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Thesis

Challenges for Implementation of Recognition of Prior Learning: Technical Training Centers in Bangladesh

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We hereby recommend that the thesis prepared by Marium Sarkar (Student No: 153602) entitled" **Challenges for implementation of recognition of prior learning: Technical Training Centers in Bangladesh"** be accepted as fulfilling the part of requirement for the degree of Master of Science in Technical Education (M.Sc.T.E.) with specialization in Mechanical Engineering.

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This is to certify that the worked presented in this thesis is authentic and the outcome of investigation carried out by Marium Sarkar under the supervision of Dr. Md. Abu Raihan, Associate Professor of the department of technical and vocational education (TVE), Islamic university of technology (IUT),Gazipur, Dhaka, Bangladesh. It is hereby declared that this thesis report or part of it has not been submitted elsewhere for the award of any degree or Diploma. All literature and contributions cited are fully acknowledged.

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DEDICATION

I am dedicating my thesis work to my Mother, Honorable Teachers and special person in my life Father Mohammad Hossain.

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ABBRABEATIONS

BMET	: Bureau of Manpower Employment and Training
BTEB	: Bangladesh Technical Education Board
CBT	: Competency-based Training
CBT&A	: Competency Based Training and Assessment
DTCL	: Development Technical Consultants Limited
DTE	: Directorate of Technical Education
EC	: European Commission
GoB	: Government of Bangladesh
HSC	: Higher Secondary Certificate
ILO	: International Labour Organization
IT	: Information Technology
MoE	: Ministry of Education
NSDC	: National Skills Development Council
NSDP	: National Skills Development Policy
NSS	: National Skill Standard
NTVQ	: National Technical and Vocational Qualification
NTVQF	: National Technical and Vocational Qualification Framework
QAQC	: Quality Assurance and Quality Control
RFP	: Request for Proposal
RPL	: Recognition of Prior Learning
RTO	: Registered Training Organization
SSC	: Secondary School Certificate
STEP	: Skills and Training Enhancement Project
SPSS	: Statistical Packages for Social Science
ToR	: Terms of Reference
TQM	: Total Quality Management
TSC	: Technical Schools and College
TTC	: Teachers Training College
TTC	: Technical Training Center
TVET	: Technical and Vocational Education and Training
UCEP	: Underprivileged Children's Educational Programs

ABSTRACT

Recognition of Prior Learning (RPL) is a process commonly used to determine what credits may be granted to individuals to recognize their previous learning, experiences and/or skills acquired through various training and study programs. The RPL system allows teachers to get credits for the skills and knowledge they have developed as a result of formal and informal learning and/or training. It is a process of identifying, assessing and recognizing what a person knows and can do. It assesses the skills and knowledge that a person has developed as a result of formal and informal learning. Some participants have not choose to apply for it, even when eligible. The researcher has identified major problems facing of the applying RPL program in TTCs in Bangladesh. Objective of the research are: to review the RPL process, to identify strengths and limitations of the RPL, to identify how effective and participatory are the program intervention and to make recommendations for actions needed for better implementation of RPL. This study is an exploratory review of RPL literature aimed to gain a deeper understanding of the nature of RPL provisioning in some selected countries. The study intended to inform recommend policies, processes and a plan for RPL development and implementation in Bangladesh. Quantitative research method was used in this study. The population of the study comprises of trainers (teachers), participants (students) and external (assessors) from Garments trade course in technical training centers (TTCs) in Bangladesh. But the RPL concept is only implemented in ten (10) TTCs in Bangladesh. Researcher sample was selected only Bangladesh-German TTC, Sheikh Fazilatunnesa Mujib TTC, UCEP Mirpur, Dhaka. The institutions were selected purposively, where sample size was 57 (3x19) followed by random sampling technique. Semi-structure questionnaires was used as the Tool of research which was analyzed terms of frequency, percentage and weighted average by using Statistical Packages for Social Science (SPSS).The study tried to find out the lagging, limitations and problems in TTCs for implementing of RPL. It was found that major strength of RPL assessment provides the opportunity to obtain certification for working skills, RPL certificate will increased employment opportunities, training centers are well quipped for assessing students of RPL. It was found that major limitations of there is lack of awareness of the employers about the benefits of the RPL assessment and certification, RPL certification is very

expensive, there is limited number of RPL assessors in the RPL training institutions. It was found that major effectiveness of public awareness (advertisement, circular etc.) on the RPL system should be increased, the assessor of RPL should be well-trained with pedagogical and subjective skills. It was found that major of participatory of the whole process of RPL should tangible (easy and interesting) for the trainees/students and the value system of RPL certification should very high and prestigious. Some problems were found where most of the respondents recommended that, time and days should be increase (minimum 5 days), advertisement system should be done through radio, television, social media and newspaper. The study also recommended that exam questions should be easy if so it would be better, the working environment should be improve to digital classroom and machine tools and RPL program should be open at each TTCs in Bangladesh. Outcome of the research may support STEP, DTE, TVET policy makers and BMET in process of smooth implementation and monitoring RPL in TTCs. This study is significant not only for Bangladesh but also for others developing countries because it may useful for curriculum developers in TVET in integrating RPL within the existing curriculum frameworks. Based on analyzed and interpreted data, find out conclusion and recommendations were made.

CHAPTER ONE
INTRODUCTION

1.0 Introduction

Recognition of Prior Learning (RPL) is seen as a step towards lifelong learning in EU policy. This is true for both informal and non-formal learning (European Commission, 2000; 2001). In this study, RPL is defined as providing recognition of the learning that take place in both formal and non-formal learning activities, as described by Taylor and Clemans (2000). In Bangladesh, the concept of RPL in TVET is new (NSDP, 2011). To implement something new always a matter of challenging. And so, there have no study conducted to identify challenges for implementation of RPL TTCs in Bangladesh. Rapid economic and technological changes require individuals to gain higher and more generic skills (Pool & Sewell, 2007). To keep up with this increasing pace, the full spectrum of learning (ranging from formal education to informal learning) must be used (Malcolm, Hodkinson, & Colley, 2003). UNESCO defines Recognition of Prior Learning as: "The formal acknowledgement of skills, knowledge and competencies that are gained through work experience, informal training and life experience." (Vlasceanu et al. 2004, p.56). Recognition of prior learning (RPL) is defined in the Australian Qualification Framework (AQF) as follows: Recognition of prior learning is an assessment process that involves assessment of an individual's relevant prior learning (including formal, informal and non-formal learning) to determine the credit outcomes of an individual application for credit.

1.1 Background of the study

Recognition of Prior Learning (RPL) is the system to assess, evaluate and formally recognize the skills and knowledge acquired through work and other life experiences without access to formal education and training. RPL is therefore a strong means to formally recognize and validate competencies gained outside the formal training system for the purpose of certification. The Skills and Training Enhancement Project (STEP) under DTE has BTEB affiliated 10 (ten) assessment centers approved for RPL assessment, where RPL activities have been run with the financial assistance of STEP for 3 days (2 days orientation and 1 day assessment) for a batch of 20 assesses of one occupation. STEP initiated the RPL program for the first time in Bangladesh in September 2014. In the meantime (from September 2014 to February 2016), 9689 assesses have been assessed, out of which 7744 assesses got competent certificate with the support of STEP and 1945 go

partially competent or Not Yet Competent certificate. With the additional financing, the additional 10 RPL assessment centers have also been approved for RPL assessment under the second revision of STEP that will be continued up to June 2019. The current assignment of RPL assessment have been conducted aiming to review the whole RPL process conducted through STEP financial assistance to identify strengths and limitations to identify how effective and participatory are the program intervention; and to make recommendations for actions needed for better implementation of RPL.

Recognition of Prior Learning (RPL) is the official or formal recognition of one's knowledge and skill acquired or learned on the job or informal training or via life experience or any combination of these three. RPL provide opportunity to people having excess to formal qualification system and as a result they are able to gain eligibility for higher training or higher position in their career. People seeking job in the country or overseas also can be benefited with recognized certificate of qualification through RPL. RPL should meet the needs of learners that can support socially inclusive purposes of further and technical education and training, in that it facilitates entry to programs, gives credit to or exemptions from a program of study or access to a full award. RPL can address the needs of disadvantaged groups, part-time students and mature students, and can have a positive impact on retention of students. In addition, it can bring benefits to the workplace by enhancing worker's employability and a better matching of skills demand and supply. RPL has also being assisting in supporting staff development within organizations by increasing staff motivation to undertake appropriate education or training. It can reduce the amount of time required to acquire a qualification.

1.2 Statement of the problem

The issues of strengths and challenges are importantly be considered before implementation RPL in TTCs in Bangladesh. Some participants choose not to apply for it, even when eligible. The researcher will identify major problems facing of the applying RPL program in TTC in Bangladesh. Within the European Union (EU), two main problems have been identified regarding the validation of non-formal and informal learning. These are: (1) the limited opportunities for individuals to go through RPL practices; and (2) the lack of compatibility and coherence between RPL approaches in the Member States of the EU (European Commission, 2012).

1.3 Significance of the study

RPL has been in use in Bangladesh in the technical education sector, but it is considered still in its infancy. Institutions in the technical education sector have been grappling with the issues for a few years. This research will add value to the growing body of knowledge around RPL and its wider implementation in technical education sector in Bangladesh.

The study has benefits to specific groups in various ways:

- The STEP, DTE, TVET and BMET, who are responsible for the facilitation of RPL implementation and monitoring.
- The RPL implementers, that is, those who grapple with the realities and practicalities of RPL provisioning to enable them to improve their practice.
- The technical education academics, more especially those dealing with curriculum development matters, as there is a need to integrate provisioning of RPL within the existing curriculum frameworks and designs (designing flexible curriculum that allows for multiple entry points at various levels).

1.4 Objective of the Study

The general objective of the study is to understand strengths and challenges for implementation of RPL in TTCs in Bangladesh.

The specific objectives of the study are as follows:

a) To review the whole RPL process / to identify strengths and limitations of the RPL.
b) To identify how effective and participatory are the program intervention.
c) To make recommendations for actions needed for better implementation of RPL.

1.5 Delimitation of the study

There are more than 100 technical training centers in Bangladesh. The concept RPL is very new in TTCs in Bangladesh and it is not available in all TTCs in Bangladesh. The study was conducted in three TTCs such as (i) Bangladesh-German TTC, (ii) Shekh Fazilatunnesa Mujib TTC, (iii) UCEP Bangladesh, Mirpur, Dhaka in Bangladesh. Moreover, the study were restricted to garments trade for collecting the research data. However, the study was delineate only in informal learning.

1.6 Definition of the terms

The following terms and concepts need to be 'unpacked' or elucidated upon in order to approach the study in an enlightened manner and to add to the understanding of what is meant by RPL.

