RECOGNITION, ACCREDITATION AND VALIDATION OF NON-FORMAL AND

INFORMAL LEARNING: PROSPECTS FOR LIFELONG

LEARNING IN NEPAL

Kapil Dev Regmi

A Dissertation

Submitted to

School of Education

Kathmandu University

In partial fulfillment of the requirements for the Degree of

Master of Philosophy in Education

Presented on October 07, 2009

AN ABSTRACT OF THE DISSERTATION OF

Kapil Dev Regmi for the Degree of *Master of Philosophy in Education* presented on

October 07, 2009. Title: *"Recognition, Accreditation, and Validation of Non-formal and*

Informal Learning: Prospects for Lifelong Learning in Nepal"

Abstract approved

………………………………   ………………………...

Prof. Tanka Nath Sharma, PhD   Prof. Shreeram Prasad Lamichhane, PhD

Dissertation Supervisor   Dissertation Supervisor

This study was an exploration on the various issues related to recognition, accreditation

and validation of non-formal and informal learning to open up avenues for lifelong

learning and continuing education in Nepal. The perceptions, experiences, and opinions

of Nepalese Development Activists, Educational Administrators, Policy Actors and

University Professors became the major part of this research. Some of the reviews of the

good practices in the field of validation of non-formal and informal learning and

development of National Qualifications Framework at international level; and the

progresses Nepal has made so far in this field were also equally incorporated in the

study.

It was a two-phased Sequential Mixed Method study in which Survey and

Phenomenology representing positivist and constructivist paradigms were used

sequentially to draw the findings. The quantitative part of the research dealt with the

three themes of the research. The first theme was 'providing options for learners to learn through formal, non-formal and informal modes of learning equally'; the second theme was 'bringing parity among the three modes of learning' and the third theme was 'developing a National Qualifications Framework' to recognize, accredit, and validate non-formal and informal learning to enhance lifelong learning in Nepal.

During the analysis of qualitative part of the research eight different themes generated. They were making people free to acquire knowledge; making the three forms of learning equal; recognition, accreditation, and certification of non-formal and informal learning; recognition, accreditation and certification of indigenous knowledge; assessing non-formal and informal learning; adaptability and employability of non-formal and informal learners; developing a National Qualifications Framework; and enhancing lifelong learning. These themes either directly or indirectly are related to validation of non-formal and informal learning to create an environment conducive for lifelong learning in Nepal.

From the analysis of both quantitative and qualitative data it was found that the Educational Stakeholders were positive and enthusiastic towards enhancing lifelong learning by recognizing, accrediting and validating non-formal and informal learning in Nepal. They opined almost in a similar spirit that the three forms of learning should get equal focus to make one's learning a lifelong endeavor. They had a consensus on developing a mechanism to assess non-formal and informal learning outcomes including indigenous knowledge and skills. They also claimed that non-formal and informal learners are equally employable and adaptable as formal degree holders if the formers were provided with an environment conducive for fostering their knowledge, skills and

competencies. Above all, from the triangulation of qualitative results with quantitative

data and review of literatures it was found that if a mechanism for recognizing,

accrediting and validating non-formal and informal learning is developed on the basis of

a National Qualifications Framework, then the goal of enhancing lifelong learning could

be achieved.

…………………………

Kapil Dev Regmi

Degree Candidate

DEDICATION

To my father Bed Nidhi Regmi who has been praying for my success throughout his life

To my mother China Kumari Regmi who gave me the world

To my wife Laxmi Khanal whose continuous support and love has made my world bright

To my cute twin daughters Sadikshya and Samikshya – my hope, my present and my

future

To my teachers who helped me to illuminate my academic world

DECLARATION

I hereby declare that this thesis has not been submitted for candidature for any other degree.

....

Kapil Dev Regmi

Degree Candidate

October 07, 2009

APPROVAL

Master of Philosophy in Education dissertation of Kapil Dev Regmi presented on October

07, 2009

APPROVED:

……………………………………

Prof. Tanka Nath Sharma, PhD   October 07, 2009
Dissertation Supervisor

……………………………………

Prof. Shreeram Prasad Lamichhane, PhD   October 07, 2009
Dissertation Supervisor

………………………………….

