনে করেন? আপনি/ আপনার প্রতিষ্ঠানের প্রশিক্ষকগণ কি CBT approach/method এর উপর কোন ট্রেনিং পেয়েছেন? CBT approach/method এর উপর ট্রেনিং এর প্রয়োজনীয়তা সম্পর্কে আপনার অভিমত কী?
23. BTEB এর অনুমোদনকৃত ট্রেড কোর্সগুলো বা NTVQF কোর্সসমূহ CBT approach/method এ অফার করার জন্য আমাদের দেশের VSD প্রশিক্ষণ কেন্দ্রসমূহ কতটা well organized বলে আপনি মনে করেন?
24. বর্তমানে একটা গুরুত্বপূর্ণ বিষয় হচ্ছে industry সমূহের present and future needs address করা এবং এজন্য বর্তমানে CBT & A system চালু করা হয়েছে, উক্ত system সম্পর্কে আপনার মতামত কী? আপনি কি CBT & A system implement করেন? এ পদ্ধতিকে আপনি কতটা ফলপ্রসূ বলে মনে করেন?
25. CBT approach/method এবং CBT & A system implement করতে আপনারা কী কী ধরনের challenge face করেন? এ সমস্ত challenge দূর করার জন্য আপনার সাজেশন কী?
26. BTEB এর অনুমোদনক্রমে বর্তমানে বাংলাদেশে প্রচলিত ট্রেড কোর্সসমূহের মাধ্যমে Participants group দের employability বৃদ্ধিকরণে কোর্স ডিজাইনার গণ কী কী পদক্ষেপ গ্রহণ করতে/ভূমিকা পালন করতে পারে বলে আপনি মনে করেন?
27. BTEB এর অনুমোদনক্রমে বর্তমানে বাংলাদেশে প্রচলিত ট্রেড কোর্সসমূহের মাধ্যমে Participants group দের employability বৃদ্ধিকরণে সংশ্লিষ্ট কর্তৃপক্ষ কী কী পদক্ষেপ গ্রহণ করতে /ভূমিকা পালন করতে পারে বলে আপনি মনে করেন?
28. BTEB এর অনুমোদনক্রমে বর্তমানে বাংলাদেশে প্রচলিত ট্রেড কোর্সসমূহের মাধ্যমে Participants group দের employability বৃদ্ধিকরণে employer গণ কী কী পদক্ষেপ গ্রহণ করতে/ভূমিকা পালন করতে পারে বলে আপনি মনে করেন?
29. BTEB এর অনুমোদনক্রমে বর্তমানে বাংলাদেশে প্রচলিত ট্রেড কোর্সসমূহের মাধ্যমে Participants group দের employability বৃদ্ধিকরণে Participants group দের বিশেষ কোন ভূমিকা রাখার সুযোগ আছে বলে কি আপনি মনে করেন?

30. ট্রেড কোর্স সমূহ অফার করার জন্য প্রশিক্ষণ কেন্দ্রসমূহে BTEB কর্তৃক প্রদেয় কী কী ধরনের নিয়মকানুন/নির্দেশমালা রয়েছে?
31. বর্তমানে প্রচলিত ট্রেড কোর্স সমূহের গুণগত মান উন্নয়নে প্রশিক্ষণ কেন্দ্রসমূহে BTEB কর্তৃক প্রদেয় নিয়মকানুন/নির্দেশমালায় কোন ধরনের পরিবর্তন, সংশোধন বা পরিমার্জন করা প্রয়োজন বলে কি আপনি মনে করেন?

Appendix-4: Interview Guideline for the Trainers

1. আমাদের দেশের প্রেক্ষাপটে VSD এর জন্য বিভিন্ন রকম ট্রেড কোর্স অফার করা কতটা প্রয়োজনীয় এবং গুরুত্বপূর্ণ বলে আপনি মনে করেন?
2. BTEB এর অনুমোদনক্রমে বর্তমানে বাংলাদেশে যে সমস্ত ট্রেড কোর্স অফার করা হচ্ছে সেগুলিকে কতটা সময়োপযোগী বলে আপনি মনে করেন?
3. আপনি কোন কোন ট্রেড কোর্সের ট্রেনিং প্রদান করেন? এ সমস্ত কোর্সের সাথে সম্পৃক্ত আপনার একাডেমিক ও প্রশিক্ষণ Background কি? আপনার অন্য কোন বিশেষ প্রশিক্ষণ প্রয়োজন আছে বলে কি আপনি মনে করেন?
4. আপনি যে সমস্ত কোর্সের ট্রেনিং করান সেগুলোর target group/participants group কারা? আপনি কি মনে করেন যে, participants group - দের need and receive করার capability অনুযায়ী উক্ত কোর্স সমূহ ডিজাইন করা হয়েছে? এ ব্যাপারে আপনার সাজেশন কী?
5. বর্তমানে প্রচলিত ট্রেড কোর্সগুলোর participants group সম্পর্কে আপনার মতামত কী? তাঁরা (participants group) কী কী কারণে এ সমস্ত ট্রেড কোর্সগুলো করতে আসে বলে আপনি মনে করেন?
6. যারা এই সমস্ত ট্রেড কোর্সগুলোতে enrolled হয় তাঁরা সবাই কী সুনির্দিষ্ট কোর্স সমাপ্ত করতে পারে? এর (উত্তর হ্যাঁ বা না) কারণ কী কী বলে আপনি মনে করেন?
7. কী কী পদ্ধতি অনুসরণ করে আপনি ট্রেনিং প্রদান করে থাকেন? আপনার ব্যবহৃত পদ্ধতিসমূহকে আপনি কতটুকু ফলপ্রসূ বলে মনে করেন?
8. আপনার পরিকল্পনা অনুযায়ী সুনির্দিষ্ট পদ্ধতি অনুসরণ করে ট্রেনিং প্রদান করার জন্য পর্যাপ্ত সুযোগ সুবিধা এখানে আছে বলে কি আপনি মনে করেন? আপনার session গুলোকে আরো ফলপ্রসূ করার জন্য অতিরিক্ত কি কি ধরনের সুযোগ সুবিধা থাকা প্রয়োজন বলে আপনি মনে করেন?
9. কোর্স শেষে প্রশিক্ষার্থীরা সুনির্দিষ্ট দক্ষতা ও যোগ্যতাসমূহ অর্জন করতে পারে বলে কি আপনি মনে করেন? কোর্স শেষে প্রত্যাশিত দক্ষতা ও যোগ্যতা আপনি কীভাবে মূল্যায়ন করেন?
10. উল্লিখিত ট্রেড কোর্সসমূহ participants group দের জন্য কতটা উপকারী বলে আপনি মনে করেন? সুনির্দিষ্ট ট্রেনিং complete করে যাওয়ার পর তারা ট্রেনিং কোর্সসমূহকে কীভাবে কাজে লাগায় বলে আপনি মনে করেন/ কর্মক্ষেত্রে কী রকম সুযোগ সুবিধা পেয়ে থাকে?
11. সুনির্দিষ্ট ট্রেনিং complete করে যাওয়ার পর উক্ত ট্রেনিং কোর্সসমূহকে বিশেষ কোন কাজে লাগাতে পারে না এমন কিছু participants group আছে বলে কি আপনি মনে করেন? এর (উত্তর হ্যাঁ বা না) কারণ কী কী বলে আপনি মনে করেন?
12. Employer দের সাথে আপনার এবং প্রশিক্ষার্থীদের কী কোন ধরনের যোগাযোগ আছে? এর প্রয়োজনীয়তা সম্পর্কে আপনার অভিমত কী?
13. Participants group দের employability বৃদ্ধিকরণে ট্রেড কোর্সসমূহের অবদান কতটুকু বলে আপনি মনে করেন? অথবা

Participants group দের employability বৃদ্ধিকরণে ট্রেড কোর্সসমূহকে কতটুকু সহায়ক বলে আপনি মনে করেন?