- **Access:** Access concerns entry to and participation in education and training institutions or programmes. In certain circumstances before admittance is granted certain criteria may need to be fulfilled.
- **Alignment:** Qualifications (awards) of professional bodies and awarding bodies that are based on other countries may be "aligned" with the National Framework for Qualification (NFQ) (a similar, but less specific, term is "recognized through the Framework") and in accordance with quality assurance criteria.
- **Assessment:** The sum of methods and processes used to evaluate learning attainments (knowledge, skill and competences) of an individual against the standards of the unit of assessment (e.g. module, unit, programme, qualification). Formative assessment is used to support the learner. Summative assessment is used to certify whether learning outcomes have been achieved and whether the learner is therefore entitled to gain entry, credit etc. for his/her learning.
- **Competency:** Competency is a mix of knowledge, technical skills, understanding, problem solving and attitudes that can be demonstrated in the workplace. To be deemed competent the students are assessed against the relevant units of competence.
- **Curriculum:** Curriculum cannot be narrowly defined as the syllabus of a learning programme; it is far wider in its scope and extent. Curriculum is the structured approach to learning developed to achieve a set of outcomes for a qualification.
- **Gap training:** As part of the RPL assessment process, the assessor may determine training is required in one or more units to achieve the whole qualification. These options may include enrolling into evening or part-time classes, flexible learning, or an adult apprenticeship.
- **Learning outcomes:** Learning outcomes describe what a learner is expected to know, to understand and / or be able to do following successful completion of a period of learning. Awards in the National Framework for Qualification (NFQ) are based on learning outcomes. These are set out in level indicators and in award-type descriptors.
- **Outcomes Based Education:** Outcomes Based Education (OBE) is an approach to education that depends upon the identification of predetermined outcomes by which performance judged. These outcomes are skills, knowledge and values that a learner can demonstrate.

- **Qualification:** A formal certification that is recognized nationally and awarded by different examination boards, institutions and universities for the achievement of competencies according to respective Qualifications Framework.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 RPL Implementation in Australia

RPL Definition in Australia

In Australia, there is a distinction between the learning achieved through formal education (credit transfer) and learning achieved outside the formal education and training system (RPL). Thus: RPL is an assessment process that assesses the individual's non-formal and informal learning to determine the extent to which that individual has achieved the required learning outcomes, competency outcomes, or standards for entry to, and/or partial or total completion of, a qualification. Credit transfer assesses the initial course that the individual is using to claim access to, or the award of credit in the destination course, to determine the extent to which it is equivalent to the required learning outcomes, competency outcomes, or standards in a qualification. The key distinguishing characteristic is that it is the student who is assessed in the case of RPL, and the course, module or programme in the case of credit transfer. That is in credit transfer, the judgment is about the learning programme, outcomes and assessment in the initial course or subject, which has to be considered for RPL purposes. Many students will use both RPL and credit transfer simultaneously, as the learning pathways students use, combined with their life and work experience is becoming increasingly complex.

2.2 RPL: Purpose and implementation

One of the key drivers for RPL was its perceived capacity to act as a mechanism for social inclusion for those who have not had the opportunity to participate in, or who have had negative experiences of, post compulsory education and training, but who nonetheless have much learning that is relevant to qualification outcomes. RPL is seen as one of the main objectives of the AQF. In addition, it is used as a key strategy in facilitating access to technical education qualifications and programs, and the achievement of nationally recognized qualifications for Australians. RPL is deemed to have benefits for individuals, education and training institutions, enterprises, unions and governments – benefits that are regarded by many as self- evident and obvious. The extent of RPL practice in Australian is somewhat limited. Van Rooy (2002) claims that RPL in the Australian context is in its infancy, although it has some ten or more years of standing in the educational environment. RPL is currently used in Australia for admission to a course and for advanced standing or credit in a course. The Australian model acknowledges the need for close collaboration

between the providers of technical and further training and industry. Du Pre and Pretorius (2001) point to three important areas in which problems have occurred in the implementation of RPL in Australia:

- There is little evidence to suggest that RPL has significantly increased access to individuals.
- It has not led to any more synergy between traditional notions of academic knowledge and those who support the view that more experiential learning should be recognized by institutions.
- It shows evidence of gate-keeping to maintain traditional academic forms of knowledge. The research of Wheelahan, Newton and Miller (2003) also shows that, RPL so far has not acted as a mechanism for social inclusion in Australia, though it was intended for this purpose.

2.3 RPL Implementation in Canada

In Canada, RPL is referred to as Prior Learning Assessment and Recognition (PLAR).

The available literature on the implementation of RPL, or PLAR, in Canada, for example, reveals that RPL is seen as a journey in the sense of being part of life-long learning through educational opportunities that meet individual needs, as is also the case in the United States of America (Kistan, 2002). Canada's education system is completely provincial in terms of jurisdiction and thus the challenges facing Canada relate to transferability and portability of qualifications between provinces. Prinsloo and Buchler (2006) report that PLAR is mainly practiced in non-degree credit programmes in Canada.

2.4 Canada's Experience Favorable View of RPL Implementation in Bangladesh

A cross-Canadian case study provides a favorable view of RPL for implementation in Bangladesh according to its key findings (du Pre and Pretorius, 2001):

- RPL candidates had higher pass rates and graduation rates than traditional students.
- This higher pass rate resulted in increased confidence in their own knowledge and skills.
- The confidence that enhanced their chances of continuation of learning over the long term.

2.5 Accreditation of Prior Learning (APL) Implementation in the United Kingdom

APL definition and purpose

APL (accreditation of prior learning) is the generic term used for the award of credit based on demonstrated learning that has occurred at some time in the past. This learning may have come about as the result of a course, or self-directed study, or as the result of experience either at work or in leisure pursuits. The latter is usually referred to as Prior Experiential Learning (Nyatanga et al 1998:7-8). According to Evans (1989:19), experiential learning is uncertified learning. He says: it is what is in someone's head for which there is no formal evidence that it does exist. It is also worth noting that "while both forms of prior learning focus on learning rather that experience, and outcome rather than process, they can differ in the way candidates may gather and submit evidence to support their claim" (Nyatanga *et al* 1998:7-8).

2.6 APL Implementation: Historical and Current Developments

According to Evans (1989:23), APL was introduced in Great Britain in the 1980s, based mainly on the work done by CAEL in America. There is also very little UK based longitudinal research on the effectiveness of RPL in higher education and there seems to be no reporting of research into the long-term value of RPL. Scotland introduced RPL in 1987 when the Scottish Vocational Education Council developed an APL system within the further education sector. In Scotland, RPL is characterized by collaborative development and networking, links with further education, emphasis on work-based learning, partnerships with employers and professional bodies. It was seen as a key element of HEIs meeting the needs of the communities which they serve (Sharp, Reeve & Whitaker, (2000:132) and in candidates' lifelong learning paths.

2.7 APL: Model of Provisioning

There are five main areas of practice identified in which stringent quality assurance measures need to be in place. These areas are: policies and procedures; information; roles and responsibilities; support and monitoring and review. In the United Kingdom APL is based on a qualifications framework that operates at the vocational level (Prinsloo & Buchler, 2006). As in the USA, there are diverse RPL practices across the system, with many institutions adopting their own approaches to RPL (Van Rooy, 2002).

2.8 RPL Implementation in South Africa

RPL Policy and Implementation in South Africa

The international literature on RPL policy and implementation, being the forerunner to the process in South Africa, has, to a large extent, shaped the direction and theory of RPL in South Africa. Osman (2004) points out a subtle difference in that international approaches to RPL are framed within a discourse of individual empowerment and individual growth, while in South Africa policy is philosophically framed within the discourse of access, equity and redress. RPL is seen as a rather minor activity at best, but hardly as a major social imperative, as it is in South Africa where it is seen as vehicle for transformation and social redress. The South African model of a NQF is based on the Australian and United Kingdom models of a similar framework. However, it is surprising to note that in countries where there is a national qualifications framework RPL has not been as successful as in countries such as the United States and Canada, where there is no national qualifications framework (Prinsloo and Buchler, 2006).

It is also important to frame the discussions on RPL policy and implementation in terms of the ways in which they have been influenced by international trends and the various models of RPL that have evolved over the years. It is important that the implementation of RPL in South Africa learns from the lessons that have already taken place elsewhere.

2.9 Extent of Implementation

It is interesting to note that many of the issues related to the difficulties of implementing RPL in technical education that surfaced about a decade ago, still continue to vex the academics. Most of the admissions made on the basis of RPL are into professional programmes, such as selected health science programs (support services), engineering, computer science and building. There is evidence that RPL is being offered across the technical education spectrum, except at doctoral level, but there is no evidence of whole qualifications by recognition of prior learning (Breier & Bumess, 2001). The report by Breier and Burness (2001) indicates that students are being admitted to institutions of technical education through RPL in the following ways:

- Completion of portfolios combined with some Exemptions by administration.
- Completion of a module combined with some Exemptions by administration
- Widening admissions policy.
- For non-degree study purposes.
- Bridging programs.

CHAPTER THREE

METHODOLOGY AND PROCEDURES

3.0 Type of Research

Quantitative research method was used throughout the study. According to Zulueta & Costales, (2003) view quantitative that each of these objectives is done through the assigning of numerical values to the variables and the mathematical analysis of those values.

3.1 Research Field

The study was carried out in three technical training centers (TTCs) in Bangladesh.

3.2 Population of the research

The population of the study comprises of trainers (teachers), participants (students) and external (assessors) from Garments trade course in Government technical training centers (TTCs) in Bangladesh. But the RPL concept is only implemented in ten (10) TTCs in Bangladesh.

3.3 Sample and Sampling Technique

This research sample was selected in Bangladesh-German TTC, Sheikh Fazilatunnesa Mujib TTC, UCEP Mirpur, Dhaka for taking data as RPL is present in these institutions. The institutions was selected **purposively**, meanwhile the Garments trade course of the selected TTCs was chosen as a sample. 2 teachers, 15 participants and 2 external (assessors) from each TTCs was selected **randomly** as a sample. So, the sample size are 57 (3x19) followed by random sampling technique.

3.4 Tool of Research

The semi-structure questionnaire used for data collection. The researcher distributed semi-structure questionnaires to get necessary information to fulfill the objective of the research.

3.5 Data Collection and Procedure

Data was collected by using the questionnaires from both participants (students), trainers (teachers) and assessors (external). The researcher administered directly the questionnaires to respondents in the selected institution for data collection. The questionnaire was structured into two parts, part ‘A’ consist on the questions about the background of the respondents or respondents information and part ‘B’ which consist of questions about strengths, limitations, effectiveness and participatory by RPL programs in technical training centers tabulated in two sections and one section open ended opportunities as

shown in appendix. And the questionnaire response was structured in a five (5) point scale as stated in table below:

Table 3. 1: Five (5) point- scale

Scale		Points
Strongly Agree	(SA)	5
Agree	(A)	4
Undecided	(U)	3
Disagree	(D)	2
Strongly Disagree	(SD)	1

3.6 Data analysis

The data analysis for this study was carried out through quantitative procedure. The data gathered for this study was tabulated in the frequencies, percentage, weighted average (WA), and graphs was drawn for different parts of the questionnaire as well as *chi-square test*. SPSS software version 20 was used to analyze the collected data of this research. Each table and graph are follow by its interpretation.