Prof. Jaya Raj Awasthi, PhD   October 07, 2009
External Examiner

…………………………………...

Asso. Prof. Mahesh Nath Parajuli, PhD   October 07, 2009
Member, Research Committee

……………………………….

Prof. Tanka Nath Sharma, PhD   October 07, 2009
Act. Dean, School of Education

I understand that my dissertation will become a part of the permanent collection of
Katmandu University Library. My signature below authorizes release of my dissertation
to any reader upon request for scholarly purposes.

………………….

Kapil Dev Regmi   October 07, 2009

ACKNOWLEDGEMENTS

I would like to acknowledge all the teachers and friends whose help and inspiration directly and indirectly supported to complete this study wholeheartedly. I would like to express my sincere acknowledgements to all the informants and respondents of this study for their opinions, perceptions and experiences.

I am extremely grateful to all teachers of the School of Education, Kathmandu University for their warm affection and guidelines, which have been leading me to the path of academic brightness since I enrolled in this University.

I am grateful to my dissertation supervisors Prof. Dr. Tanka Nath Sharma and Prof. Dr. Shreeram Prasad Lamichhane, for their unremitting encouragement, mentoring and support. I have got thousands of inspirations from their gentleness and perseverance. This dissertation was their brainchild that I nurtured with the help of hundreds of hands and minds. I would like to thank them from the inner core of my heart.

I found no suitable words to express my gratitude to Prof. Dr. Mana Prasad Wagley for his appreciation to my academic activities that has been boosting me to a better acclivity of my scholarly life since he welcomed me in Kathmandu University in 2007. Dr. Wagley deserves a special place in my heart and memory.

I would like to express my sincere gratitude to the external examiner of this dissertation Prof. Dr. Jaya Raj Awasthi for his constructive suggestions for giving the final shape of this thesis both in content and quality.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Figures

ABBREVIATIONS

APEL   Accreditation of Prior Experiential Learning

BEUPA   Basic Education in Urban Poverty Areas

CAEL   Cooperative Assessment of Experiential Learning

CEDEFOP   European Centre for the Development of Vocational Training

CTEVT   Center for Technical Education and Vocational Training

DA   Development Activist

DEOLC   Distance Education and Open Learning

EA   Educational Administrators

EFA   Education for All

EP   Equivalency Program

EQF   European Qualifications Framework

EU   European Union

EVC   Erkenning Verworven Competenities

FE   Formal Education

FL   Formal Learning

IL   Informal Learning

ISCE   International Standard Classification of Education

KU   Kathmandu University

LLL   Lifelong Learning

MM   Mixed - Method

MOE   Ministry of Education

NASA	National Aeronautics and Space Administration
NCED	National Center for Education and Development
NEC	National Education Commission
NESP	National Education System Plan
NFE	Non-Formal Education
NFL	Non-Formal Learning
NQF	National Qualifications Framework
OBE	Open and Basic Education
OECD	Organization for Economic Cooperation and Development
OFL	Options for Learning
PA	Policy Actor
PLAR	Prior Learning Assessment and Recognition
POE	Parity of Esteem
RPL	Recognition of Prior Learning
RVA	Recognition, Accreditation and Validation
RVC	Recognition, Validation and Certification
SEEQUEL	Sustainable Environment for the Evaluation of Quality in E-Learning
UIL	UNESCO Institute of Lifelong Learning
UP	University Professor
VAE	Validation des Acquis de Experience
VAP	Validation des Acquis Professionals
VET	Vocational Education Training
WBL	Work Based Learning

CHAPTER I

INTRODUCTION

Background of the Study

Perhaps, one of the important reasons behind the development of human civilization to today's stage is human curiosity to learn. In the world of competition people who learn more are always moving ahead. Men [and women] of our times should be intellectually, physically and emotionally equipped (Lengrand, 1975). The process and nature of learning has been contributing to make this world further advanced and comfortable to live.