14. Participants group দের employability বাড়ানোর জন্য উক্ত কোর্সসমূহের কি রকম উন্নয়ন প্রয়োজন বলে আপনি মনে করেন? কোর্সসমূহের উন্নয়নের জন্য কাদের, কি রকমের সম্পৃক্ততা প্রয়োজন বলে আপনি মনে করেন?
15. আমাদের দেশে প্রচলিত ট্রেড কোর্সসমূহের ডিজাইনার বা সংশ্লিষ্ট কর্তৃপক্ষ এবং employer দের মধ্যে কতটা যোগসূত্র আছে বলে আপনি মনে করেন? এর প্রয়োজনীয়তা সম্পর্কে আপনার অভিমত কী?
16. Employers এবং ট্রেড কোর্সের সাথে সম্পৃক্ত authority, trainers and trainees দের মধ্যে প্রয়োজনীয় যোগসূত্র স্থাপনের জন্য কী ধরনের উদ্যোগ গ্রহণ করা প্রয়োজন বলে আপনি মনে করেন? এক্ষেত্রে কে কী ধরনের ভূমিকা পালন করতে পারে?
17. NTVQF এর আওতায় BTEB ট্রেড কোর্সগুলোর যে Improve version (NTVQF courses) তৈরী করছে সেই NTVQF কোর্স সম্পর্কে আপনার মতামত কী?
18. NTVQF কোর্সগুলো খুব সীমিত আকারে খুব অল্প সংখ্যক প্রশিক্ষণ কেন্দ্রে শুরু হয়েছে, উল্লিখিত কোর্সসমূহের practice/offer সম্প্রসারণ সম্পর্কে আপনার মতামত কী?
19. NTVQF কোর্সগুলো পুরনুদমে শুরু করতে চাইলে সংশ্লিষ্ট কর্তৃপক্ষ এবং প্রশিক্ষণ কেন্দ্রসমূহকে কী কী ধরনের উদ্যোগ/প্রস্তুতি গ্রহণ করা প্রয়োজন বলে আপনি মনে করেন?
20. গুণগত মান বিচারে সকল প্রশিক্ষণ কেন্দ্রে প্রচলিত ট্রেড কোর্সসমূহ এবং NTVQF এর আওতায় BTEB কর্তৃক প্রস্তুতকৃত NTVQF কোর্সসমূহের মধ্যে কী কী ধরনের পার্থক্য আছে বলে আপনি মনে করেন?
21. NTVQF কোর্সসমূহের ট্রেনিং করানোর জন্য বর্তমানে BTEB কর্তৃক চালুকৃত CBT approach সম্পর্কে আপনার মতামত কী? আপনি কি ট্রেনিং করানোর সময় CBT approach/method ব্যবহান করেন?
22. CBT approach/method – এ ট্রেনিং করানোর জন্য প্রশিক্ষকদের কিভাবে প্রস্তুত করানো প্রয়োজন বলে আপনি মনে করেন? আপনি কি CBT approach/method এর উপর কোন ট্রেনিং পেয়েছেন? CBT approach/method এর উপর ট্রেনিং এর প্রয়োজনীয়তা সম্পর্কে আপনার অভিমত কী?
23. BTEB এর অনুমোদনকৃত ট্রেড কোর্সগুলো বা NTVQF কোর্সসমূহ CBT approach/method এ অফার করার জন্য আমাদের দেশের VSD প্রশিক্ষণ কেন্দ্রসমূহ কতটা well organized বলে আপনি মনে করেন?
24. বর্তমানে একটা গুরুত্বপূর্ণ বিষয় হচ্ছে industry সমূহের present and future needs address করা এবং এজন্য বর্তমানে CBT & A system চালু করা হয়েছে, উক্ত system সম্পর্কে আপনার মতামত কী? আপনি কি CBT & A system implement করেন? এ পদ্ধতিকে আপনি কতটা ফলপ্রসূ বলে মনে করেন?
25. BTEB এর অনুমোদনক্রমে বর্তমানে বাংলাদেশে প্রচলিত ট্রেড কোর্সসমূহের মাধ্যমে Participants group দের employability বৃদ্ধিকরণে কোর্স ডিজাইনার গণ কী কী পদক্ষেপ গ্রহণ করতে পারে বলে আপনি মনে করেন?
26. CBT approach/method এবং CBT & A system implement করতে আপনারা কী কী ধরনের challenge face করেন? এ সমস্ত challenge দূর করার জন্য আপনার সাজেশন কী?
27. BTEB এর অনুমোদনক্রমে বর্তমানে বাংলাদেশে প্রচলিত ট্রেড কোর্সসমূহের মাধ্যমে Participants group দের employability বৃদ্ধিকরণে সংশ্লিষ্ট কর্তৃপক্ষ কী কী পদক্ষেপ গ্রহণ করতে পারে বলে আপনি মনে করেন?
28. BTEB এর অনুমোদনক্রমে বর্তমানে বাংলাদেশে প্রচলিত ট্রেড কোর্সসমূহের মাধ্যমে Participants group দের employability বৃদ্ধিকরণে employer গণ কী কী পদক্ষেপ গ্রহণ করতে পারে বলে আপনি মনে করেন?
29. BTEB এর অনুমোদনক্রমে বর্তমানে বাংলাদেশে প্রচলিত ট্রেড কোর্সসমূহের মাধ্যমে Participants group দের employability বৃদ্ধিকরণে Participants group দের বিশেষ কোন ভূমিকা রাখার সুযোগ আছে বলে কি আপনি মনে করেন?

30. ট্রেড কোর্স সমূহ অফার করার জন্য প্রশিক্ষণ কেন্দ্রসমূহে BTEB কর্তৃক প্রদেয় কী কী ধরনের নিয়মকানুন /নির্দেশমালা রয়েছে?
31. বর্তমানে প্রচলিত ট্রেড কোর্স সমূহের গুণগত মান উন্নয়নে প্রশিক্ষণ কেন্দ্রসমূহে BTEB কর্তৃক প্রদেয় নিয়মকানুন /নির্দেশমালায় কোন ধরনের পরিবর্তন, সংশোধন বা পরিমার্জন করা প্রয়োজন বলে কি আপনি মনে করেন?

Appendix – 5: Interview Guideline for the officers from selected industries

1. আপনার Industry-তে কী কী ধরনের Production এর কাজ হয় ? কী ধরনের কাজ হয়?
2. উল্লিখিত Production এর কাজের জন্য আপনার Industry-তে কী কী ধরনের skilled manpower প্রয়োজন বলে আপনি মনে করেন?
3. আপনার Industry-তে skilled manpower নিয়োগের ক্ষেত্রে আপনারা কি কোন প্রাতিষ্ঠানিক Vocational Training বা Certificate এর প্রাধাণ্য দিয়ে থাকেন? কী কী ধরনের Training- প্রাধাণ্য দিয়ে থাকেন?
4. আপনারা কি আপনাদের প্রয়োজন মতো নিয়োগের ক্ষেত্রে পর্যাপ্ত পরিমাণ Skilled বা Certified manpower পান ?
5. আপনাদের প্রয়োজন মতো Skilled Manpower Supply- এর ক্ষেত্রে কারা কী ধরনের ভূমিকা পালন করতে পারে বলে আপনি মনে করেন ?
6. Demand side হিসাবে Skilled Manpower এর যথাযথ Supply- এর পাওয়ার জন্য আপনারা কি কোন প্রতিষ্ঠানের সাথে কোন ধরনের যোগাযোগ রক্ষা করেন (কোন কোন প্রতিষ্ঠানের সাথে, কি ধরনের যোগাযোগ)?
7. আপনাদের প্রয়োজন মতো Skilled Manpower পাওয়ার জন্য Supply Side থেকে আপনারা কী কী ধরনের সহযোগিতা প্রত্যাশা করেন?
8. বর্তমানে আমাদের দেশে যে সমস্ত Trade Courses বা Vocational Training আছে সেগুলি সম্পর্কে আপনার মতামত কি? আপনার Industry’র সার্বিক কাজ/চাহিদা বিবেচনা করলে আপনার কোম্পানির জন্য এই সব Training সমূহ কতটা উপযোগী বলে আপনার মনে হয়? (আপনারা Vocational Training Course সমূহ কতটা ব্যবহার করে থাকেন?)
9. আপনার Industry’র সার্বিক কাজ/চাহিদার পরিপ্রেক্ষিতে Trade Courses বা Vocational Training সমূহের ব্যবহার বা উপযোগিতা বৃদ্ধিতে আপনার সাজেশান কি ? Trade Courses বা Vocational Training সমূহের Overall Practice তথা Content, Skill, Delivery Mood ইত্যাদিতে কোন ধরনের পরিবর্তন আনা প্রয়োজন বলে কি আপনি মনে করেন?
10. Trade Courses বা Vocational Training –এর মূল উদ্দেশ্য হচ্ছে Industry গুলোতে উৎপাদন বৃদ্ধির লক্ষ্যে দক্ষ জনসংখ্যা তৈরী করা -এক্ষেত্রে Skills Training Organization গুলো কী ধরনের ভূমিকা রাখছে বলে আপনি মনে করেন?
11. Trade Courses বা Vocational Training সমূহকে ফলপ্রসূ করার জন্য Skills Training Organization গুলোর কি কোন ধরনের পরিবর্তন বা উন্নয়ন প্রয়োজন? এ ব্যাপারে আপনার সাজেশান কী?
12. Participants group দের employability বৃদ্ধিকরণে ট্রেড কোর্সসমূহের অবদান কতটুকু বলে আপনি মনে করেন? অথবা
Participants group দের employability বৃদ্ধিকরণে ট্রেড কোর্সসমূহকে কতটুকু সহায়ক বলে আপনি মনে করেন?

13. Trade Courses বা Vocational Training সমূহের মাধ্যমে Trainee -দের employability বৃদ্ধিকরণে আপনাদের কি কোন ধরনের ভূমিকা আছে? এক্ষেত্রে Industry গুলো তথা আপনারা কী করতে পারেন বলে আপনি মনে করেন?
14. কোন কোন Trade Course-এ Participants-দের জন্য Relevant Industry গুলোর সাথে যুক্ত হয়ে কিছু Practical কাজ (Apprenticeship) করার সুযোগ রাখা হয় -এ বিষয়ক total procedure এবং Practice সম্পর্কে আপনার মতামত কী ? Participants-দের employability বৃদ্ধিকরণে এই ধরনের কাজকে (Apprenticeship-কে) কতটা সহায়ক বলে আপনি মনে করেন?
15. Apprenticeship অর্থাৎ Relevant Industry গুলোর সাথে যুক্ত হয়ে কিছু Practical কাজ করার মাধ্যমে Participants-দের employability বৃদ্ধিকরণে Industry গুলো তথা আপনারা Skills Training Organization গুলোকে কী কী ধরনের সহায়তা করতে পারেন বলে আপনি মনে করেন ?
16. অন্যদিকে Vocational Training প্রাপ্ত দক্ষ জনশক্তিকে কাজে লাগানোর ক্ষেত্রে আপনারা কি বিশেষ কোন ধরনের Consideration করেন? এক্ষেত্রে Overall Industry সমূহ কী ধরনের ভূমিকা পালন করতে পারে বলে আপনি মনে করেন ?
17. Trade Course সমূহের Design তথা content and skill level selection, practice ইত্যাদিতে আপনাদের কি কোন ধরনের সম্পৃক্ততা আছে ? এক্ষেত্রে আপনারা অর্থাৎ Overall Industry সমূহ কী ধরনের ভূমিকা পালন করতে পারে বলে আপনি মনে করেন ?
18. আমাদের দেশে প্রচলিত ট্রেড কোর্সসমূহ provider (প্রশিক্ষণ কেন্দ্রসমূহ) এবং employer দের মধ্যে কতটা যোগসূত্র আছে বলে বলে আপনি মনে করেন? এর প্রয়োজনীয়তা সম্পর্কে আপনার অভিমত কী?
19. এটা স্পষ্ট যে, Training Course গুলোর মাধ্যমে দক্ষ/skilled জনশক্তি তৈরী করে তাদের দক্ষতাকে যথাযথভাবে কাজে লাগিয়ে উৎপাদন বৃদ্ধি তথা overall উন্নয়নের জন্য প্রশিক্ষণ কেন্দ্রসমূহ, Industry এবং employer-দের সম্মিলিত প্রচেষ্টা প্রয়োজন- তা সফল করার ক্ষেত্রে আপনার সাজেশান কী? (প্রশিক্ষণ কেন্দ্রসমূহ, Industry এবং employer-গণ সমঝোতার সাথে কাজ করবে, Trade Courses এবং Training ফলপ্রসূ হবে- তাহলে করণীয় কী?)
20. NSDP-2011-এ National Skills Council (ISC) –এর কথা বলা আছে, এই ISC সম্পর্কে কী আপনি কিছু জানেন? ISC-এর প্রয়োজনীয়তা এবং কার্যাবলী সম্পর্কে আপনার মতামত ও সাজেশান কী?