Table 3.2: Interpretation of Weighted Average Base on Five Point Scale

Weighted Average (WA)	Responses
5≥ WA > 4.5	SA (5)
4.5≥ WA >3.5	A (4)
3.5≥ WA> 2.5	U (3)
2.5≥ WA> 1.5	D (2)
1.5≥WA > 0	SD (1)

3.7Validation of Research Tools

Initially the semi-structure questionnaires was prepare by the researcher following the instruction of the research advisor in the department of the Technical and Vocational Education in Islamic university of Technology (IUT) . After that, the questionnaires were validated by the Principals of the two TTCs, Dhaka, Bangladesh.

CHAPTER FOUR

ANALYSIS AND INTERPRETATION OF DATA

4.0 Introduction

This chapter deals with all finding and analysis of statistical statements of collected data form sample respondents. The collected data were tabulated in the respective column. The questionnaire was design with *5 point scale* as shown above in table 3.2. The opinions of respondents were tasted at 0.05 significant levels by calculating the value of Chi-square ($\chi 2$) for each item of the data compeering the calculated value of ($\chi 2$) with the critical value ($\chi 2$) obtained from the Chi-square ($\chi 2$) table.

4.1 Analysis of objectives one

The table below indicate the Data analysis of objective on and its interpretation.

To review the whole RPL process / to identify strengths and limitations of the RPL.

Strength of RPL

S/No	Statements	5(SA)	4(A)	3(U)	2(D)	1(SD)	WA	χ^2	Sig. Val.	Df
1	RPL assessment provides the opportunity to obtain certification for working skills	38 84.4%	7 15.6%	0 0.0%	0 0.0%	0 0.0%	4.84	21.356	.000	1
2	RPL certification will ensure both national and international recognition of prior skills	33 73.3%	12 26.7%	0 0.0%	0 0.0%	0 0.0%	4.73	9.800	.002	1
3	RPL certificate will increase employment opportunities	22 48.9%	23 51.1%	0 0.0%	0 0.0%	0 0.0%	4.88	.022	.881	1
4	RPL increases wage of the employees	21 46.7%	23 51.1%	1 2.2%	0 0.0%	0 0.0%	4.44	19.733	.000	2

5	RPL is a positive experience and builds on one's strengths	21 46.7%	24 53.3%	0 0.0%	0 0.0%	0 0.0%	4.46	.200	.655	1
6	Training centers are well quipped for assessing students of RPL	222 48.9%	21 46.7%	2 4.4%	0 0.0%	0 0.0%	4.44	16.933	.000	2
7	RPL reduces the cost of education and study load	29 64.4%	16 35.6%	0 0.0%	0 0.0%	0 0.0%	4.64	3.756	.053	1
	Limitations of RPL									
8	There is lack of awareness of the employers about the benefits of the RPL assessment and certification	17 37.8%	22 48.9%	4 8.9%	2 4.4%	0 0.0%	4.20	25.489	.000	3
9	There is limited number of RPL assessors in the RPL training institutions	18 40.0%	19 42.2%	2 4.4%	6 13.3%	0 0.0%	4.08	19.444	.000	3
10	There is lack of availability of equipment and machineries in the Labs for the RPL program	16 35.6%	17 37.8%	0 0.0%	12 26.7%	0 0.0%	3.82	.933	.627	2
11	As a students of RPL, faced difficulties (written test & language) during assessment and evaluation	15 33.3%	20 44.4%	1 2.2%	8 17.8%	1 2.2%	3.88	31.778	.000	4

12	Teachers are not properly skilled for RPL assessment program	20 44.4%	12 26.7%	3 6.7%	8 17.8%	2 4.4%	3.88	24.000	.000	4
13	RPL certification is very expensive	25 55.6%	16 35.6%	0 0.0%	4 8.9%	0 0.0%	4.37	14.800	.001	2
14	The student's participation in the RPL program is very low.	12 26.7%	20 44.4%	3 6.7%	8 17.8%	2 4.4%	3.71	24.000	.000	4

Statement 1: From the returned questionnaire shows that 84.4% of the respondents strongly agree and 15.6% of the respondents agree that RPL assessment provides the opportunity for implementation RPL in TTCs in the Bangladesh. The weighted average of 4.84 (4.84>4.50) which strongly agrees that, RPL assessment provides the opportunity for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=1 with significant value of 0.000 which is less than 0.05 level of significance and chi-square observed (χ^2o) is greater than chi-square critical (χ^2c), that is χ^2o (21.356) > χ^2c (3.841) of which the null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore, the researcher concluded that it was statistically significant to strongly agree that RPL assessment provides the opportunity for implementation of RPL program in TTCs.

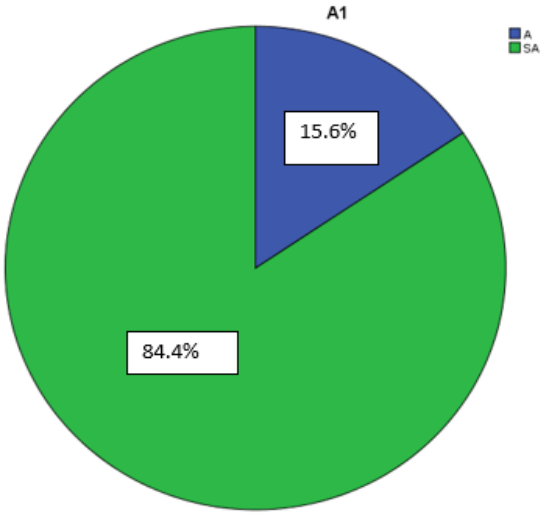

Figure 1: Showing the statement one of RPL assessment provides the opportunity.

Statement 2: From the returned questionnaire shows that 73.3% of the respondents strongly agree and 26.7% of the respondents agree that, RPL certification will ensure both national and international recognition for implementation of RPL in TTCs in the Bangladesh. The weighted average is 4.73 (4.73>4.50) which strongly agrees that, RPL certification will ensure both national and international recognition for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=1 with significant value of 0.002 which is less than 0.05 level of significance and chi-square observed (χ^2o) is greater than chi-square critical (χ^2c), that is χ^2o (9.800) > χ^2c (3.841) of which the null hypothesis, responses on this statement are not statistically significant is rejected. Therefore, the researcher concluded that it was statistically significant to strongly agree that, RPL certification will ensure both national and international recognition for implementation of RPL program in TTCs.

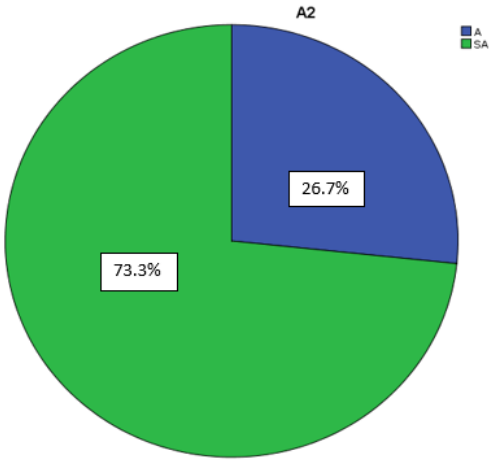

Figure 2: Showing the statement two RPL certification will ensure both national and international recognition.

Statement 3: From the returned questionnaire shows that 48.9% of the respondents strongly agree and 51.1% of the respondents agree that, RPL certificate will increase employment opportunities for implementation RPL in TTCs in the Bangladesh. The weighted average is 4.49 (4.49>3.50) which agrees that, RPL certificate will increase employment opportunities for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=1 with significant value of 0.881 which is greater than 0.05 level of significance and chi-square observed (χ^2o) is less than chi-square critical (χ^2c), that is χ^2o (.022) < χ^2c (3.841) of which the null hypothesis, responses on this statement is statistically significant, is accepted. Therefore, the researcher concluded that it was not statistically significant to agree that RPL certificate will increase employment opportunities for implementation of RPL program in TTCs.

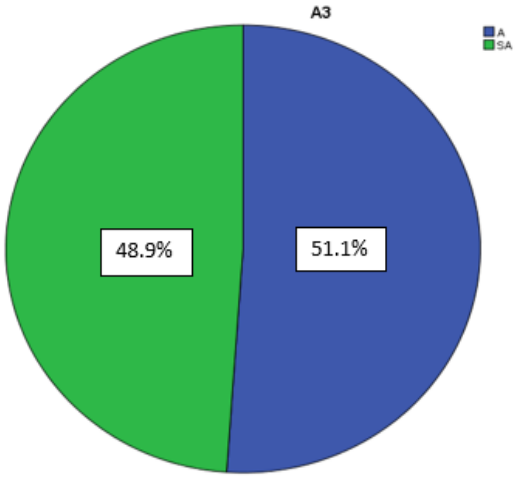

Figure 3: Showing the statement three RPL certificate will increase employment opportunities.

Statement 4: From the returned questionnaire shows that 46.7% of the respondents strongly agree and 51.1% of the respondents agree that, RPL increases wage of the employees for implementation RPL in TTCs in the Bangladesh, 2.2% undecided that RPL increases wage of the employees for implementation RPL in TTCs. The weighted average is 4.44 (4.44>3.50) which agrees that, RPL increases wage of the employees for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=2 with significant value of 0.000 which is less than 0.05 level of significance and chi-square observed (χ^2o) is greater than chi-square critical (χ^2c), that is χ^2o (19.733) > χ^2c (5.991) of which the null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore, the researcher concluded that it was statistically significant to agree that RPL increases wage of the employees for implementation of RPL program in TTCs.

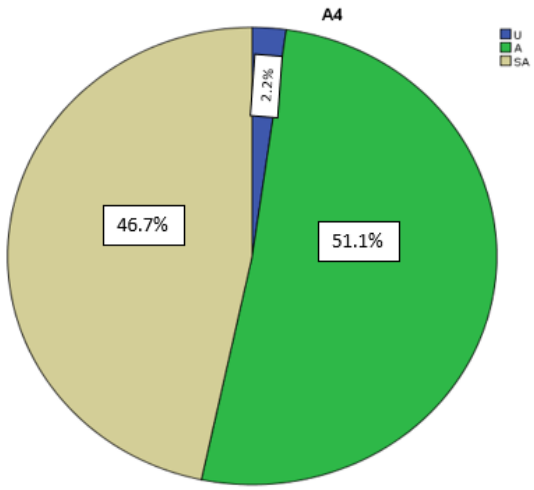

Figure 4: Showing the statement four RPL increases wage of the employees.