Learning, in general, is a process of acquiring knowledge or developing the ability to carry out new behaviors (Mazur, 2006). Normally the word 'learning' is associated with school; nonetheless, much of human learning occurs outside the classroom, and people continue to learn throughout their lives (ibid). Learning and education are related terms. The former refers to acquisition of knowledge whereas latter one refers to the imparting and acquiring knowledge through teaching and learning (Encarta Dictionary, 2006). Learning is a cognitive process internal to the learner that can occur 'both incidentally and in planned educational activities' while education is only the planned activities (Smith, 1996, 2001).

Because of diversity in learning settings, there may be many types of learning. Different types of learning have been discussed in the literature of educational psychology. Since the 1970s, the International Standard Classification of Education

(ISCE) differentiated three types of learning: formal, non-formal and informal (Torres, 2001). There are other types of learning identified by psychologists and discussed in the literature. For example, UNESCO (1991, pp 17-18 as cited in Torres 2001) identified a fourth type of learning i.e. experiential learning. However, I will be discussing only three types of learning as identified by ISCE. Other variants of learning may fall under one of the categories of Formal Learning (FL), Non-Formal Learning (NFL) or Informal learning (IL). For example, the fourth type of learning as discussed above i.e. experiential learning can be taken as a part of informal learning as it comes from experiences of individuals rather than from formal schooling.

Obviously, FL comprises the leaning that comes from regular school and university education. The NFL comprises out-of-school and continuing education, on-the-job training etc. (Torres, 2001). The third type of learning is family and socially directed learning.

Educationists and progenitors of learning theories wonder on how real learning takes place. Which form of education – formal, non-formal, or informal – is better for learning? Formal education system has dominated the field of learning. Although NFE and IE antedate FE, after the sixteenth century, education was seen as schooling alone (Literary Watch Bulletin, 2001). Some of the educationists such as Paulo Friere, John Dewey, Ruddy Kidds, and Malcolm Knowles brought new concepts in the field of education and learning.

John Dewey, an American educationist, who was also the advocate of 'democracy through education' claimed that the 'key to intellectual development, and consequently to social progress, was schooling, especially at a time when the educational influences of

other institutions (the home, the church, etc.) had decreased so drastically (Apple & Teitelbaum, 2004). Dewey believed that school is a 'community in miniature'. He suggested that schooling shouldn't only be the preparation for life but life itself. In this regard he found a lot of loopholes in traditional schooling. He criticized schools for silencing and ignoring student's interests and experiences using artificial language. His main condemnation against traditional schooling is for alienating students, over-relying on testing to assess students learning, and differentiating students according to their presumed ability (Apple & Teitelbaum).

Ivan Illich, a radical philosopher and activist fiercely criticized public schooling for its centralization, its internal bureaucracy, its rigidity and for the inequalities it harbors (Gajardo, 2000). Paulo Friere, a Brazilian educator, also raised voices against the schools (Apple & Teitelbaum). These educational reformers claimed that school education emphasized rote learning curtailing the creativity and originality of learners. The schools didn't care whether the education they teach was relevant to people's life or not. They strongly advocated for innovation in education to make education practical and empowering to people. This was actually the beginning of NFE (Apple & Teitelbaum)

There may be some semantic overlapping between NFL and IL; however, there are significant differences. Unlike non-formal learning informal learning is voluntary and self-directed. It results from personal exploration and discourse and may occur spontaneously in everyday's life situations, within the family circle, and neighborhood (SEEQUEL, 2004).

The importance of non-formal and informal learning is increasing. There are several factors that are putting these two facets of learning in a better acclivity. Change in

the field of information delivery, political awareness, globalization bestowed a kind of education to the people of all ages irrespective of their involvement in formal education (Lengrand, 1975). It has become a false belief that true knowledge can only be acquired by exclusive use of formal lectures and exercises (Lengrand). This kind of paradigm shift has engendered many questions in the mindset of people involved in teaching and learning. The notions of marks, positions, punishments, and rewards, which are the features of formal schooling, have been challenged. People have seen many loopholes in formal schooling. As the society is getting complex the member of the society are in the need of getting more and more dynamic. Schools systems are unable to cope with current political, economic, and social realities, and are unable to meet the basic learning needs of children, youths and adults (Torres, 2001).