Appendix – 6: Focus Groups Discussion (FGD) Guideline for the current participants of vocational training courses

1. Participant দের পরিচয় এবং একাডেমিক background?
2. আপনারা General Education ছেড়ে শেষ করে du Vocational Skills Development এর ট্রেনিং-এ আসার কারণ কী ?
3. আপনারা কেন এবং কোন পরিস্থিতির প্রেক্ষিতে Vocational Trade Course- এর ট্রেনিং করার প্রয়োজনীয়তা অনুভব করলেন ?
4. আপনারা সুনির্দিষ্ট এই Trade এর কোর্স choice করলেন কেন ? উক্ত কোর্স সম্পর্কে আপনাদের অভিমত কী?
5. উক্ত ট্রেনিং এর মাধ্যমে আপনারা কী কী রকমের দক্ষতা অর্জন করবেন বলে মনে করেন?

6. উক্ত ট্রেনিং কোর্সে যা যা আছে এবং যেভাবে পড়ানো হয় আপনারা কি তা ভালভাবে বুঝতে পারেন? আপনারা যে উদ্দেশ্যে এই ট্রেনিং কোর্স করতে এসেছেন- উক্ত কোর্স complete করার পর আপনাদের সেই উদ্দেশ্য পূরণ হবে বলে কি আপনাদের মনে হয়? এ ব্যাপারে আপনাদের কী ধরনের সহায়তা প্রয়োজন বলে আপনারা মনে করেন?
7. উক্ত কোর্স আপনাদের employability বৃদ্ধিতে কতটা সহায়ক বলে আপনারা মনে করেন? আপনাদের employability বাড়ানোর জন্য উক্ত কোর্সে কিছু সংযোজন বা বিয়োজন করা প্রয়োজন আছে বলে কি আপনারা মনে করেন?
8. আপনি কি মনে করেন এই ধরনের দক্ষতা সমূহ (উক্ত কোর্স থেকে যা অর্জন করেছেন) কাজে লাগানোর জন্য আমাদের দেশে কি যথেষ্ট ও যথাযথ ক্ষেত্র এবং সুযোগ সুবিধা রয়েছে? আমাদের দেশে আরো কী কী ধরনের ক্ষেত্র বা সুযোগ সুবিধা তৈরী করা প্রয়োজন বলে আপনারা মনে করেন?
9. উক্ত কোর্স থেকে অর্জিত দক্ষতাসমূহ আপনারা কোথায় কীভাবে কাজে লাগানোর পরিকল্পনা করছেন ?
10. উক্ত কোর্স থেকে অর্জিত দক্ষতাসমূহ এবং সার্টিফিকেট কী সংশ্লিষ্ট সেটরে-ই কাজে লাগাতে পারেন ? নাকী উক্ত দক্ষতাসমূহ এবং সার্টিফিকেট বিবেচনায় না এনে কর্মক্ষেত্রে অন্য ধরনের কাজ করতে হয়?
11. আপনাদের employability বাড়ানোর জন্য, কর্মক্ষেত্রে সুযোগ সুবিধা বাড়ানোর জন্য উক্ত প্রশিক্ষণ কেন্দ্র থেকে কি কোন ধরনের উদ্যোগ গ্রহণ করা হয় বা কোন ধরনের সহায়তা করা হয়? প্রশিক্ষণ কেন্দ্র থেকে কী আপনারা কোন ধরনের সহায়তা প্রত্যাশা করেন?
12. Employer দের সাথে আপনাদের কী কোন ধরনের যোগাযোগ আছে? এর প্রয়োজনীয়তা সম্পর্কে আপনাদের অভিমত কী?
13. আপনাদের এই ধরনের ট্রেনিং কোর্স সমূহকে employer গণ কীভাবে মূল্যায়ন করেন ? Employer গণ এই ধরনের ট্রেনিং কোর্স সমূহকে কি বিশেষ কোন রকম গুরুত্ব দিয়ে থাকে?
14. আপনাদের এই ধরনের ট্রেনিং কোর্স সমূহকে যথাযথভাবে কাজে লাগানোর জন্য Employer দের ব্যাপারে আপনাদের অভিমত কী ? এক্ষেত্রে Employer দের বিশেষ কিছু করণীয় আছে বলে কী আপনারা মনে করেন?
15. আপনারা এই যে Trade Course গুলো করছেন - এই কোর্সগুলো Employer দের requirement fulfill করতে সহায়ক বলে কি আপনারা মনে করেন ?
16. Employer দের requirement fulfill করতে Trade Course-এর overall practice –এ কোন ধরনের পরিবর্তন, পরিমার্জন করা প্রয়োজন বলে কি আপনারা মনে করেন ? এ সম্পর্কে আপনার সাজেশন কী?
17. Employer দের সাথে প্রয়োজনীয় যোগাযোগ বাড়ানোর জন্য কী ধরনের উদ্যোগ গ্রহণ করা প্রয়োজন বলে আপনারা মনে করেন ? এক্ষেত্রে কে কী ধরনের ভূমিকা পালন করা পালন করতে পারে বলে আপনারা মনে করেন?
18. আপনারা এই যে ট্রেনিং করতে আসেন, এখানে ট্রেনিং করার ক্ষেত্রে আপনারা কি কোন ধরনের সমস্যা (ব্যক্তিগত, পারিবারিক, সামাজিক, প্রাতিষ্ঠানিক) face করেন ? এ সমস্ত সমস্যা দূর করার ক্ষেত্রে আপনার সাজেশন কী?
19. উক্ত ট্রেনিং সমূহকে যথাযথভাবে কাজে লাগানোর জন্য বা আপনাদের employability বাড়ানোর জন্য আপনাদের নিজেদের বিশেষ কিছু করণীয় আছে বলে কি আপনাদের মনে হয়?
20. BTEB এবং Vocational Training এর উচ্চ পর্যায়ের অন্য কোন প্রতিষ্ঠান সম্পর্কে কি আপনাদের কোন ধারণা আছে? উচ্চ পর্যায়ের এ ধরনের প্রতিষ্ঠান থেকে কি আপনারা কোন কিছু প্রত্যাশা করেন?
21. সার্বিক অবস্থা অর্থাৎ আমাদের দেশের Vocational Training, আপনাদের এখানে Training করতে আসা, উক্ত প্রশিক্ষণ কাজে লাগিয়ে চাকরী পাওয়া বা না পাওয়া, ইত্যাদি সার্বিক অবস্থা সম্পর্কে আপনাদের অনুভূতি কী ?

Appendix-7: Training Session Observation Schedule (for theoretical session)

General Information

Name of the class observer: -----

Trainer : -----

Organization: -----

Course : -----

Date : ----- Time: -----

Total Participants: ----- Number of participants present: -----

Types of participants: -----

Note: This observation checklist was designed to explore the practice of Vocational Skills Development training programs. This toll includes relevant indicators in different sections considering a quality Training session. Rating is based on a three- point scale- excellent (5), average (3) and poor (1). Please circle the number which most closely corresponds to your own view about each statement.

A Initiating the Training Session

S.No.	Indicators	Rating criteria	Excellent	Avg.	Poor	Comments
01.	Starting the Session	5. Trainer started the session on time and he/she seemed well prepared and well organized.	5	3	1	
		3. Trainer started the session on time but he/she seemed unorganized and she was in a hurry.	5	3	1	
		1. Trainer started the session few minutes late and he/she seemed not sincere about the session.	5	3	1	
		5. The Trainer greeted participants cheerfully and did a good and enjoyable warm-up.	5	3	1	

02.	Greeting the participants/ Building rapport with the participants	3. The Trainer greeted participants just for formalities	5	3	1	
		1. The Trainer did not greet participants or the Trainer greeted students but his/her voice was not loud enough for the class size and all students were not addressed.	5	3	1	

03	Introducing the topic with learning objectives of the session	5. The Trainer introduced the learning objectives of the session for the day in a very simple, clear manner.	5	3	1	
		3. The Trainer introduced the objectives of the session for the day but he/she was not clear.				
		1. The Trainer did not introduce the objectives of the session.				
04.	Providing a comprehensive plan of the whole session after briefing the topic shortly	5. The Trainer shared a clear time plan of the whole session to the participants mentioning specific content and allotted time.	5	3	1	
		3. The Trainer shared a time plan of the session but it was not consistent and logical.				
		1. The Trainer did not share any time plan of the session				

B Teaching-Learning Activities

S.No.	Indicators	Rating criteria	Excellent	Avg.	Poor	Comments
05.	Exploring the prior learning/knowledge of the participants	5. The Trainer asked about participants' prior knowledge about the content/topic of the session and started the main discussion of the session based on the participants' prior knowledge.	5	3	1	
		3. The Trainer asked about participants' prior knowledge about the content/topic of the session but did not relate this during starting the main content/session.				
		1. The Trainer did not ask about participants' prior knowledge about the content/topic of the session.				
06.	Presentation/explanation of the specific content of the session	5. The trainer presented/ explained the specific content of the session very clearly and in an interesting and enjoyable way.	5	3	1	
		3. The trainer presented/ explained the specific content but sometimes participants were in confusion as he/she did not deal with it properly.				
		1. The trainer himself/herself was not clear in some specific content areas				

07.	<p>Providing examples of the practice relating knowledge /content and materials of the session.</p>	<p>5. The trainer provided interesting examples of good practice or the trainer demonstrated the hands on activity himself/herself very clearly using relevant knowledge/materials.</p>	5	3	1	
<p>3. The trainer provided a few examples but these were not relevant with the session or the trainer tried to demonstrate the hands on activity himself/herself but seemed reluctant to do this.</p>						
<p>1. The trainer did not share any related example or the trainer did not demonstrate any hands on activity himself/herself.</p>						
08.	<p>Illustrating the applicability of the materials, knowledge or practice relating to the participants' context</p>	<p>5. The trainer introduced the relevant materials clearly including explanation of their usage where particular knowledge and skills of the session can be applied.</p>	5	3	1	
<p>3. The trainer explained the usage of the materials but not much related with the knowledge and skills of the session.</p>						
<p>1. The trainer did not mention any point about the relevant materials and applicability of knowledge and skills of the session.</p>						

09.	Provide readings, activities or other relevant materials in accessible formats to understand the session/task clearly.	5. The trainer provided relevant readings and materials in accessible formats and clear instruction and explanation of the activities required to perform by the participants.	5	3	1	
		3. The trainer provided relevant readings and materials but did not mention about their access and the instruction/ explanation of the activities was not clear to the participants.				
		1. The trainer did not provide any relevant readings and materials and the trainer did not provide any instruction/ explanation of the activities required to perform by the participants.				