Statement 5: From the returned questionnaire shows that 46.7% of the respondents strongly agree and 53.3% of the respondents agree that RPL is a positive experience and builds on one's strengths for implementation RPL in TTCs in the Bangladesh. The weighted average is 4.45 (4.45>3.50) which agrees that, RPL is a positive experience and builds on one's strengths for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=1 with significant value of 0.655 which is greater than 0.05 level of significance and chi-square observed (χ^2o) is less than chi-square critical (χ^2c), that is χ^2o (.200) < χ^2c (3.841) of which the null hypothesis, responses on this statement is statistically significant, is accepted. Therefore, the researcher concluded that it was not statistically significant to agree that, RPL is a positive experience and builds on one's strengths for implementation of RPL program in TTCs.

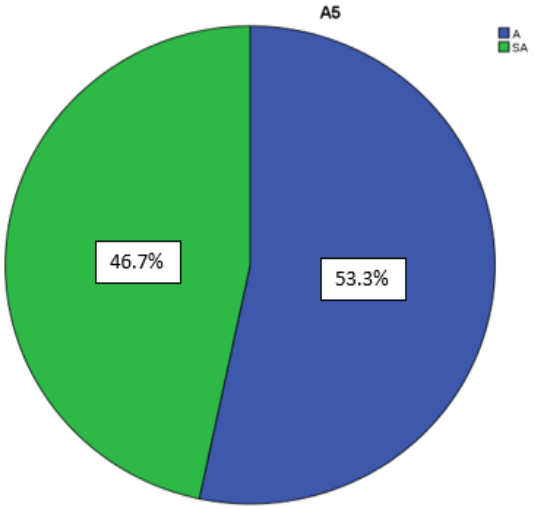

Figure 5: Showing the statement five RPL is a positive experience and builds on one's strengths.

Statement 6: From the returned questionnaire shows that 48.9% of the respondents strongly agree and 46.7% of the respondents agree that Training centers are well quipped for assessing students of RPL for implementation of RPL in TTCs in the Bangladesh, 2.2% undecided that Training centers are well quipped for assessing students of RPL in TTCs. The weighted average is 4.84 (4.84>4.50) which strongly agrees that, RPL assessment provides the opportunity for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=2 with significant value of 0.000 which is less than 0.05 level of significance and chi-square observed (χ^2o) is greater than chi-square critical (χ^2c), that is χ^2o (16.933) > χ^2c (5.991) of which the null hypothesis, responses on this statement is not statistically significant, is rejected. Therefore, the researcher concluded that it was statistically significant to strongly agree that, training centers are well quipped for assessing students of RPL for implementation of RPL program in TTCs.

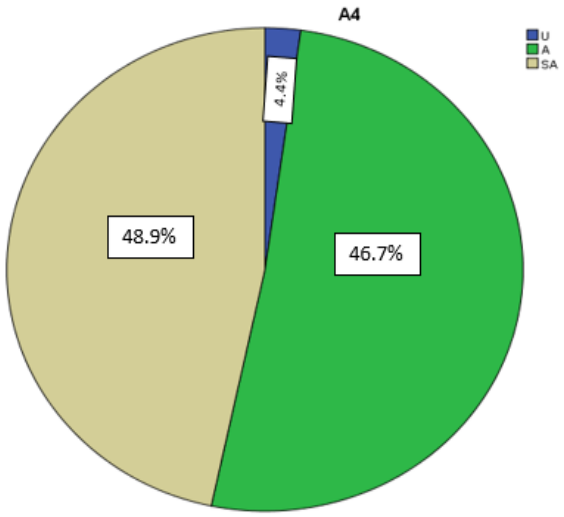

Figure 6: Showing the statement six training centers are well quipped for assessing students of RPL.

Statement 7: From the returned questionnaire shows that 64.4% of the respondents strongly agree and 35.6% of the respondents agree that RPL reduces the cost of my education and study load for implementation RPL in TTCs in the Bangladesh. The weighted average is 4.64 (4.64>4.50) which strongly agrees that, there is RPL reduces the cost of my education and study load for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=1 with significant value of 0.053 which is greater than 0.05 level of significance and chi-square observed (χ^2o) is less than chi-square critical (χ^2c), that is χ^2o (3.756) < χ^2c (3.841) of which the null hypothesis, responses on this statement is statistically significant, is accepted. Therefore, the researcher concluded that it was not statistically significant to strongly agree that, RPL reduces the cost of my education and study load for implementation of RPL program in TTCs.

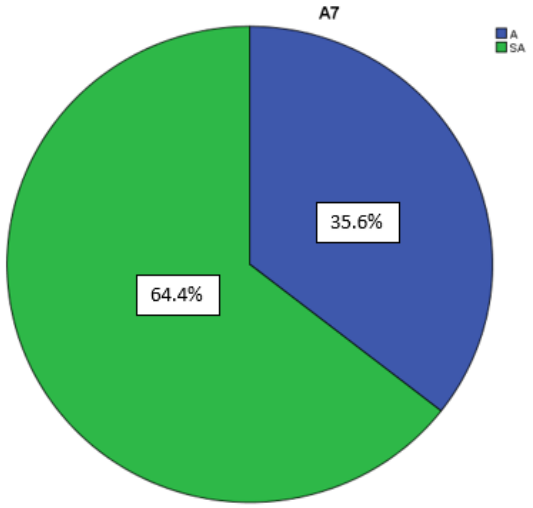

Figure 7: Showing the statement seven RPL reduces the cost of my education and study load.

Statement 8: From the returned questionnaire shows that 37.8% of the respondents strongly agree and 48.9% of the respondents agree that there is lack of awareness of the employers about the benefits of the RPL assessment and certification for implementation RPL in TTCs in the Bangladesh, 8.9% undecided and 2.2% disagree that there is lack of awareness of the employers about the benefits of the RPL assessment and certification. The weighted average is 4.20 (4.20>3.50) which agrees that, there is There is lack of awareness of the employers about the benefits of the RPL assessment and certification for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=3 with significant value of 0.000 which is less than 0.05 level of significance and chi-square observed (χ^2o) is greater than chi-square critical (χ^2c), that is χ^2o (25.489) > χ^2c (7.815) of which the null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore, the researcher concluded that it was statistically significant to agree that, there is lack of awareness of the employers about the benefits of the RPL assessment and certification for implementation of RPL program in TTCs

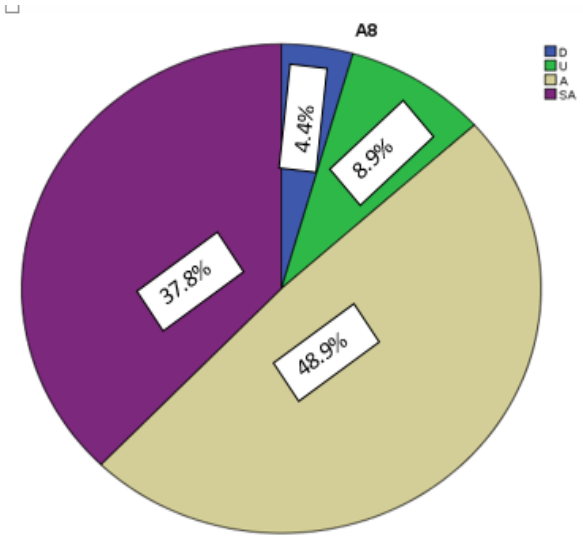

Figure 8: Showing the statement eight there is lack of awareness of the employers about the benefits of the RPL assessment and certification.

Statement 9: From the returned questionnaire shows that 40.0% of the respondents strongly agree and 42.2% of the respondents agree that there is limited number of RPL assessors in the RPL training institutions for implementation RPL in TTCs in the Bangladesh, 4.4% undecided and 13.3% that there is limited number of RPL assessors in the RPL training institutions. The weighted average is 4.09 (4.09>3.50) which agrees that, there is limited number of RPL assessors in the RPL training institutions for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=3 with significant value of 0.000 which is less than 0.05 level of significance and chi-square observed (χ^2o) is greater than chi-square critical (χ^2c), that is χ^2o (19.444) > χ^2c (7.815) of which the null hypothesis, responses on this statement is not statistically significant, is rejected. Therefore, the researcher concluded that it was statistically significant to agree that there is limited number of RPL assessors in the RPL training institutions for implementation of RPL program in TTCs.

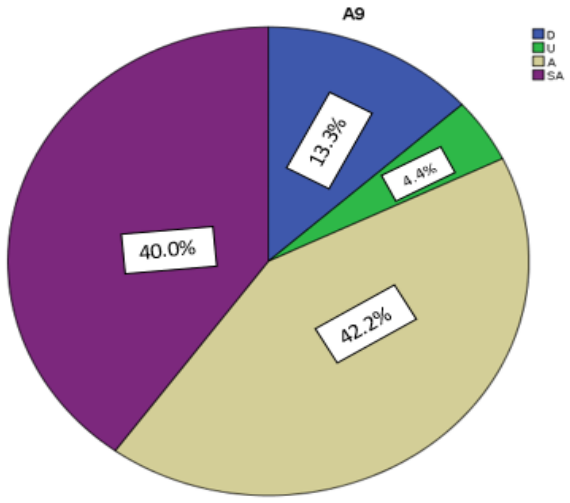

Figure 9: Showing the statement nine there is limited number of RPL assessors in the RPL training institutions.

Statement 10: From the returned questionnaire shows that 35.6% of the respondents strongly agree and 37.8% of the respondents agree that there is lack of availability of equipment and machineries in the Labs for the RPL program for implementation RPL in TTCs in the Bangladesh, 26.7% disagree that there is lack of availability of equipment and machineries in the Labs for the RPL program. The weighted average is 3.82 (3.82>3.50) which agrees that, there is lack of availability of equipment and machineries in the Labs for the RPL program for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=2 with significant value of 0.627 which is greater than 0.05 level of significance and chi-square observed (χ^2o) is less than chi-square critical (χ^2c), that is χ^2o (0.933) < χ^2c (5.991) of which the null hypothesis, responses on this statement is statistically significant, is accepted. Therefore, the researcher concluded that it was not statistically significant to agree that there is lack of availability of equipment and machineries in the Labs for the RPL program for implementation of RPL program in TTCs.

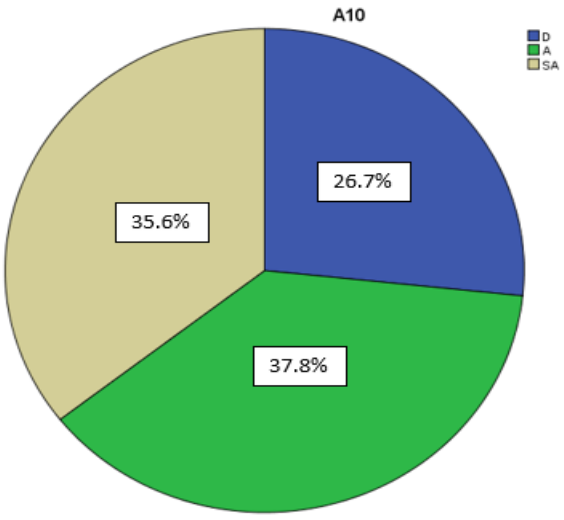

Figure 10: Showing the statement ten there is lack of availability of equipment and machineries in the Labs for the RPL program.