The tendency of evaluating one's knowledge only on the basis of the number of years spent in colleges and schools – the agents of formal education – is questioned in recent years. The school orthodox so far acknowledged has been challenged because of the widening coverage of non-formal and informal learning. Breaking this orthodox Torres (2001) writes,

> Education and learning that take place outside the school system – home, community, peers, church, workplace, media, libraries, education and cultural centers and activities, learning by doing, by observing, by reading, by reflecting in real life situations etc – tend to remain intangible and invisible, and contribute not to be contemplated in education diagnoses and prospects, policies and statistics. (p. 2)

The tussling among formal learning, non-formal learning and informal learning has culminated into the emergence of a new form of learning known as 'Lifelong Learning'. The concept of lifelong learning is also reflected in the discussion under continuing education and distance education, nonetheless, these terms refer, more or less, to the same ideology given by the term 'lifelong learning'. "The relationship between what is continuing education, distance education and lifelong education is uncertain, since these terms are used interchangeably" (Abukari, 2005, p. 146)

According to European Commission, lifelong learning is "all learning activities undertaken throughout life with the aim of improving knowledge, skills and competencies within a personal, civic, social, and/or employment related perspective (Thomas, 2003, p. 4 as cited in Abukari, 2005, p. 143).

The term 'lifelong learning' seems to be coined recently. Focusing on this matter Abukari (2005) writes,

> Literature suggests that the notion of lifelong learning has existed since the creation of humanity and has only recently appeared in its institutional form (Kallen 2002), or that it has existed since the era of great thinkers such as Plato and Comenius (Withnall, 2000), and the notion will continue (Cropley, 1980) (P. 143).

The heart of lifelong learning lies in the non-formal and informal learning. The field of formal learning or the so-called classical field of learning shares little portion of lifelong learning continuum. "The classical field of learning was formed by closed institution, that were to be attended in the first or third quarter of the lifespan, lifelong

learning declares any place and any time as suitable for learning" (Tuschling &

Engemann, 2006, p. 457).

Lifelong learning has been viewed as a "lifespan endeavor, whether in the formal,

non-formal or informal mode, to enrich the quality of life of the learner as an individual

and of the general community as a whole" (Abukari, 2005, p. 143)

There may be suspicion whether the spread of lifelong learning would bring any

negative effect in the existing system of formal education. According to Kraus (2001)

lifelong learning intends no disorganization or dismantling of national educational

system; instead a flexibalization of the given framework of education is sought after, not

least in order to minimize the 'time-lag' between education and socio-economic

developments (Tuschling & Engemann, 2006, p. 460).

There is a growing demand of non-formal and informal education with the

widening spectrum of lifelong learning. Moreover, the formal learning, non-formal

learning and informal learning have been the vital components of lifelong learning and

continuing education. "Within the lifelong learning framework formal education, non-

formal education, and informal education appear interweaved in the learning itineraries of

individuals, groups and societies" (Torres, 2001, p. 4)

The informal learning that takes place from cradle to grave (Colardyn &

Bjornavold, 2005) is an important facet of lifelong learning because it covers the whole

life of a human being. In the era of lifelong learning it is almost certain that "informal

learning becomes more evident and valued than ever" (Torres, 2001, p. 4). Similarly,

non-formal education that also deserves the essence of lifelong learning expands in

industrialized [all] countries as a means to provide continuing education to children, youths, and adults of all social strata (Torres).

The grandiose spectrum of formal education system of the modern world is going to be almost obsolete with the advent of lifelong learning in the postmodern era. It may be because formal education system is so structured and rigid that it can be seen as repressive, too costly, generally cognitive and not able to support peoples' attitudes to becoming active lifelong learners (SEEQUEL, 2004). However, the lifelong learning approach doesn't undermine the role of formal schooling as a component of learning as a whole.

Human beings face many challenges in different modes of their life. The complexity in peoples' life brought by the development in the field of science and technology, population growth, explosion of new knowledge, market competitiveness etc. have compelled them to learn new things and update their existing knowledge repertoire. For this they need to keep their mind unlocked throughout their lives. The importance of lifelong learning is growing because of this obligatory necessity of human being living in the postmodern era.