C. Participants' Engagement (in hands on activities)

10.	Providing opportunities for participants to practice and rehearse new skills	5. The trainer created conducive environment in the classroom to practice the hands on activity using the acquired skills from the session and provide proper support to do the task.	5	3	1	
		3. The trainer provided opportunities for the participants to practice and rehearse new skills but the environment of the class was not in favour for practice.				
		1. The trainer did not provide opportunities for the participants to practice and rehearse new skills and the session was mostly theory/content based.				
11.	Providing opportunities	5. The trainer created conducive environment in the classroom and allowed the participants to share their personal experiences and				

	for participants to express personal perspectives/to relate the task with their purpose	<p>expectations to use the new skills from the session.</p> <p>3. The trainer allowed participants to share their personal perspectives and experiences but most of the sharing was not relevant.</p> <p>1. The trainer did not allow and seemed very rigid and strict in controlling the participants in the classroom.</p>	5	3	1	
12.	Facilitate opportunities for participants to interact with each other related to the training content/hands on task	<p>5. The trainer created conducive environment in the classroom and allowed the participants to interact with each other to perform the task accurately and the trainer was very supportive.</p> <p>3. The trainer allowed participants to interact with each other for performing the task but the participants were engaged with doing other things created chaos in the classroom.</p> <p>1. The trainer did not allow participants to interact with each other to understand the concepts and the trainer seemed very rigid and strict in controlling the participants in the classroom.</p>	5	3	1	
13.	Supporting participants to completed the task/activity on scheduled time according to written or verbal announcement	<p>5. The trainer was very supportive to the participants to help them to complete the task/activity timely and created a rigorous environment in the classroom.</p> <p>3. The trainer did not care participants to complete the task/activity timely and most of the participants did not complete the task/activity on time.</p> <p>1. The trainer did not follow up with the task/activity and the task was not completed by the participants.</p>	5	3	1	

D. Scope of Evaluation/Reflection

S.No.	Indicators	Rating criteria	Excellent	Avg	Poor	Comments
14.	Providing opportunities for the participants to reflect on learning from the particular session	5. After completing the task the trainer created an intensive classroom environment for participants to reflect their learning from the particular activity/session and the trainer also reflected his/her own reflection about the activity or session.	5	3	1	
		3. The trainer provided opportunities for the participants to reflect their learning from the session but the sharing was not well organized or rigorous.				
		1. The trainer did not create opportunities for participants to reflect on learning rather he/she was engaged with some other unnecessary speech.				
15.	Engage participants in assessment of their acquired knowledge and skills from the specific session	5. The trainer generated a constructive discussion to engage participants in the assessment procedure and use an effective strategy to assess the participants	5	3	1	
		3. The trainer tried to engage participants in the assessment procedure but all the participants were not fully engaged.				
		1. The trainer did not engage participants and the assessment procedure was unclear.				
16.	Asking questions by the	5. The participants asked questions when they could not understand and they were very fluent in asking questions.				

	students	3. Very few participants asked questions, rest seemed not clear and uncomfortable and the trainer did not concentrate to all the participants.	5	3	1	
		1. There were hardly any question from participants and the teacher did not encourage participants to do this rather he/she showed avoiding tendency to some extent.				
17.	Answering questions by the teacher	5. The trainer answered the questions from the participants cordially and he/she was very clear, well behaved and supportive to the participants.	5	3	1	
		3. The trainer answered participants' questions reluctantly. He/she did not encourage participants to ask questions.				
		1. The trainer did not encourage students to ask any questions. He/she answered one or two questions asked by the participants, but his/her answers were not understood by the participants or these were not the right answer.				

E. Follow-up activities and extra-support for proper learning

S.No.	Indicators	Rating criteria	Excellent	Avg.	Poor	
18.	Providing detail follow –up activities that support participants to apply their learning	5. The trainer provided a very clear and comprehensive follow –up activity to the participants to support them to apply their learning and the participants were very much motivated eager to complete follow-up activity.	5	3	1	
		3. The trainer provided a follow-up activity but the instruction was not clear to the participants and they seemed reluctant to do this.				
		1. The trainer did not provide any follow-up activity and was reluctant to support participants to apply their learning.				

19.	Offering opportunities to the participants for continues their learning taking technical assistance and resources from the organization/trainer	5. The trainer encouraged and motivated the participants to continue their learning and offered opportunities to take technical assistance and resources from the organization and trainer as required.	5	3	1	
		3. The trainer told participants to continue their learning but it was not that much encouraging offering the opportunities to take support and resources from the organizations and trainers.				
		1. The trainer did not tell anything to the participants to continue their learning				
20.	Offer opportunities for coaching to provide follow up support and additional information	5. The trainer encouraged and motivated the participants to communicate with him/her for further coaching , support and additional information if needed.	5	3	1	
		3. The trainer told participants to provide further coaching, support and additional information but was not cordial enough .				
		1. The trainer did not tell anything to the participants for providing any types of coaching, support and additional information.				

F. Overall Comments on the whole session

S.No	Indicators	Rating criteria	Excellent	Avg.	Poor	Comments
.	Teacher-students	1. The trainer was friendly with the participants and participants were enthusiastic to ask him/her about their difficulties.				

21.	relationship	2. The trainer was friendly but sometimes he/she was not patient with the participants.	5	3	1	
		3. The trainer was rigid and participants were afraid of asking about their problems/difficulties.				
22.	Teacher's understanding of the materials	5. The trainer understood the content and concepts very clearly and <i>followed every steps of the session properly</i> . The <i>concept/content and the organization of the session</i> were very clear to him/her.	5	3	1	
		3. The teacher <i>understood the concept but the concept/content and the organization of the session</i> were not clear to him/her.				
		1. The content and concept of the session was not clear to the trainer and the <i>concept/content and the organization of the session was not consistent</i> .				
23.	Students' understanding of the materials	1. The students easily understood the concept/content of the session and completed most of the activities	5	3	1	
		2. The teacher faced difficulties to make the students understand some of the concepts				
		3. The students did not understand most of the points and did not complete most of the				

		activities of the session.				
24.	Overall teaching-learning activities	1. The <i>concept was clear, participants were active, the teacher monitored participants' activities and finished the session within the specific time.</i>	5	3	1	
		2. The teacher missed out or did not do well on one/two of the above points				
		3. The teacher missed out or did not do properly on all of the four points.				

D IDENTIFICATION OF PROBLEMS

a. Problems in the classroom/ teaching-learning process, identified by the class teacher

1. -----
2. -----
3. -----

Suggested solutions

1. -----
2. -----
3. -----

b. Problems in the classroom/ teaching-learning process, identified by the class observer

1. -----
2. -----
3. -----

Suggested solutions

1. -----
2. -----
3. -----

Appendix-8: Training Session Observation Schedule (for practical session)

General Information

Name of the class observer:

Trainer :

Organization:

Course :

Date : Time:

Total Participants: Number of participants present:

Types of participants:

Note: This observation checklist was designed to explore the practice of Vocational Skills Development training programs. This toll includes relevant indicators in different sections considering a quality Training session. Rating is based on a three- point scale- excellent (5), average (3) and poor (1). Please circle the number which most closely corresponds to your own view about each statement.

S.No.	Indicators	Rating criteria	Excellent	Avg.	Poor	Comments
01.	Starting the Session	5. Trainer started the session on time giving the instruction clearly, introduce the job-sheet, learning objectives and provided a time plan.				
		3. Trainer started the session on time, gave the instruction for the task/job and not mentioned learning objectives and any time plan.	5	3	1	

		1. Trainer started the session few minutes late and instruction for the task was not clear to all.				
02.	Demonstration of the particular task by the trainers	5. The trainer demonstrated the particular task very clearly and all the participants understood the task properly.	5	3	1	
3. The trainer demonstrated the task but sometimes participants were in confusion as he/she did not deal with it properly.						
1. The trainer demonstrated the particular task very clearly.						

03.	Explaining the usage of the materials, knowledge or skills relating to	5. The trainer introduced the relevant materials clearly including explanation of their usage where particular knowledge and skills of the session can be applied.	5	3	1	
3. The trainer explained the usage of the materials but not much related with the knowledge and skills of the session.						

	the participants' context	1. The trainer did not mention any point about the relevant materials and applicability of knowledge and skills of the session.				
04.	Provide necessary materials in accessible formats to do the job/task properly.	5. The trainer provided necessary materials in accessible formats and clear instruction and explanation of the task	5	3	1	
		3. The trainer provided necessary materials but did not mention about their access and the instruction/ explanation of the activities was not clear to the participants.				
		1. The trainer did not provide the necessary materials and did not provide any instruction/ explanation of the activities.				

05.	Providing opportunities for participants with necessary tools and equipment to practice the hands-on skills	5. The trainer provided necessary tools and equipments to each individual participant and these machineries were new and updated	5	3	1	
		3. The trainer provided necessary tools and equipments to each individual participant and very few of these machineries were new and updated				
		1. The trainer did not provide opportunities for the participants with sufficient tools and equipments.				

06.	Providing opportunities for participants to share their individual context and needs and relate the task with their purpose	5. The trainer created conducive environment in the classroom and allowed the participants to share their personal experiences and expectations to use the new skills from the session.	5	3	1	
3. The trainer allowed participants to share their personal perspectives and experiences but most of the sharing was not relevant.						
1. The trainer did not allow and seemed very rigid and strict in controlling the participants in the classroom.						
07.	Facilitate opportunities for participants to interact with each other related to the training content/hands on task	5. The trainer created conducive environment in the classroom and allowed the participants to interact with each other to perform the task accurately and the trainer was very supportive.	5	3	1	
3. The trainer allowed participants to interact with each other for performing the task but the participants were engaged with doing other things created chaos in the classroom.						
1. The trainer did not allow participants to interact with each other to understand the concepts and the trainer seemed very rigid and strict in controlling the participants in the classroom.						
08.	Supporting participants to completed the task/activity on scheduled time according to written or verbal	5. The trainer was very supportive to the participants to help them to complete the task/activity timely and created a rigorous environment in the classroom.	5	3	1	
3. The trainer did not care participants to complete the task/activity timely and most of the participants did not complete the task/activity on time.						

	instructions	1. The trainer did not follow up with the task/activity and the task was not completed by the participants.				
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09.	Providing opportunities for the participants to reflect on practical tasks	5. After completing the task the trainer created an intensive classroom environment for participants to reflect their learning from the particular activity/session and the trainer also reflected his/her own reflection about the activity or session.	5	3	1	
		3. The trainer provided opportunities for the participants to reflect their learning from the session but the sharing was not well organized or rigorous.				
		1. The trainer did not create opportunities for participants to reflect on learning rather he/she was engaged with some other unnecessary speech.				
10.	Assessment strategies used in the practical session	5. The trainers assessed all participants in the end of the practical session and provide necessary feedback.	5	3	1	
		3. The trainers assessed all but did not provide constructive feedback				
		1. The trainers did not assess any participant and the assessment procedure was unclear				
11.	Asking questions by the participants and answering questions by the trainers	5. The participants asked questions when they could not understand and the trainers were very cordial and confident to answer the questions.	5	3	1	
		3. Very few participants asked questions, rest seemed not clear and uncomfortable and the trainer did not concentrate to all the participants.				