Statement 11: From the returned questionnaire shows that 33.3% of the respondents strongly agree and 44.4% of the respondents agree that as a students of RPL, I faced difficulties (written test & language) during assessment and evaluation for implementation RPL in TTCs in the Bangladesh, 2.2% undecided, 17.8% disagree and 2.2% strongly disagree that as a students of RPL, I faced difficulties (written test & language) during assessment and evaluation. The weighted average is 3.89 (3.89>3.50) which agrees that, as a students of RPL, I faced difficulties (written test & language) during assessment and evaluation for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=4 with significant value of 0.000 which is less than 0.05 level of significance and chi-square observed (χ^2o) is greater than chi-square critical (χ^2c), that is χ^2o (31.778) > χ^2c (9.488) of which the null hypothesis, responses on this statement is not statistically significant, is rejected. Therefore, the researcher concluded that it was statistically significant to agree that as a students of RPL, I faced difficulties (written test & language) during assessment and evaluation for implementation of RPL program in TTCs.

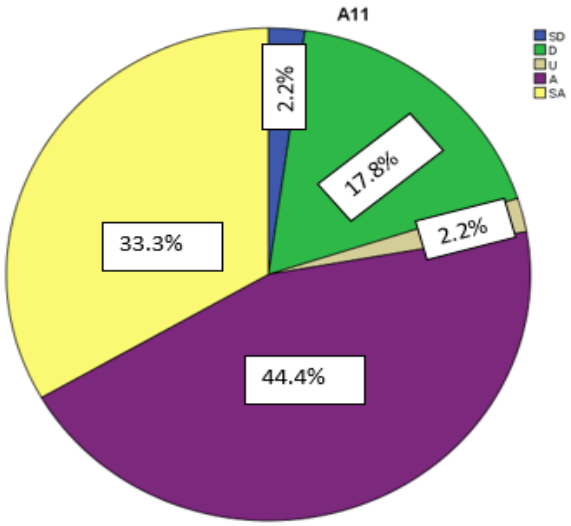

Figure 11: Showing the statement eleven as a students of RPL, I faced difficulties (written test & language) during assessment and evaluation.

Statement 12: From the returned questionnaire shows that 44.4% of the respondents were strongly agree and 26.7% of the respondents were agree that teachers are not properly skilled for RPL assessment program for implementation RPL in TTCs in the Bangladesh, 6.7% undecided, 17.8% disagree and 4.4% strongly disagree that teachers are not properly skilled for RPL assessment program. The weighted average is 3.89 (3.89>3.50) which agrees that, there is teachers are not properly skilled for RPL assessment program for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=4 with significant value of 0.000 which is less than 0.05 level of significance and chi-square observed (χ^2o) were greater than chi-square critical (χ^2c), that is χ^2o (24.000) > χ^2c (9.488) of which the null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore, the researcher concluded that it was statistically significant to agree that there is teachers are not properly skilled for RPL assessment program for implementation of RPL program in TTCs.

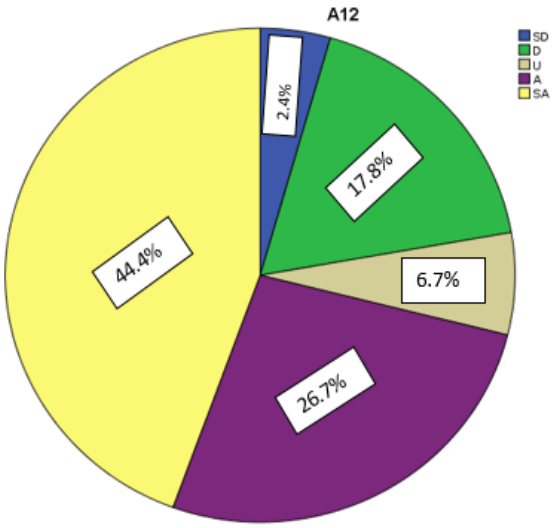

Figure 12: Showing the statement twelve teachers are not properly skilled for RPL assessment program.

Statement 13: From the returned questionnaire shows that 55.6% of the respondent strongly agree and 35.6% of the respondents agree that RPL certification is very expensive for implementation RPL in TTCs in the Bangladesh, 8.9% disagree that RPL certification is very expensive. The weighted average is 4.35 (4.35>3.50) which agrees that, RPL certification is very expensive for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=2 with significant value of 0.001 which is less than 0.05 level of significance and chi-square observed (χ^2o) is greater than chi-square critical (χ^2c), that is χ^2o (14.800) > χ^2c (5.991) of which the null hypothesis, responses on this statement is not statistically significant, is rejected. Therefore, the researcher concluded that it was statistically significant to agree that there is RPL certification is very expensive for implementation of RPL program in TTCs.

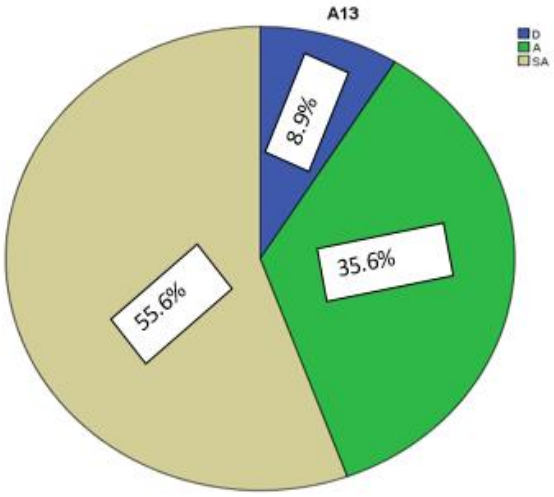

Figure 13: Showing the statement thirteen RPL certification is very expensive.

Statement 14: From the returned questionnaire shows that 26.7% of the respondents strongly agree and 44.4% of the respondents agree that the student's participation in the RPL program is very low for implementation RPL in TTCs in the Bangladesh, 6.7% undecided, 17.8% disagree and 4.4% that the student's participation in the RPL program is very low. The weighted average is 3.71 (3.71>3.50) which agrees that, The students participation in the RPL program is very low for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=4 with significant value of 0.000 which is less than 0.05 level of significance and chi-square observed (χ^2o) is greater than chi-square critical (χ^2c), that is χ^2o (24.000) > χ^2c (9.488) of which the null hypothesis, responses on this statement is not statistically significant, is rejected. Therefore, the researcher concluded that it was statistically significant to agree that, student participation in the RPL program is very low for implementation of RPL program in TTCs.

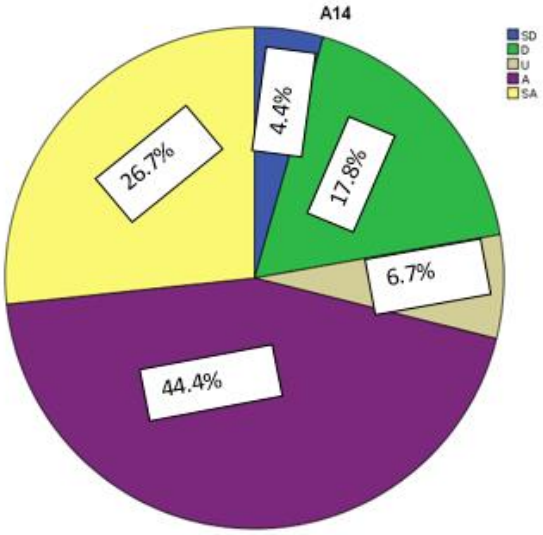

Figure 14: Showing the statement fourteen student participation in the RPL program is Very low.

Table 4.2 Analysis of objectives two

The table below indicate the Data analysis of objective on and its interpretation.

Identify how effective and participatory are the program intervention.

Effectiveness of RPL

S/N0	Statements	5(SA)	4(A)	3(U)	2(D)	1(SD)	WA	χ^2	Sig. Val.	Df
.1	Orientation program are necessary for preparing students for RPL assessment	28	17	0	0	0				
		62.2%	37.8%	0.0%	0.0%	0.0%	4.62	2.689	.101	1
2	Public awareness (advertisement, circular etc.) on the RPL system should be increased	24	20	1	0	0				
		53.3%	44.4%	2.2%	0.0%	0.0%	4.51	20.133	.000	2
3	Industry-institution linkage should be made for providing job with the certificate of RPL	26	19	0	0	0				
		57.8%	42.2%	0.0%	0.0%	0.0%	4.57	1.089	.297	1
4	The assessor of RPL should be well-trained with pedagogical and subjective skills	22	22	1	0	0				
		48.9%	48.9%	2.2%	0.0%	0.0%	4.44	19.600	.000	2
5	Market responsiveness of RPL should be enhanced	24	16	5	0	0				
		53.3%	35.6%	11.1%	0.0%	0.0%	4.42	12.133	.002	2

Participatory of RPL

6	The whole process of RPL should tangible (easy and interesting) for the trainees/students	29 64.4%	15 33.3%	1 2.2%	0 0.0%	0 0.0%	4.60	26.133	.000	2
7	The trainees should have scholarship such as financial assistance to take RPL certificate	29 64.4%	16 35.6%	0 0.0%	0 0.0%	0 0.0.%	4.64	3.756	.053	1
8	The environment of RPL assessment should be conducive to enhance the demand of learners	24 53.3%	21 46.7%	0 0.0%	0 0.0%	0 0.0%	4.53	.200	.655	1
9	The value system of RPL certification should very high and prestigious	25 55.6%	16 35.6%	4 8.9%	0 0.0%	0 0.0%	4.46	14.800	.001	2

Statement 1: From the returned questionnaire shows that 62.2% of the respondents strongly agree and 37.8% of the respondents agree that orientation program are necessary for preparing students for RPL assessment for implementation RPL in TTCs in the Bangladesh. The weighted average is 4.62 (4.62>4.50) which strongly agrees that, orientation program are necessary for preparing students for RPL assessment for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=1 with significant value of 0.101 which is greater than 0.05 level of significance and chi-square observed (χ^2o) is less than chi-square critical (χ^2c), that is χ^2o (2.689) < χ^2c (3.841) of which the null hypothesis, responses on this statement are statistically significant, is accepted. Therefore, the researcher concluded that it was not statistically significant to strongly agree that orientation program are necessary for preparing students for RPL assessment for implementation of RPL program in TTCs.