The developed countries such as America, Canada and the member states of European Union (EU) have already accepted lifelong learning as a suitable vehicle to ameliorate knowledge economy. The developing countries like ours are also in need of making lifelong learning 'a policy agenda'. According to Torres (2001), "the acceptance of lifelong learning as a need for all and as an organizing principle of education and learning system in the 21st century applies both developed and developing countries" (p. 1). Similarly, Kokosalakis (2000), an editor of European Journal of Education, claims

"lifelong learning has been a fundamental goal of education policies, both at the national and international level" (p. 25).

Due to the rapid change in the socio-economic status and technology, there is a need of reform in educational system. The importance of lifelong learning lies in the fact that it refers directly both to socio-economic and technological change (Kokosalakis, 2000). The very structure of education needs to be changed along with the changing trend in lifelong education. The formal learning system needs to be restructured so as to make it useful for enhancing lifelong learning.

As I discussed earlier, informal and non-formal learning are more important than formal learning for enhancing lifelong learning. The autonomy of formal education in today's knowledge world has put it in such a height that undermining it would lead towards systemic chaos in education. The possible solution for this problem would be acknowledging all of them. The notion of non-formal and informal learning can be fostered with the help of formal schooling system so far we have developed as the most vital social institution. The system of acknowledging or validating the knowledge and skills acquired in informal and non-formal setting in the formal schooling system could be a best probable way for the maturation of the concept of lifelong learning in its infancy. Tushling & Christoph (2006) say, "The whole development of lifelong learning can be in fact described as a formalization of non-formal education and non-formalization of formal education" (p. 460).

Though the concept of lifelong learning and continuing education has recently crept into the academic discussion, the history of it goes back to the induction of non-formal education in Nepal. "The history of non-formal education can be traced back to

1951 when the activities for an educational expansion were conducted as a strategy for the national development" (NRC-NFE, n. d.).

The agenda of lifelong learning and continuing education have taken some space in the recent policy level documents such as Open and Distance Learning Policy Framework (July, 2006), School Sector Reform (2007), Three Year Interim Education Plan (2007), Education Sector Development Program (2007-2010), EFA National Plan of Action (2003), Center for Technical Education and Vocational Training (CTEVT) Skill Certification Program, etc. These policy documents of the Government of Nepal (GON) have highlighted the need of recognition, validation and certification of non-formal and informal learning.

In this research, I have tried to explore the prospects of lifelong learning in Nepal by providing due consideration for non-formal and informal learning. It is necessary to identify, assess and recognize wider range of skills and competences that people have accumulated, or are likely to acquire throughout their lives. For this, I have explored on whether validation of non-formal and informal learning could be probable solution. However, it is not as easy as one can assume. It becomes further complicated in the context of countries like Nepal whether there is much diversity in culture, language and skills, especially indigenous ones. It is necessary to develop an appropriate mechanism at national level.

<center>Statement of the Problem</center>

In the past the process of teaching and learning was either non-formal or informal in Nepal (Panta, 2006). The disciples used to stay in the ashram of gurus and learn from him in Hindu education system. The followers of Buddha, known as monks, also learnt from

the preaching of him. Unfortunately, after the emergence of the concept of mass schooling these non-formal and informal ways of teaching and learning were abandoned.

Different plans and policies of the past focused more on formal learning than on non-formal and informal learning. The indigenous, Janajati and Dalit population are deprived not only of formal schooling but also of preserving their traditional knowledge and skills. They have vast treasure of knowledge and skills in traditional occupations such as in agriculture, fishing, carpentry etc. They are in need of getting their knowledge and skills recognized and certified.

A large number of populations, especially adult people, are still illiterate in Nepal. According to UNESCO Institute of Statistics (2008) only 55.2 percent adults were literate in Nepal. The dropout rate in schools and colleges is very high. The survival rate to Grade 5 was 79 percent (UIS, 2008) in 2006. The students who couldn't continue their study are languishing in some sort of works and are in need of resuming their formal schooling. The children who are still out of school are also doing something for their survival. They are also in need of getting their skills recognized.