12.	Teacher-students relationship	1. The trainer was friendly with the participants and participants were enthusiastic to ask him/her about their difficulties.	5	3	1	
		2. The trainer was friendly but sometimes he/she was not patient with the participants.				
		3. The trainer was rigid and participants were afraid of asking about their problems/difficulties				
13.	Teacher's understanding of the practical work and relevant materials	5. The trainer understood the content, concepts and tasks very clearly and <i>followed every steps of the session properly</i> . The <i>concept/content/task and the organization of the session</i> were very clear to him/her.	5	3	1	
		3. The trainers understood the procedure of the practical tasks and use of materials but their explanation was not so good.				
		1. The students did not understand most of the points and did not complete most of the activities of the session.				
14.	Overall teaching-learning activities in the	1. <i>The task was clear, participants were active, the teacher monitored participants' activities and finished the session within the specific time.</i>	5	3	1	

	practical class of vocational training courses	2. The teacher missed out or did not do well on one/two of the above points.				
		3. The teacher missed out or did not do properly on all of the four points.				

D IDENTIFICATION OF PROBLEMS

a. Problems in the classroom/ teaching-learning process, identified by the class teacher

- 1. -----
- 2. -----
- 3. -----

Suggested solutions

- 1. -----
- 2. -----
- 3. -----

b. Problems in the classroom/ teaching-learning process, identified by the class observer

- 1. -----
- 2. -----
- 3. -----

Suggested solutions

- 1. -----
- 2. -----
- 3. -----

Appendix-9: Survey Questionnaire for the current participants of vocational training courses

প্রশিক্ষণ প্রতিষ্ঠানের নাম (যে প্রতিষ্ঠানে আপনি ট্রেনিং করেছেন) :

ট্রেনিং কোর্সের নাম : _____

ট্রেনিং কোর্সটির সময়কাল: _____

লিঙ্গ _____ বয়স : _____ পেশা : _____

শিক্ষাগত যোগ্যতা: _____ তারিখ: _____

নির্দেশনা :

অনুগ্রহপূর্বক নিচের প্রশ্নসমূহ মনোযোগ সহকারে পড়ুন এবং আপনার সুচিন্তিত মতামত / উত্তর প্রদান করুন।

প্রশ্ন ১ঃ আপনি কখন, কি কারণে কারিগরি প্রশিক্ষণ নেয়ার সিদ্ধান্ত নিলেন?

- সাল :-----
- কারণঃ যেকোন একটা চাকরি পাওয়ার জন্য
 - তুলনামূলক ভাল একটা চাকরি পাওয়ার জন্য
 - আয় বাড়ানোর জন্য
 - স্বাবলম্বী হওয়ার জন্য
- অন্যান্য (উল্লেখ করুন) :-----

প্রশ্ন ২ঃ আপনি উক্ত প্রশিক্ষণ কোর্সটির ব্যাপারে প্রথম কার কাছে জানতে পারলেন ?

(প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

- প্রশিক্ষণ কেন্দ্র থেকে ফোন/বিজ্ঞপ্তি পেয়েছেন
- সংবাদপত্র, টেলিভিশন বা অন্য কোন যোগাযোগ মাধ্যমে জানতে পেরেছেন
- বর্তমান বা পূর্ব কর্মসংস্থানকারীর নিকট থেকে জানতে পেরেছেন
- অন্যান্য (উল্লেখ করুন) : _____

প্রশ্ন ৩ : উক্ত প্রশিক্ষণ কোর্সটি আপনার কাছে কেমন লাগছে ?

(প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

খুব ভাল	ভাল	মোটামুটি ভাল	ভাল লাগছে না	একেবারেই ভাল লাগছে না	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ৪ : উক্ত প্রশিক্ষণ কোর্সটিতে তাত্ত্বিক যে সমস্ত বিষয়বস্তু পড়ানো হচ্ছে সেগুলি কি আপনি বুঝতে পারেন ?

(প্রযোজ্যক্ষেত্রে \sqrt চিহ্ন দিন)

হ্যাঁ না

প্রশ্ন ৫। প্রশিক্ষণ কোর্সটি আপনার দক্ষতা বৃদ্ধিতে কতটা সহায়ক বলে আপনি মনে করেন?

(প্রযোজ্যক্ষেত্রে \sqrt চিহ্ন দিন)

অনেক বেশি সহায়ক	সহায়ক	মোটামুটি সহায়ক	সহায়ক নয়	একেবারেই সহায়ক নয়	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ৬ : উক্ত প্রশিক্ষণ কোর্সটির ব্যবহারিক ক্লাসগুলো আপনার কেমন লাগছে ?

(প্রযোজ্যক্ষেত্রে \sqrt চিহ্ন দিন)

খুব ভাল	ভাল	মোটামুটি ভাল	ভাল লাগছে না	একেবারেই ভাল লাগছে না	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ৭ : ব্যবহারিক ক্লাসের জন্য/ হাতে কলমে কাজ শেখার জন্য প্রশিক্ষণ কেন্দ্রটিতে কি প্রয়োজনীয় সরঞ্জামাদি পর্যাপ্ত পরিমাণে আছে ? (প্রযোজ্যক্ষেত্রে \sqrt চিহ্ন দিন)

হ্যাঁ না

প্রশ্ন ৮ : উক্ত প্রশিক্ষণ কোর্সটির প্রশিক্ষকদের আপনার কাছে কেমন লাগে ?

(প্রযোজ্যক্ষেত্রে \sqrt চিহ্ন দিন)

খুব ভাল	ভাল	মোটামুটি ভাল	ভাল লাগছে না	একেবারেই ভাল লাগছে না	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ৯ : উক্ত প্রশিক্ষণ কোর্সটিকে আরো উন্নতভাবে ডিজাইন করা দরকার বলে কি আপনি মনে করেন?

(প্রযোজ্যক্ষেত্রে \sqrt চিহ্ন দিন)

হ্যাঁ না

প্রশ্ন ১০ : চাকুরীক্ষেত্রে বা চাকুরীপ্রাপ্তিতে উক্ত প্রশিক্ষণ কোর্সটিকে কতটুকু সহায়ক বলে কি আপনি মনে করেন? (প্রযোজ্যক্ষেত্রে \sqrt চিহ্ন দিন)

অনেক বেশি সহায়ক	সহায়ক	মোটামুটি সহায়ক	সহায়ক নয়	একেবারেই সহায়ক নয়	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ১১ : প্রশিক্ষণ শেষে উক্ত প্রশিক্ষণ কেন্দ্র থেকে প্রাপ্ত সার্টিফিকেটটি আপনি কতটা কাজে লাগাতে পারবেন বলে আপনার মনে হয়?
(প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

অনেক বেশি কাজে লাগবে	কাজে লাগবে	কাজে লাগতেও পারে	কাজে লাগবে না	একেবারেই কাজে লাগবে না	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ১২ : প্রশিক্ষণ শেষে উক্ত প্রশিক্ষণ কেন্দ্র থেকে প্রাপ্ত সার্টিফিকেটটি নিয়োগকারীরা কতটা গুরুত্ব সহকারে মূল্যায়ন করে/করবে বলে আপনি মনে হয়? (প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

অনেক বেশি গুরুত্ব দেয়	গুরুত্ব দেয়	মোটামুটি গুরুত্ব দেয়	গুরুত্ব দেয় না	একেবারেই গুরুত্ব দেয় না	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ১৩ : প্রশিক্ষণ শেষে উক্ত প্রশিক্ষণকে কাজে লাগিয়ে আপনার জীবনমানে কি কোন পরিবর্তন হবে বলে আপনি মনে করেন?

হ্যাঁ না

(যেগুলো আপনার ক্ষেত্রে প্রযোজ্য সবগুলিতেই √ চিহ্ন দিন)

- যোগ্যতা ও দক্ষতা বৃদ্ধি পাবে
- কর্মক্ষেত্রে যোগদানের আগ্রহ বৃদ্ধি পাবে
- কর্মক্ষেত্রে কাজ করার আগ্রহ বৃদ্ধি পাবে
- কর্মক্ষেত্রে কাজের পরিমাণ বৃদ্ধিতে সহায়ক হবে
- কাজের সুযোগ বৃদ্ধি পাবে
- কাজের সুযোগ বৃদ্ধি পাবে
- কর্মক্ষেত্রে স্বয়ংসম্পূর্ণতা বৃদ্ধি পাবে
- আয় বৃদ্ধি পাবে
- সার্বিক জীবনযাত্রার মান উন্নত হবে
- দৈনন্দিন জীবনের সমস্যা সমাধানের দক্ষতা বৃদ্ধি পাবে
- অন্যান্য (উল্লেখ করুন):

প্রশ্ন ১৪ : উক্ত প্রশিক্ষণ কোর্সটিতে কি **Relevant** কোন **Factory-** তে প্রশিক্ষণকালীন কোন ধরনের **Exposure** – এর সুযোগ আছে ?

হ্যাঁ না

প্রশ্ন ১৫ : প্রশিক্ষণকালীন **Relevant** কোন **Factory**- তে প্রশিক্ষণ কেন্দ্র কর্তৃক কোন ধরনের Exposure – এর ব্যবস্থা করাকে আপনি কতটা উপকারী বলে মনে করেন ? (প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

অনেক বেশি উপকারী	উপকারী	মোটামুটি উপকারী	উপকারী নয়	মোটাই উপকারী নয়	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ১৬ : উক্ত প্রশিক্ষণ কোর্সটিতে কি **Relevant** কোন **Factory**- তে প্রশিক্ষণকালীন কোন ধরনের Job Placement – এর সুযোগ আছে ?