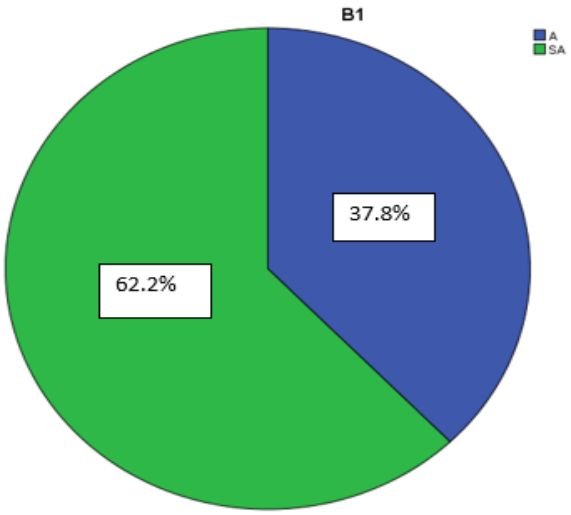

Figure 15: Showing the statement one orientation program are necessary for preparing students for RPL assessment.

Statement 2: From the returned questionnaire shows that 53.3% of the respondents strongly agree and 44.4% of the respondents agree that Public awareness (advertisement, circular etc.) on the RPL system should be increased for implementation RPL in TTCs in the Bangladesh, 2.2% undecided, that Public awareness (advertisement, circular etc.) on the RPL system should be increased .The weighted average is 4.51 (4.51>4.50) which strongly agrees that, Public awareness (advertisement, circular etc.) on the RPL system should be increased for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=2 with significant value of 0.000 which is less than 0.05 level of significance and chi-square observed (χ^2o) is greater than chi-square critical (χ^2c), that is χ^2o (20.133) > χ^2c (5.991) of which the null hypothesis, responses on this statement are not statistically significant, is rejected. Therefore, the researcher concluded that it was statistically significant to strongly agree that there is public awareness (advertisement, circular etc.) on the RPL system should be increased for implementation of RPL program in TTCs.

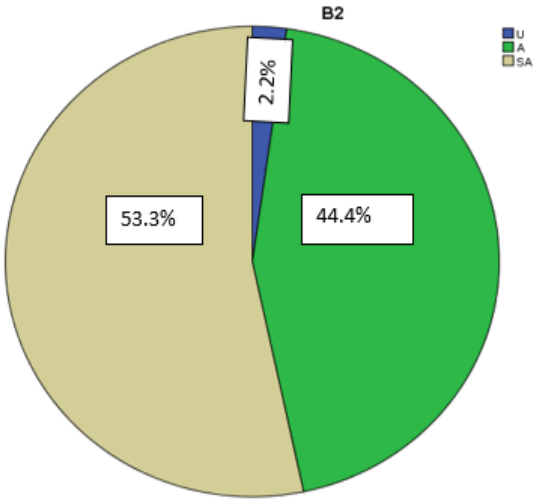

Figure 16: Showing the statement two public awareness (advertisement, circular etc.) on the RPL system should be increased.

Statement 3: From the returned questionnaire shows that 57.8% of the respondents strongly agree and 42.2% of the respondents agree that Industry-institution linkage should be made for providing job with the certificate of RPL for implementation RPL in TTCs in the Bangladesh. The weighted average is 4.56 (4.56>4.50) which strongly agrees that, Industry-institution linkage should be made for providing job with the certificate of RPL for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=1 with significant value of 0.297 which is greater than 0.05 level of significance and chi-square observed (χ^2o) is less than chi-square critical (χ^2c), that is χ^2o (1.089) < χ^2c (3.481) of which the null hypothesis, responses on this statement is statistically significant, is accepted. Therefore, the researcher concluded that it was not statistically significant to strongly agree that there is Industry-institution linkage should be made for providing job with the certificate of RPL for implementation of RPL program in TTCs.

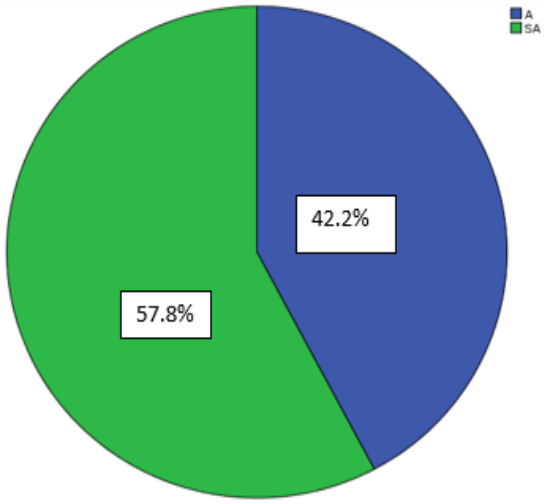

Figure 17: Showing the statement three industry-institution linkage should be made for providing job with the certificate of RPL.

Statement 4: From the returned questionnaire shows that 48.9% of the respondents strongly agree and 48.9% of the respondents agree that the assessor of RPL should be well-trained with pedagogical and subjective skills for implementation RPL in TTCs in the Bangladesh, 2.2% disagree that the assessor of RPL should be well-trained with pedagogical and subjective skills. The weighted average is 4.44 (4.44>3.50) which agrees that, the assessor of RPL should be well-trained with pedagogical and subjective skills for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=2 with significant value of 0.000 which is less than 0.05 level of significance and chi-square observed (χ^2o) is greater than chi-square critical (χ^2c), that is χ^2o (19.600) > χ^2c (5.991) of which the null hypothesis, responses on this statement is not statistically significant, is rejected. Therefore, the researcher concluded that it was statistically significant to agree that there is the assessor of RPL should be well-trained with pedagogical and subjective skills for implementation of RPL program in TTCs.

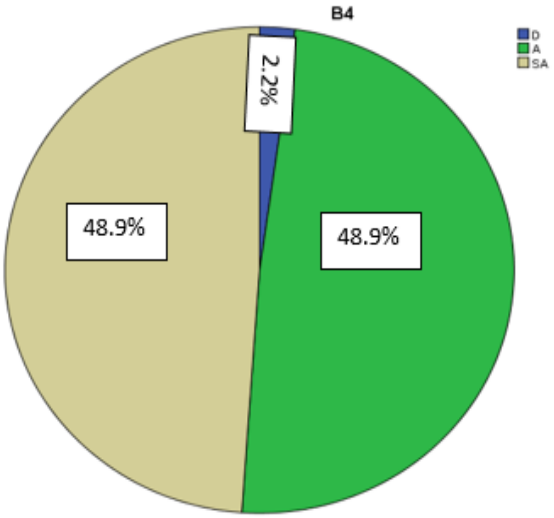

Figure 18: Showing the statement four the assessor of RPL should be well-trained with pedagogical and subjective skills.

Statement 5: From the returned questionnaire shows that 53.3% of the respondents strongly agree and 35.6% of the respondents agree that market responsiveness of RPL should be enhanced for implementation RPL in TTCs in the Bangladesh, 11.1% undecided that market responsiveness of RPL should be enhanced. The weighted average is 4.22 (4.22>3.50) which agrees that, market responsiveness of RPL should be enhanced for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=2 with significant value of 0.002 which is less than 0.05 level of significance and chi=square observed (χ^2o) is greater than chi-square critical (χ^2c), that is χ^2o (12.133) > χ^2c (5.991) of which the null hypothesis, responses on this statement is not statistically significant, is rejected. Therefore, the researcher concluded that it was statistically significant to agree that market responsiveness of RPL should be enhanced for implementation of RPL program in TTCs.

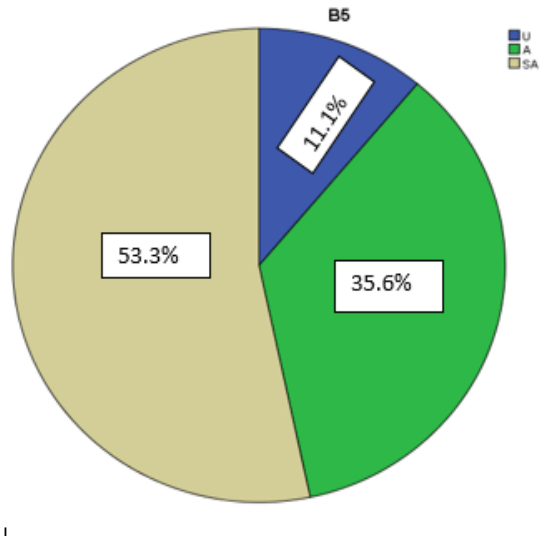

Figure 19: Showing the statement five market responsiveness of RPL should be enhanced.

Statement 6: From the returned questionnaire shows that 64.4% of the respondents strongly agree and 33.3% of the respondents agree that the whole process of RPL should tangible (easy and interesting) for the trainees/students for implementation RPL in TTCs in the Bangladesh, 2.2% disagree that the whole process of RPL should tangible (easy and interesting) for the trainees/students. The weighted average of 4.60 (4.60>4.50) which strongly agrees that, the whole process of RPL should tangible (easy and interesting) for the trainees/students for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=2 with significant value of 0.000 which is less than 0.05 level of significance and chi-square observed (χ^2o) is greater than chi-square critical (χ^2c), that is χ^2o (26.133) > χ^2c (5.991) of which the null hypothesis, responses on this statement is not statistically significant, is rejected. Therefore, the researcher concluded that it was statistically significant to strongly agree that the whole process of RPL should tangible (easy and interesting) for the trainees/students for implementation of RPL program in TTCs.

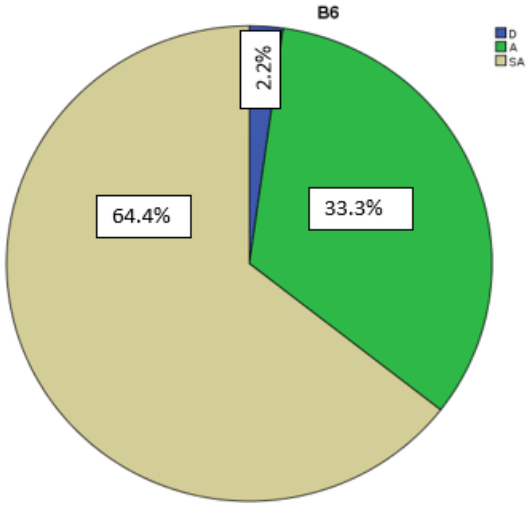

Figure 20: Showing the statement six the whole process of RPL should tangible (easy and interesting) for the trainees/students.

Statement 7: From the returned questionnaire shows that 64.4% of the respondents strongly agree and 35.6% of the respondents agree that the trainees should have scholarship such as financial assistance to take RPL certificate for implementation RPL in TTCs in the Bangladesh. The weighted average is 4.64 (4.64>4.50) which strongly agrees that, the trainees should have scholarship such as financial assistance to take RPL certificate for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=1 with significant value of 0.053 which is greater than 0.05 level of significance and chi-square observed (χ^2o) is less than chi-square critical (χ^2c), that is χ^2o (3.756) < χ^2c (3.841) of which the null hypothesis, responses on this statement is statistically significant, is accepted. Therefore, the researcher concluded that it was not statistically significant to strongly agree that there is the trainees should have scholarship such as financial assistance to take RPL certificate for implementation of RPL program in TTCs.

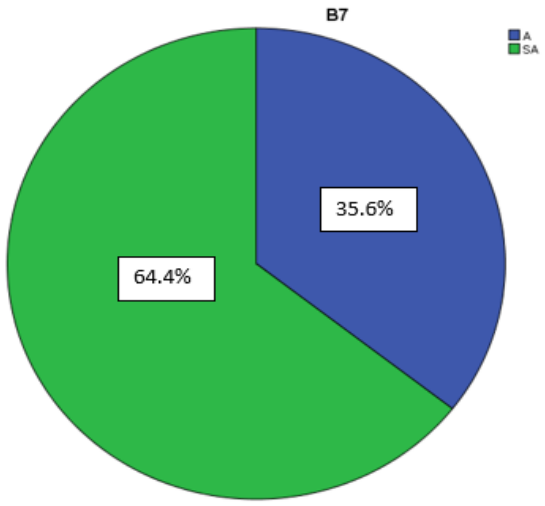

Figure 21: Showing the statement seven the trainees should have scholarship such as financial assistance to take RPL certificate.

Statement 8: From the returned questionnaire shows that 53.3% of the respondents strongly agree and 46.7% of the respondents agree that the environment of RPL assessment should be conducive to enhance the demand of learners for implementation RPL in TTCs in the Bangladesh. The weighted average is 4.53 (4.53>4.50) which strongly agrees that, the environment of RPL assessment should be conducive to enhance the demand of learners for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=1 with significant value of 0.655 which is greater than 0.05 level of significance and chi-square observed (χ^2o) is less than chi-square critical (χ^2c), that is χ^2o (.200) < χ^2c (3.841) of which the null hypothesis, responses on this statement is statistically significant, is accepted. Therefore, the researcher concluded that it was not statistically significant to strongly agree that the environment of RPL assessment should be conducive to enhance the demand of learners for implementation of RPL program in TTCs.

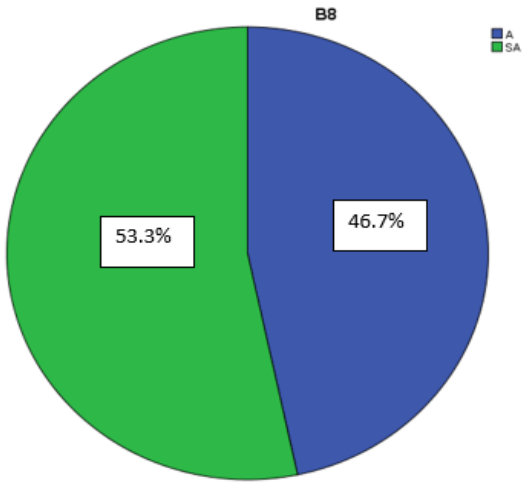

Figure 22: Showing the statement eight the environment of RPL assessment should be conducive to enhance the demand of learners.

Statement 9: From the returned questionnaire shows that 55.6% of the respondents strongly agree and 35.6% of the respondents agree that the value system of RPL certification should very high and prestigious for implementation RPL in TTCs in the Bangladesh, 8.9% undecided, that the value system of RPL certification should very high and prestigious. The weighted average is 4.67 (4.67>4.50) which strongly agrees that, the value system of RPL certification should very high and prestigious for implementation RPL in the TTCs, meanwhile the chi-square test was performed at df=2 with significant value of 0.001 which is less than 0.05 level of significance and chi-square observed (χ^2o) is greater than chi-square critical (χ^2c), that is χ^2o (14.800) > χ^2c (5.991) of which the null hypothesis, responses on this statement is not statistically significant, is rejected. Therefore, the researcher concluded that it was statistically significant to strongly agree that there is the value system of RPL certification should very high and prestigious for implementation of RPL program in TTCs.

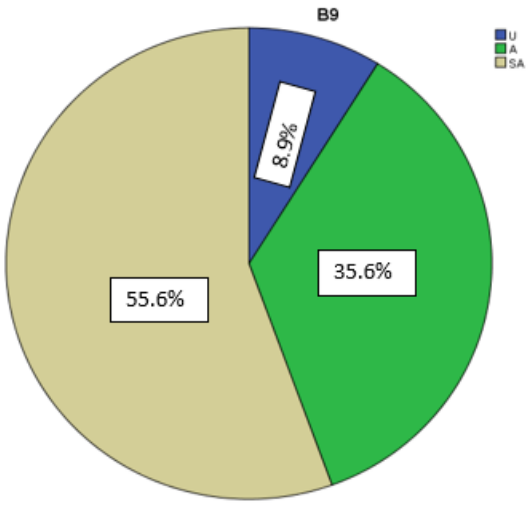

Figure 23: Showing the statement nine the value system of RPL certification should very high and prestigious.

4.3 Objectives -3

To make recommendations for actions needed for better implementation of RPL.

1. From the opinion of the respondents ten (10) of them recommended that, the time and days should be increased to minimum of 5 days and the nine (9) respondents recommended that, Advertisement system such as radio, television, social media and newspaper.
2. From the opinion of the respondents eight (8) of them recommended that, the working environment should be improved to digital classroom and machine tools and the eight (8) respondents recommended that, RPL program should be opened at each TTC in Bangladesh.
3. From the opinion of the respondents eight (8) of them recommended that, exam questions should be easy if so it will be better and another eight (8) respondents recommended that, teachers Honorium should be increased.

Table 4.3: Recommendations for actions needed for better implementation of RPL in TEVT institution

Number of respondent=10

SL/NO	Opinion	Number of respondents	Key Recommendation
1	The time and days should be increased to minimum of 5 days.	10	1
2	Advertisement system such as radio, television, social media and newspaper should be increased.	9	2
3	Need to proper valuation for industry worker.	1	
4	The working environment should be improve to digital classroom and machine tools	8	3
5	RPL program should be open at each TTC in Bangladesh	8	3

6	Trainer opportunity should be increase	1	
7	If give not the join of industry without level-1 certificate, so more than effect on RPL	1	
8	Should be commitment with B.G.M. for RPL develop	1	
9	Looking for that sight there financial assistance is continue	1	
10	Given the opportunity to get good job looking for that sight and help them.	1	
11	Exam questions should be easy if so it will be better	8	3
12	Teachers Honorium should be increased.	8	3
13	Proper person/participant cannot coming in TTC for doing RPL program,	1	
14	Participants should be minimum eight pass needed for written exam of RPL program	1	
15	According to the level assessing which kind of salary he will get?	1	
16	Participant's motivation should be increase from pocket money of RPL program.	1	

CHAPTER FIVE

SUMMARY, FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The aim of the study was challenges for implementation of the recognition of prior learning: Technical Training Centers in Bangladesh.

The objectives of the study were

a) To review the whole RPL process / to identify strengths and limitations of the RPL.
b) To identify how effective and participatory are the program intervention.
c) To make recommendations for actions needed for better implementation of RPL.

In this study the population was teachers, students and assessors of different Technical Training Centers in Bangladesh. There are the 38 government TTCs in Bangladesh. However, the study was delaminated to three (3) TTCs for the convenience of data collection of this study. As a part of the study for the existing strengthens and limitations of TTCs, assessment of technical skill and for finding the recommendation opinion was collected from teachers and assessors in the sample. Out of the 57 questionnaires, 57 of them had received, 100 percent rate of return. From the collected copy of the questionnaires the returned data were generated, analyzed using statistical packages for social science (SPSS) software version 20.0, some computed, all the graphs representing various information were drawn through using Microsoft excel table and graph have been prepared for different parts of the questionnaires. Purpose of decision making, collected data statistically analyzed through using chi- square test at the level of significant α=0.05. The percentage and weighted average were also calculated.

The finding of the study revealed that; there are different strengths-limitations and effective-participatory in the TTCs of Bangladesh for the implementing of RPL programme. And the data were highly analyzed with higher weighted average and chi-square. All respondents were given importance to respond to the questionnaires and majority agreed that such effective and efficient for properly implementing RPL programme in their institute, adaptation of the recommendation made were sincerely use as techniques for implementing RPL programme with then aims of promoting of TTCs. The result of the study may be helpful on social and economic development of Bangladesh.

5.2 Findings

Through the sample selected which comprised of teachers, students and assessors and analyzed the data related to the challenges for implementation of the recognition of prior learning: Technical Training Centers in Bangladesh, the findings include the following as stated below:

1. The results from table 4.1 showed at mean average of 4.63 that majority of the respondents strongly agree that the strength of RPL programs provides opportunity to obtain certification for working skills and its increased employment opportunities while for the limitation, the results showed at mean average of 3.99 that majority of the respondents agree that there is lack of awareness, RPL certification is very expensive, limited number of RPL assessors in the RPL training institutions.
2. From table 4.2 it was found at mean average of 4.51 that majority of the respondents strongly agree that RPL program is very effective, while participatory was found at mean average of 4.56 that majority of the respondents strongly agree that whole process of RPL is very tangible for the trainees/students.
3. The one objective was to make recommendations for actions needed for better implementation of RPL. Most of the respondents recommended that, time and days should be increase (minimum 5 days), advertisement system should be done through radio, television, social media and newspaper. They have also recommended that exam questions should be easy if so it will be better, the working environment should be improve to digital classroom and machine tools and RPL program should be open at each TTC in Bangladesh.

5.3 Discussions on findings

1. The results from the analysis of table 4.1 showed at a mean average of 4.63 that majority of the respondents strongly agree that the strength of RPL programs provides opportunity to obtain certification for working skills and its increased employment opportunities while for the limitation, the results showed at mean average of 3.99 that majority of the respondents agree that there is lack of awareness, RPL certification is very expensive, limited number of RPL assessors in the RPL training institutions. This findings is related to the findings of Md. Ali et al (2016) it was found that RPL assessment creates the opportunities of skills

workers to participate in higher level vocation and technical training and education as well as upscale the work force. From this study findings it was also revealed that majority of the competent (55%) and partially competent (71%) assesses asserted that they were interest to participate further for higher level RPL assessment. The reasons for interest to participate further in higher level RPL assessment to develop their better career as well as to get better opportunity for searching better job. Also Md. et al (2016) from their study findings it was also revealed that the on-line NTVQF certification available to assess for downloading and using it for employment does not bear the signature of any authority. Certificates without authorized signature are of no value.