হ্যাঁ না

প্রশ্ন ১৭ : প্রশিক্ষণকালীন **Relevant** কোন **Factory**- তে প্রশিক্ষণ কেন্দ্র কর্তৃক কোন ধরনের Job Placement – এর ব্যবস্থা করাকে আপনি কতটা উপকারী বলে মনে করেন ? (প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

অনেক বেশি উপকারী	উপকারী	মোটামুটি উপকারী	উপকারী নয়	মোটাই উপকারী নয়	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ১৮ : আপনাদের employability বাড়ানোর জন্য, কর্মক্ষেত্রে সুযোগ সুবিধা বাড়ানোর জন্য উক্ত প্রশিক্ষণ কেন্দ্র থেকে কি কোন ধরনের উদ্যোগ গ্রহণ করা হয় বা কোন ধরনের সহায়তা করা হয়?

হ্যাঁ না

প্রশ্ন ১৯ : Employer দের সাথে আপনাদের কী কোন ধরনের যোগাযোগ আছে? হ্যাঁ না

প্রশ্ন ২০ : সার্বিক অবস্থা অর্থাৎ আমাদের দেশের Vocational Training, আপনাদের এখানে Training করতে আসা, উক্ত প্রশিক্ষণ কাজে লাগিয়ে চাকরী পাওয়া বা না পাওয়া, ইত্যাদি সার্বিক অবস্থা সম্পর্কে আপনাদের অনুভূতি/সাজেশন কী ?

প্রশ্ন ২১ঃ সেশন পরিচালনার সময় প্রশিক্ষণ কোর্সটির **Theoretical and Practical Part** – এর মধ্যে কোনটিতে বেশি জোর দেয়া হয়?

১। Theoretical Part ২. Practical Part

প্রশ্ন ২২ঃ প্রশিক্ষণ কোর্সটির **Theoretical and Practical Part** – এর মধ্যে আপনি কোনটিকে বেশি জোর দেয়া উচিত বলে মনে করেন?

১। Theoretical Part ২. Practical Part

প্রশ্ন ২৩ঃ আপনার **Employability** বৃদ্ধিতে উক্ত প্রশিক্ষণ কোর্সটি সহায়ক হবে বলে কি আপনি মনে করেন?

হ্যাঁ না

প্রশ্ন ২৪ঃ আপনার **Employability** বৃদ্ধিতে উক্ত প্রশিক্ষণ কোর্সটি কতটুকু সহায়ক হবে বলে আপনি মনে করেন?

অনেক বেশি সহায়ক	সহায়ক	মোটামুটি সহায়ক	সহায়ক নয়	একেবারেই সহায়ক নয়	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ২৫ঃ Employer দের সাথে আপনাদের কোন ধরনের যোগাযোগ থাকা প্রয়োজন বলে কি আপনি মনে করেন?

হ্যাঁ না

প্রশ্ন ২৬ঃ প্রশিক্ষণ শেষে চাকরী পাওয়ার ব্যাপারে প্রশিক্ষণ কেন্দ্রের সাথে কি আপনার কোন আলোচনা হয়েছে?

হ্যাঁ না

উক্ত 'হ্যাঁ' হলে কী ধরনের আলোচনা হয়েছে? _____

প্রশ্ন ২৭ঃ উক্ত প্রশিক্ষণ কোর্সটি কি আপনার প্রয়োজনীয় যোগ্যতা ও দক্ষতাসমূহ অর্জনে সহায়ক হবে বলে আপনি

মনে করেন?

হ্যাঁ না

প্রশ্ন ২৮ঃ উক্ত প্রশিক্ষণ কোর্সটি আপনার প্রয়োজনীয় যোগ্যতা ও দক্ষতাসমূহ অর্জনে কতটুকু সহায়ক হবে বলে

আপনি মনে করেন?

অনেক বেশি সহায়ক	সহায়ক	মোটামুটি সহায়ক	সহায়ক নয়	একেবারেই সহায়ক নয়	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ২৯ঃ উক্ত প্রশিক্ষণ কোর্স হতে অর্জিত যোগ্যতা ও দক্ষতাসমূহ আপনি কোথায় কাজে লাগাবেন?

১। চাকরীক্ষেত্রে ২। নিজস্ব ব্যবসাক্ষেত্রে

Thank you very much for your cooperation!

Appendix-10: Survey Questionnaire for the graduates of vocational training courses

প্রশিক্ষণ প্রতিষ্ঠানের নাম (যে প্রতিষ্ঠানে আপনি ট্রেনিং করেছেন) :

ট্রেনিং কোর্সের নাম : _____

ট্রেনিং কোর্সটির সময়কাল: _____

লিঙ্গ _____ বয়স : _____ পেশা : _____

শিক্ষাগত যোগ্যতা: _____ তারিখ: _____

নির্দেশনা :

অনুগ্রহপূর্বক নিচের প্রশ্নসমূহ মনোযোগ সহকারে পড়ুন এবং আপনার সুচিন্তিত মতামত / উত্তর প্রদান করুন।

প্রশ্ন ১ঃ আপনি কখন, কি কারণে কারিগরি প্রশিক্ষণ নেয়ার সিদ্ধান্ত নিয়েছিলেন?

- সাল :-----
- কারণঃ যেকোন একটা চাকরি পাওয়ার জন্য
 - তুলনামূলক ভাল একটা চাকরি পাওয়ার জন্য
 - আয় বাড়ানোর জন্য
 - ১ স্বাবলম্বী হওয়ার জন্য
 - 0 অন্যান্য (উল্লেখ করুন) : -----

প্রশ্ন ২ঃ আপনি উক্ত প্রশিক্ষণ কোর্সটির ব্যাপারে প্রথম কার কাছে জানতে পেরেছিলেন ?

(প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

- প্রশিক্ষণ কেন্দ্র থেকে ফোন/বিজ্ঞপ্তি পেয়েছেন
- সংবাদপত্র, টেলিভিশন বা অন্য কোন যোগাযোগ মাধ্যমে জানতে পেরেছেন
- বর্তমান বা পূর্ব কর্মসংস্থানকারীর নিকট থেকে জানতে পেরেছেন
- অন্যান্য (উল্লেখ করুন) : _____

প্রশ্ন ৩ : উক্ত প্রশিক্ষণ কোর্সটি আপনার কাছে কেমন লেগেছিল ?

(প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

খুব ভাল	ভাল	মোটামুটি ভাল	ভাল লাগে নি	একেবারেই ভাল লাগে নি	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ৪ : উক্ত প্রশিক্ষণ কোর্সটিতে তাত্ত্বিক যে সমস্ত বিষয়বস্তু পড়ানো হয়েছিল সেগুলি কি আপনি বুঝতে পেরেছিলেন ?

(প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

হ্যাঁ না

প্রশ্ন ৫ : প্রশিক্ষণ কোর্সটি আপনার দক্ষতা বৃদ্ধিতে কতটা সহায়ক ছিল বলে আপনি মনে করেন?

(প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

অনেক বেশি সহায়ক	সহায়ক	মোটামুটি সহায়ক	সহায়ক নয়	একেবারেই সহায়ক নয়	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ৬ : উক্ত প্রশিক্ষণ কোর্সটির ব্যবহারিক ক্লাসগুলো আপনার কেমন লেগেছিল ?

(প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

খুব ভাল	ভাল	মোটামুটি ভাল	ভাল লাগে নি	একেবারেই ভাল লাগে নি	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ৭ : ব্যবহারিক ক্লাসের জন্য/ হাতে কলমে কাজ শেখার জন্য প্রশিক্ষণ কেন্দ্রটিতে কি প্রয়োজনীয় সরঞ্জামাদি পর্যাপ্ত পরিমাণে ছিল ? (প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

হ্যাঁ না

প্রশ্ন ৮ : উক্ত প্রশিক্ষণ কোর্সটির প্রশিক্ষকদের আপনার কাছে কেমন লেগেছিল ?

(প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

খুব ভাল	ভাল	মোটামুটি ভাল	ভাল লাগে নি	একেবারেই ভাল লাগে নি	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ৯ : উক্ত প্রশিক্ষণ কোর্সটিকে আরো উন্নতভাবে ডিজাইন করা দরকার বলে কি আপনি মনে করেন?

(প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

হ্যাঁ না

প্রশ্ন ১০ : চাকুরীক্ষেত্রে বা চাকুরীপ্রাপ্তিতে উক্ত প্রশিক্ষণ কোর্সটিকে কতটুকু সহায়ক বলে কি আপনি মনে করেন? (প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

অনেক বেশি সহায়ক	সহায়ক	মোটামুটি সহায়ক	সহায়ক নয়	একেবারেই সহায়ক নয়	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ১১ : প্রশিক্ষণ শেষে উক্ত প্রশিক্ষণ কোর্স থেকে অর্জিত যোগ্যতা ও দক্ষতাকে আপনি কতটা কাজে লাগাতে পারছেন বলে আপনি মনে হয়? (প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

অনেক বেশি কাজে লাগছে	কাজে লাগছে	কাজে লাগতেও পারে	কাজে লাগছে না	একেবারেই কাজে লাগছে না	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ১২ : প্রশিক্ষণ শেষে উক্ত প্রশিক্ষণ কেন্দ্র থেকে প্রাপ্ত সার্টিফিকেটটি আপনি কতটা কাজে লাগাতে পারছেন বলে আপনি মনে হয়? (প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

অনেক বেশি কাজে লাগছে	কাজে লাগছে	কাজে লাগতেও পারে	কাজে লাগছে না	একেবারেই কাজে লাগছে না	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ১৩ : প্রশিক্ষণ শেষে উক্ত প্রশিক্ষণ কেন্দ্র থেকে প্রাপ্ত সার্টিফিকেটটি নিয়োগকারীরা কতটা গুরুত্ব সহকারে মূল্যায়ন করে বলে আপনি মনে হয়? (প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

অনেক বেশি গুরুত্ব দেয়	গুরুত্ব দেয়	মোটামুটি গুরুত্ব দেয়	গুরুত্ব দেয় না	একেবারেই গুরুত্ব দেয় না	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ১৪ : প্রশিক্ষণ শেষে উক্ত প্রশিক্ষণকে কাজে লাগিয়ে আপনার জীবনমানে কি কি ধরনের পরিবর্তন হয়েছে বলে আপনি মনে করেন?