2. The results from the analysis of table 4.2 it was found at mean average of 4.51 that majority of the respondents strongly agree that RPL program is very effective, while participatory was found at mean average of 4.56 that majority of the respondents strongly agree that whole process of RPL is very tangible for the trainees/students. This findings is related to the findings of Md. Ali et al (2016) it was found that as per RPL implementation guidelines, the assessment results have to be declared immediately after RPL assessment. From this study also revealed that all (100%) of the competent and partially competent assesses were informed about the assessment results immediately after assessment in the RPL center and most of the competent (89%) and partially competent (83%) assesses were satisfied on their assessment results. Also Md. et al (2016) from their study findings it was also revealed that opportunity for re-assessment was not provided of partially competent assesses by the all RPL assessment center, but assesses felt to participate in the re-assessment process. Among the partially competent assesses 45% of them interested to participate in the re-assessment with own expenses.
3. The objective was to make recommendations for actions needed for better implementation of RPL. Most of the respondents recommended that, time and days should be increase (minimum 5 days), advertisement system should be done through radio, television, social media and newspaper. They have also recommended that exam questions should be easy if so it will be better, the working environment should be improve to digital classroom and machine tools and RPL program should be open at each TTC in Bangladesh. This is in line with the findings of Md. Ali et al (2016) it was revealed that majority of competent (87%) and partially competent (85%) assesses expressed that orientation program was

effective for RPL assessment and the majority competent (88%) and partially competent (74%) assesses reported that 2 days orientation program was not sufficient to get well preparation of the candidates for RPL assessment. This findings is related to the findings of Md. Ali et al (2016) it was found that mostly the competent assesses (85%), partially competent assesses (93%) and control respondents (79%) received the information about to participate in the RPL assessment through friends/relatives followed by notice board of the RPL assessment center. But the better way to publicity to attract the target group's applicant for RPL assessment would be the local making, poster/leaflets and broadcasting through TV. Also Md. et al (2016) from their study findings it was also revealed that majority (68%) of competent, 88% partially competent and 83% control respondents informed that skill test was necessary to select the candidates for RPL assessment. They also reported that written test was the most problematic areas of selection process. Also Md. Ali et al (2016) from their findings it was found that Majority of the competent (86%) and partially competent (82%) assesses reported that the assessment environment was friendly for the assesse.

5.4 Conclusion

The aim of the study was challenges for implementation of the recognition of prior learning: Technical Training Centers in Bangladesh. Based on the findings from the analyzed and interpreted data the following conclusions were made. The study revealed that:

1. Challenges for implementation of the recognition of prior learning: Technical Training Centers identify a lot of strengths and limitations such strengths include most of the respondents strongly agreed that, RPL assessment provides the opportunity to obtain certification for working skills, RPL certification will ensure both national and international recognition of prior skills, RPL certificate will increase employment opportunities, RPL is a positive experience and builds on one's strengths, RPL reduces the cost of education and study load, some respondents agreed that, RPL increases wage of the employees, training centers are well quipped for assessing students of RPL. And such limitations include some respondents agreed that, lack of awareness of the employers about the benefits of the RPL assessment and certification, limited number of RPL assessors in the RPL

training institutions, lack of availability of equipment and machineries in the Labs for the RPL program, as the students of RPL, they faced difficulties (written test & language) during assessment and evaluation, teachers are not properly skilled for RPL assessment program, RPL certification is very expensive, the students participation in the RPL program is very low. So from the findings of strengths and limitations was statistically significant for implementation of the recognition of prior learning in Technical Training Centers in Bangladesh.

2. Challenges for implementation of the recognition of prior learning: Technical Training Centers identify a lot of effectiveness and participatory such effectiveness include most respondents strongly agreed that, orientation program are necessary for preparing students for RPL assessment, public awareness (advertisement, circular etc.) on the RPL system should be increased, industry-institution linkage should be made for providing job with the certificate of RPL, some respondents agreed that, the assessor of RPL should be well-trained with pedagogical and subjective skills, market responsiveness of RPL should be enhanced. And some respondents strongly agreed that, the whole process of RPL should tangible (easy and interesting) for the trainees/students, the trainees should have scholarship such as financial assistance to take RPL certificate, the environment of RPL assessment should be conducive to enhance the demand of learners, the value system of RPL certification should very high and prestigious. So from the findings of effectiveness and participatory was statistically significant for implementation of the recognition of prior learning in Technical Training Centers in Bangladesh.
3. According to the study objective some recommendations were revealed for better implementation of RPL in TTCs. Most of the respondents recommended that, time and days of the RPL program should be increased (minimum 5 days), advertisement system should be done through radio, television, social media and newspaper. They have also recommended that exam questions should be easy if so it would be better, the working environment should be improved to digital classroom and machine tools and RPL program should be opened at each TTC in Bangladesh. If the government take that's recommendations as an importance than applying RPL program may be more easy and sustainable.

5.5 Recommendations

From research findings and conclusions **"**challenges for implementation of the recognition of prior learning: Technical Training Centers in Bangladesh" the following recommendations can be made:

1. In addition of traditional Newspaper advertisement, alternative ways of advertisement should be considered to attract the target candidate for participation in the RPL assessment program such as (i) broadcasting through TV (particularly BTV) and Radio, (ii) circulation of poster and leaflets in industrial areas,
2. Government should create awareness among the employers about the necessity and benefits of RPL assessment and certification.
3. The duration of 2 days orientation program was also effective and good enough for existing RPL assessment program. But many respondents opined that, government should increase the existing duration of time orientation program.
4. Government should increase the budget for raw materials particularly for welding as well as electrical installation and maintenance occupations.
5. Authority should use the Bangla version for assessment tools in the assessment process for easy to understand and answer by the candidates along with English version tools.
6. Government should give more emphasis on the demonstration of job skills rather than written test for more user friendly for the minimum literacy candidates.
7. Government should supply sufficient raw materials for demonstration of job skills during assessment session of the RPL program.
8. The industry assessors must provide proper time in assessment session with due sincerity.
9. Certificates for both competent and partially competent assesses government should be issued and distributed through the RPL center within a month of the completion of assessment without any bothering for assesses.
10. Government should ensure stronger monitoring and supervision for RPL assessment program by the STEP as well as BTEB for better and meaning implementation of the program.
11. Government NTVQF Skills Certificate should be given preference by Public and Private sector for employment and promotion of the skilled workers.

12. Different levels of RPL assessment government should be recognized with formal education level such as Level 1 should be recognized with Class VIII pass certificate.
13. Authority should increase industry-institutions linkage for better implementation of RPL in Bangladesh.

5.6: Further study

The aim of the study was challenges for implementation of the recognition of prior learning: Technical Training Centers in Bangladesh. The study revealed the findings based on the respondents opinions where some recommendations carried out such as: time and days of RPL program should be increased (minimum 5 days), advertisement system should be done through radio, television, social media and newspaper to enhance the value of RPL. The study also recommend that exam questions for RPL should be easy if so it would be better, the working environment should be improved to digital classroom and machine tools and RPL program should be opened at each TTCs in Bangladesh.

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APPENDIX

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)

Department of Technical and Vocational Education (TVE)

Board Bazar Gazipur 1704, Bangladesh.

RESEARCH QUESTIONNAIRE

(For Students)

Dear Sir/Madam,

I am M.Sc.T.E. (Mechanical Engineering) student in the above mentioned university, conducting a research on **Challenges for implementation of recognition of prior learning: Technical Training Centers in Bangladesh.**

You are requested to respond to the questionnaire as possible as you can, your suggestions and opinions will be used to improve the content of this research.

NOTE:

It is under ethnical requirement that all your personal information will be kept confidential.

Section: A (Background Information)

Nationality: ……..……..State/Town: ……..…….

Sex/Gender: ☐ Male ☐ Female Age: ……Marital Status: …….

Qualification: ……..……..

Email: ……Date: …….

Please put a tick mark (√) expressing your opinion in the instrument.

Table 1: Objective I

To identify strengths and limitations of the recognition of prior learning (RPL).

	STATEMENTS	Strongly Agree(5)	Agree(4)	Undecided(3)	Disagree (2)	Strongly Disagree (1)
Strengths of RPL						
1	RPL assessment provides the opportunity to obtain certification for working skills					
2	RPL certification will ensure both national and international recognition of my prior skills					
3	RPL certificate will increase employment opportunities					
4	RPL increases wage of the employees					
5	RPL is a positive experience and builds on one's strengths					
6	Training centers are well quipped for assessing students of RPL					
7	RPL reduces the cost of education and study load					
Limitations of RPL						
8	There is lack of awareness of the employers about the benefits of the RPL assessment and certification					
9	There is limited number of RPL assessors in the RPL training institutions					
10	There is lack of availability of equipment and machineries in the Labs for the RPL program					
11	As a students of RPL, faced difficulties (written test & language) during assessment and evaluation					
12	Teachers are not properly skilled for RPL assessment program					
13	RPL certification is very expensive					
14	The students participation in the RPL program is very low					

Table 2: Objective II

To identify how effective and participatory are the program intervention.

	STATEMENTS	Strongly Agree(5)	Agree(4)	Undecided (3)	Disagree (2)	Strongly Disagree (1)
Effectiveness of RPL						
1	Orientation program are necessary for preparing students for RPL assessment					
2	Public awareness (advertisement, circular etc.) on the RPL system should be increased					
3	Industry-institution linkage should be made for providing job with the certificate of RPL					
4	The assessor of RPL should be well-trained with pedagogical and subjective skills					
5	Market responsiveness of RPL should be enhanced					
Participation of RPL						
6	The whole process of RPL should tangible (easy and interesting) for the trainees/students					
7	The trainees should have scholarship such as financial assistance to take RPL certificate					
8	The environment of RPL assessment should be conducive to enhance the demand of learners					
9	The value system of RPL certification should very high and prestigious					

ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)

Department of Technical and Vocational Education (TVE)

Board Bazar, Gazipur 1704, Bangladesh.

RESEARCH QUESTIONNAIRE

(For Teachers and Assessors)

Dear Sir/Madam,

I am M.Sc.T.E. (Mechanical Engineering) student in the above mentioned university, conducting a research on **Challenges for implementation of recognition of prior learning: Technical Training Centers in Bangladesh.**

You are requested to respond to the questionnaire as possible as you can, your suggestions and opinions will be used to improve the content of this research.

NOTE:

It is under ethnical requirement that all your personal information will be kept confidential.

Section: A (Background Information)

Nationality: ……

State/Town: ……...

Sex/Gender: ☐ Male ☐ Female

Age: ……..

Status: ……....

Qualification……..

Email…….

Date: …….

Objective III

To make recommendations for actions needed for better implementation of RPL.

Question: **Write 3 opinions about better implementation of RPL in your institution.**

1……

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……..……

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2……

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……..……

3……

……

……

……..……

Thank you for your sincere response.

Research Student

Marium Sarkar

Student No: 153602

Research Supervisor

Dr. Md. Abu Raihan

Associate professor, TVE Dept. IUT.