(যেগুলো আপনার ক্ষেত্রে প্রযোজ্য সবগুলিতেই √ চিহ্ন দিন)

- যোগ্যতা ও দক্ষতা বৃদ্ধি পাবে
- কর্মক্ষেত্রে যোগদানের আগ্রহ বৃদ্ধি পাবে
- কর্মক্ষেত্রে কাজ করার আগ্রহ বৃদ্ধি পাবে
- কর্মক্ষেত্রে কাজের পরিমাণ বৃদ্ধিতে সহায়ক হবে
- কাজের সুযোগ বৃদ্ধি পাবে
- কাজের সুযোগ বৃদ্ধি পাবে
- কর্মক্ষেত্রে স্বয়ংসম্পূর্ণতা বৃদ্ধি পাবে
- আয় বৃদ্ধি পাবে
- সার্বিক জীবনযাত্রার মান উন্নত হবে
- দৈনন্দিন জীবনের সমস্যা সমাধানের দক্ষতা বৃদ্ধি পাবে

- অন্যান্য (উল্লেখ করুন):
-

প্রশ্ন ১৫ : উক্ত প্রশিক্ষণ কোর্সটিতে কি **Relevant** কোন **Factory-** তে প্রশিক্ষণকালীন কোন ধরনের Exposure – এর সুযোগ ছিল ?

হ্যাঁ না

প্রশ্ন ১৬ : প্রশিক্ষণকালীন **Relevant** কোন **Factory-** তে প্রশিক্ষণ কেন্দ্র কর্তৃক কোন ধরনের Exposure – এর ব্যবস্থা করাকে আপনি কতটা উপকারী বলে মনে করেন ? ? (প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

অনেক বেশি উপকারী	উপকারী	মোটামুটি উপকারী	উপকারী নয়	মোটাই উপকারী নয়	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ১৭ : উক্ত প্রশিক্ষণ কোর্সটিতে কি **Relevant** কোন **Factory-** তে প্রশিক্ষণকালীন কোন ধরনের Job Placement – এর সুযোগ ছিল ?

হ্যাঁ না

প্রশ্ন ১৮ : প্রশিক্ষণকালীন **Relevant** কোন **Factory-** তে প্রশিক্ষণ কেন্দ্র কর্তৃক কোন ধরনের Job Placement – এর ব্যবস্থা করাকে আপনি কতটা উপকারী বলে মনে করেন ? ? (প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

অনেক বেশি উপকারী	উপকারী	মোটামুটি উপকারী	উপকারী নয়	মোটাই উপকারী নয়	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ১৯ : আপনাদের employability বাড়ানোর জন্য, কর্মক্ষেত্রে সুযোগ সুবিধা বাড়ানোর জন্য উক্ত প্রশিক্ষণ কেন্দ্র থেকে কি কোন ধরনের উদ্যোগ গ্রহণ করা হয়েছিল বা কোন ধরনের সহায়তা করা হয়েছিল?

হ্যাঁ না

প্রশ্ন ২০ : প্রশিক্ষণকালীন Employer দের সাথে আপনাদের কী কোন ধরনের যোগাযোগ আছে?

হ্যাঁ না

প্রশ্ন ২১ : প্রশিক্ষণ কোর্সটি করার সময় আপনি কি কোন চাকুরি করতেন?

হ্যাঁ না চাকুরীর ধরণ (উল্লেখ করুন) :

প্রশ্ন ২২ : প্রশিক্ষণ কোর্সটি শেষ করার পর আপনি কি কোন চাকুরি পেয়েছেন?

হ্যাঁ না কতদিন/মাস পর (উল্লেখ করুন) : _____

প্রশ্ন ২৩ : প্রশিক্ষণ শেষে বা প্রশিক্ষণ থেকে অর্জিত যোগ্যতা ও দক্ষতাকে ব্যবহার করে আপনি কি ধরনের চাকুরি পেয়েছেন?
(প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

- পূর্বের চাকুরী
- একই প্রতিষ্ঠানে অন্য চাকুরী
- অন্য প্রতিষ্ঠানে একই চাকুরী
- অন্য প্রতিষ্ঠানে অন্য চাকুরী
- নিজস্ব ব্যবসা/চাকুরী
- অন্যান্য (উল্লেখ করুন) : _____

প্রশ্ন ২৪ : প্রশিক্ষণ কোর্সের ব্যাপারে সার্বিকভাবে আপনি নিজেকে কতখানি সন্তুষ্ট বলে মনে করেন? (প্রযোজ্যক্ষেত্রে √ চিহ্ন দিন)

অনেক বেশি সন্তুষ্ট	সন্তুষ্ট	মোটামুটি সন্তুষ্ট	সন্তুষ্ট নয়	মোটাই সন্তুষ্ট নয়	মন্তব্য
৫	৪	৩	২	১	

প্রশ্ন ২৫ : সার্বিক অবস্থা অর্থাৎ আমাদের দেশের Vocational Training, আপনাদের এখানে Training করতে আসা, উক্ত প্রশিক্ষণ কাজে লাগিয়ে চাকরী পাওয়া বা না পাওয়া, ইত্যাদি সার্বিক অবস্থা সম্পর্কে আপনাদের অনুভূতি/সাজেশন কী ?

Thank you very much for your cooperation!

Appendix-11: Sample Transcript (Interview 1)

Interview ## 1: DD BTEB/ 24 June 2019

1. Importance of Trade Courses

According to the requirement and demand of the industry's job market offering trade courses is very important because each and every occupation requires particular skill workers and we need to develop those types of skills workers who will be able to fulfill the need of particular occupation. For this purpose, considering the current context of the industries it is very important to offer different trade courses of different trade and occupation.

Of course, offering trade courses is very important because if skilled people are not developed according to the requirement of the industries, the trained people himself/herself will not get any kind of job, will not be benefitted anyway. On the other hand, the industries also will not be benefitted.

2. Quality of the Trade Courses

360 hours basic and conventional trade courses which BTEB is offering currently these might require revision considering the context of the present industries as the requirement of the industries are changed over time.

Side by side under NTVQF we/BTEB is developing the competency standards which we developed according to the requirement of the industries and of course these courses are up to date and updated. People from industries were involved in developing the competency standards under NTVQF. As the people from industries were involved in the development process of competency standards, so I think the competency standards under NTVQF are occupation based

and up to dated. But the conventional basic trade courses will require a revision and I think these basic trade courses need to develop and fine-tune like the NTVQF courses.

3. Process of Designing the Trade Courses

Honestly speaking, we mainly started the process of trade courses from 1985. At that time, it was designed as 360 hours courses and practical oriented courses. Mainly the academicians worked in designing the courses, for example, we the industry people work in the NTVQF courses but only the academicians worked in developing the basic trade courses. They used their theoretical knowledge in designing the courses. They thought, okay, is this mobile, radio or TV servicing? And for these types of servicing those things are essential. Mainly the teachers were involved in the development process of basic trade courses.

But industry's people mainly involved in the development process of NTVQF courses. Only the academic support has been taken from the academicians. But previous time in the early years only the academicians and teachers were involved in the development process of trade courses.

4. Analysis /Consideration of Participants' groups' need in designing the trade courses

During starting the trade courses the perspectives of trainees are not considered, rather during designing the 360 hours trade courses it is ensured that these courses are job oriented and educational qualification of the trainees are mentioned there. For example, in the 'Computer Operation Courses'- Masters level, Intermediate level or SSC level participants can attend the courses, but lower than SSC level can not attend the 'Computer Operation Courses'.

Mainly the trade courses were designed considering the job perspectives not considering the trainees perspectives. For example, if we need a plumber, in that case it was thought out what types of things a plumber need to know. But trainees' perspectives are not considered here. Actually it is not the need of trainees rather the main requirement is for the job position. People need to be developed for the particular type of job. It might be for fulfilling the requirement of the industries but not for fulfilling the need of the individual trainees.

5. Employers involvement and consideration of their needs in designing the trade courses

In designing the trade courses mainly the academicians were involved, the employers were not informed in this regard. But in the starting phase the employers' perspectives might be considered. In fact the courses were designed considering our young people so that they can join different types of jobs. Though this perspective is considered but in designing the trade courses the participation of employers or industries' people were not there.

In the recent time it is realized that there are some gaps between supply- side and demand-side. The reasons behind the gap between supply-side and demand-side is we are not offering the trade

courses according to requirement of the employers. As a result there are mismatch between the skills which we offer through trade courses and the skills which employers require for increasing their products.

But through NTVQF courses we are trying to fulfill the employers' requirements. And through these NTVQF courses the gap between supply-side and demand-side is lessening because in this process the employers are involved and they themselves inform what types of skills they need in their industries.

6. Quality, Context and Expansion of NTVQF Courses

In the existing vocational skill development system of Bangladesh there are some traditional basic trade and short courses which were started from 1985 in the Vocational Skill Development Sector. Currently under NTVQF these traditional trade courses are being fine-tuned into NTVQF courses. But these NTVQF courses are completely different from the traditional trade courses in terms of their delivery mood, content level, skill level and assessment procedure. Though the duration of both types of courses (NTVQF & traditional short courses), are 360 hours. Ultimately, in near future all the traditional short courses will be omitted and NTVQF courses will take place all over the country. So the NTVQF courses need to be promoted as these are internationally recognized and according to the worldwide frame it is leveling the skills in different trades.

Considering the global trends, we also should apply these types of skills leveling. This system will help us for proper documentation and for providing different useful information, like, how many skilled workers a factory has, in which level the skilled workers are, etc. These types of information/data base will be useful for providing the wages to the workers, increasing the productivity. This type of information will also help us to be clear about our need of skilled workers in different level to increase the overall productivity.

As the modality of NTVQF courses is different from the traditional courses, so for proper implementation it is very essential to develop and organize the training centres accordingly. For example, the training delivery mood of the NTVQF is different, it is more job oriented and practical oriented, so the training centres should be well equipped with necessary tools. For developing and equipping the training centres as per need of the NTVQF courses, Government should provide necessary supports, like, teachers training, tools and equipment support, initiating different activities to aware the industries. Government should also extend this kind of support to the private training organizations as the number of private training organizations are even more than the public training organizations. All types of government supports and initiatives will expand will expand the training of NTVQF courses. I think for the expansion of NTVQF courses, the most important priority is providing training to the teachers of both public and private training centres. Apart from these industries also should give importance to the NTVQF certified trained people, develop and offer a separate improve salary structure to them and to

some extent they can also provide some relevant tools and equipment supports as per the nature of their works or activities.

So the main point is for the expansion of NTVQF courses our Technical Training centres should be well developed by teachers training, infrastructure and tools equipments. Mainly government is responsible to expand the NTVQF courses courses, so it is difficult for the private training centres to support govt. investing their own fund and other equipments. SO Government can support the private porganizations in three major area:

- i) Increasing the availability of tools and equipment
- ii) Certifying all the trainers by providing relevant training
- iii) Providing infrastructural development support as per requirement

On the other hand NTVQF courses were developed giving priority to the industries' requirements whereas industries requirements were not reviewed during developing the traditional short trade courses. For this reason the content of the NTVQF courses was identified according tp the industries demand which was not addressed in selecting the content of the traditional short courses. In the short courses the academicians just developed the competency standards based on their ideas and assumptions. But in the NTVQF courses the industries experts informed their requirement regarding skill level and content level and then these specific content has been inserted in the NTVQF courses.

The NTVQF courses are more job oriented and practical oriented, so these types of courses require the use of computer or machineries individually. So our Technical Training Centers are not well organized to offer the NTVQF courses in large scale. They are just able to offer the traditional short courses because in the traditional short courses they facilitate the training and practical works in groups and in that case they do not need individually machine support. So apparently we can not sat that the Technical Training Centers are well organized to offer the NTVQF courses in large scale.

7. Qualification of the Trainers:

In the traditional trade courses if anyone has diploma in particular discipline, they become eligible to be the trainers but anyone wants to be the trainer for providing NTVQF courses they have to have the certificate on particular trade or technology as well as they have to have the certificate on teaching pedagogy. Not only this he/she has to proof his knowledge and skills in particular occupation by attending the level-wise assessment procedure. But in the conventional trade courses the trainers do not have/acquire any kind of pedagogical training. For this reason the training delivery mood and practices of NTVQF courses is much better than the traditional trade courses. Usually the traditional courses are very much lecture based and group practice is happened there for lack of tools, machineries and technological arrangements.

8. Pedagogic practice in the trade courses

Pedagogical approach of the conventional trade courses is mainly the lecture method and practical work and other practice happened in groups. But BTEB provides pedagogical training to the trainers of NTVQF courses for facilitating training in the classroom. They have to facilitate the training following specific lesson plan/session plan, before going to the class they have to prepare the lesson plan. In case of practical demonstration at first the trainers show the practical demonstration and then the students demonstrate the practical work individually.

One of the important specialties of the NTVQF courses is in these courses the teachers and trainers have to perform the practical work individually and that's why the delivery mood of the NTVQF courses is more effective than the traditional courses.

According to the guideline of the NSDP-2011 the NTVQF courses are being implemented now. So I think it is important to review the conventional trade courses and better to fine-tune these courses into NTVQF courses preparing the competency standards. It will help to incorporate the industries' requirement in the syllabus of the trade courses.

9. Target or participant groups of the trade courses

The participants groups who attend the trade courses they mainly need a certificate for applying a job/position and only for this purpose the participate and complete the trade courses. The intension of the participants is to get just a certificate in the trade courses and for this reason the traditional trade courses are not much effective and can not fulfill the requirement of the employers.

The participants who enrolled in the trade courses usually all of them complete the courses. A very small number of students might be dropped out from the courses and there are many reasons behind this, for example, some become engage with other works and they can not give time to the specific courses, after enrollment some can understand that this course will not be useful for them and ultimately they dropped out from the coruse. Mainly the participants enrolled in the courses for a certificate and for this purpose they complete the course.

10. Usefulness of the Trade Courses

An evaluation of the effectiveness of the trade courses will be helpful to mention the usefulness of the trade courses specifically. For example, regarding NTVQF courses a survey has been conducted among the employers and employees and based on the survey it is understood /found out that how employers can support in these NTVQF courses, 94% of the NTVQF trained graduates getting good job, achieving higher skills which help them to get higher salaries.

After completing the particular training if the trainees do not get any related job the trainings become useless and do not add any value on the graduates career. For example, one completed a

training on welding but can not do welding on practical, do not get any job in welding then the training will not be useful for him, he will forget the skill after a certain time.

Mainly the participants become interested to get/complete a training for the purpose of getting a job or for self employment. But ultimately if it is resulted that the training is not up to the level and the graduates face challenges in performing the job, not getting any scope to initiate self employment –in that case participants become dissatisfied about the training, the training become useless for them.

The trade course is mainly offered for increasing the employability of the participants. But to know after completing the trade courses whether the graduates are getting a good job or not it requires to conduct a research study. Without study it is difficult to say how far the trade courses are increasing employability of the participants.

11. Linkage between the designers of the trade courses, relevant authority and the employers

As there is no involvement of the employers in the trade courses it is clear that there is no linkage between the designers of the trade courses, relevant authorities and the employers. But it is very essential to involve the employers in the trade courses. We mainly develop the skilled people to use them in the relevant industries. SO if we do not consider the requirements of the industries or employers for who we develop the human resources – our products, efforts and trainings become useless. SO it is very important to communicate the employers significantly.

12. Linkage between the Technical Training Centers and employers :

In the existing practice there is less linkage between the TTCs and the employers. Between them there is no communication in two points:

- i) What the employer want
- ii) The skilled people the training centres are developing

That's why in the NTVQF courses there is option to have “employers committee” so that they can communicate and give their feedback to the training centres. But in the traditional trade courses there is very less communication between the employers and the TTCs. So the current practice of NTVQF courses need to be enhanced- by incorporating Employers Committee, arranging job fair, skill fair, inviting the employers in different events, etc. If we can able to do these the employers will be able to see and observe what types of skilled people the TTCs are developing, how the participants are doing their practical work, etc.

13. Required considerations in designing the trade courses:

All the conventional trade courses need to be designed as NTVQF courses. During the designing phase of the trade courses if we involve the employers the quality of the trade course will be improved. Previous time only the academicians designed the trade courses. But it's true that there is a huge gap between the academicians and the industry people. For example, it is difficult for the academicians to assume what types of changes are happening in the industries. The industries might change their machineries and the trainers of the training centres might not know about the changes. In that case the training centres are using the different kind of machines in their training which are not available in the industries and the trained people are not getting the scope to apply their practical knowledge in the industries.

So, for reducing this kind of mismatch it is essential to increase the linkage between the TTCs and the industries. For this purpose, our academicians can communicate with the industries, frequent visit and exposure to the industries can be arranged.

14. Role of Authority (BTEB) in increasing the employability of the participants:

BTEB can develop the conventional trade courses into NTVQF courses, if BTEB can do this the trade courses will be designed as per industries requirements and then ultimately the employability of the trained people will be increased. The current traditional trade courses are not contributing to increase the employability as proper required skills are not addressed in these traditional trade courses. For this reason, the NSDP-2011 suggested to fine-tune the traditional courses into NTVQF courses. NSDP -2011 suggested to convert the national skill development courses, SSC vocational courses and diploma courses into NTVQF courses as these are not able to contribute in enhancing the employability of the trainees.

15. Role of employers in enhancing the employability of the participants:

Employers can play significant role by supporting BTEB in developing the competency standards. During settling the competency standards the employers can inform their requirements to the training providers. They can update the training providers about their changes in the technology and machineries. For example, if the industries have CNC machines, electronic machines and the training providers provide training through manual machine then it will not work. Employers should inform their requirements to the training providers and BTEB officials who are involved in developing the curriculum and syllabus of the courses. This is their main role- if the training providers can know about their requirement –the training providers will be able to develop trained people as per their demand and need.

Apart from this they can build strong linkage with the training institutes by providing machineries support to them. For example, Samsung provided a design lab support to Dhaka Bulletin , Korean Philips company provided a mobile phone lab support to BKTTC and informed that if people are trained on this Mobile Phone Lab they will be able to provide them the job opportunities. In this way these types of initiatives can be the social responsibility of the

employers- they can provide tools and equipment support, if there is any potential trainers among the employers they can provide support by facilitating training sessions as guest lecturer. What types of trained people they need for running their existing machineries they can also inform this to BTEB and the training providers.

16. Role of the participants themselves in increasing the employability:

The participants do not have any kind of mentionable role in this regard. After completing the course, they can realize whether the course is effective for them or not. During the admission time the participants can not understand this. The participants who already completed the trainings/courses they can give some suggestions about the effectiveness of the courses. A survey can be conducted among them to collect their opinions about the course, especially how they are using the courses in their job, etc.

17. Rules regulations from BTEB regarding trade courses

BTEB has an academic regulation regarding trade courses. This academic regulation provide rules and regulations regarding admission of the trainees, entry requirement of the participants, contact hour of all the trade courses, etc. All the TTCs supposed to follow these academic regulations but the rules and regulations regarding assessment and training delivery mood is not 100% followed by all the TTCs. There are some gaps in practice, like, if there is a 3 hours session the trainers might close the session by two hours. Similarly, in case of content level it might happened that all the contents are not taught /covered by the trainers. But it should not have this kind of gaps.

The content of the syllabus has been included considering the objectives of the course and if all the contents are not taught it will hamper to achieve the goals and objectives of the course. So for reducing this kind of gaps BTEB started the CBT approach and this should be implemented across the country. For example, in the NTVQF courses there is a “Trainees Record Book” and after completing one unit of the course both the trainers and trainees sign in this ‘trainees record book’. The reasons of signing by the trainees is to agree that he/she has achieved this target and the reasons of signing by the trainers is to acknowledge the completion of the activity by the trainees. This kind of record book is very useful- because while BTEB go to monitor the training program looking at this type of ‘trainees record book’- they can assess the students - to some extent asking questions to the students they can verify these trainees record book the activities of the training program is going on properly or not.

In the NTVQF courses BTEB and the training providers follow/maintain the “Trainees record Book”. It helps to understand how far the trainers and trainees follow the training course, whether the students are current or dropped out. If any student does not entry for few months then it can be clarified with the trainers that why the rules and regulations are not maintained in the training program. Usually, the trainer keep record in a format which can be followed during monitoring. But in the conventional course there is no scope to understand whether the class is

being held or not. Without looking at the attendance it is difficult to understand who are the participants attended the courses. For ensuring the quality of the courses a few rules and regulations which BTEB provided to the TTCs might require to renew or improve. For example, the assessment procedure can be reviewed and changed. In the current assessment practice, we are taking the exam of 200 students together, it is not much effective, so like the NTVQF courses the assessment system can be skill based.

Another study can be conducted to see whether the employers and employees are satisfied with the vocational skill development training.

THE END