Due to the rapid change in the world in the field of labor market, knowledge economy, information technology, existing repertoire of knowledge and information etc. everyone is in need of acquiring new knowledge throughout their life. They are also in need of updating their knowledge and skills acquired earlier.

Despite all of these necessities of providing recognition, certification and accreditation to informal and non-formal learning our country has done very little for this purpose. A good mechanism is the need of our country to solve all of these problems interactively.

With some rays of hope the policy level documents in recent years have discussed either explicitly or implicitly about recognizing knowledge and skills learnt through non-formal and informal means. Some of them include The School Sector Reform (GON-MOES, September, 2007), Three Year Interim Education Plan (TYIEP, 2007-2010), Non-Formal Education Policy (NFEP, 2007), Open and Distance Learning Policy Framework (GON-MOES, 2006b), etc.

Various educational stakeholders such as development activists working in the field of education; educational administrators (the high-level educational bureaucrats); policy actors, especially involved in formulating national polices of education; and university professors have been contributing to enhance educational status of this country. Actually, they are the pathfinders of the future education system of Nepal. They know how much has been done so far in this field. Their perceptions in this phenomenon are very much crucial in this context.

I, as a researcher, felt that there is a need of getting the perceptions of these personalities to unravel the mystery shrouded in this field, so far as present educational system of Nepal is concerned. Moreover, I haven't found any research carried out of this nature to explore the possibility of validating non-formal and informal learning in Nepal so far. A rigorous research of this type is obligatory in this field.

Purpose of the Study

In general, the purpose of the study is to analyze and discuss the potential system of lifelong learning and continuing education in relation to formal learning, non-formal learning and informal learning. For this, it aims to review national and international

literature and explore the perceptions and opinions of different stakeholders in the field of education on lifelong learning and continuing education.

More specifically, it aims to explore the perceptions of educational stakeholders on providing multiple learning options for learners; bringing parity among the three modes of learning and developing an NQF to open up avenues for lifelong learning and continuing education in Nepal.

Research Question

How do educational stakeholders perceive the possibility of identifying, recognizing and validating non-formal and informal learning to open up avenues for lifelong learning and continuing education in Nepal?

Research Sub-questions

a. How do educational stakeholders perceive the significance of providing options for learning through formal, non-formal and informal means?

b. How do educational stakeholders perceive the possibility of bringing parity of esteem among formal learning, non-formal learning and informal learning?

c. How do educational stakeholders perceive the importance of developing an NQF that provides eligibility for further learning for those who have been through the process of non-formal and informal education?

Significance of the Study

Though small in scale and short in duration, I anticipate the research will have the following significance. Firstly, the study is the first step in understanding the views of different stakeholders of education such as educationists, development activists, and

educational administrators on validation of non-formal and informal learning. This study will certainly open the door for further research in this field.

Secondly, the approach of validation of non-formal and informal learning is for enhancing lifelong learning and continuing education. This study has unraveled some of the perplexing issues shrouded in the mystery on the possibility of validation at national and international contexts.

Thirdly, educational stakeholders such as development activists, educational administrators, educational policy actors and university professors are the key role players in the field of education. Their experiences in implementing the approach in question will be important for general people. This study will be significant for this purpose as well.

Fourthly, this study has brought the progresses so far made by different stakeholders such as Non-formal education center, distance learning and open education council, etc. for the implementation of validation process into discussion.

Finally, this study has presented a comprehensive reviews of the literature related to validation of non-formal and informal learning around the world. The educationists and policy makers of the country will be advantaged by understanding the progress made in the international level.

<p align="center">Delimitations and Limitations</p>

A research cannot incorporate all the areas related to the topic. Neither there is any method without weakness. Every research is confined within a boundary. There are two parameters for research study to establish "the boundaries, exceptions, reservations, and qualifications inherent in every study: delimitations and limitations" (Castetter & Heisler,

1977 as cited in Creswell, 2003, p. 147). The following delimitations and limitations were set for this research.

Delimitations

Best & Kahn (2002) define delimitations as the "boundaries of the study" (p. 40). These boundaries are used to "narrow down the scope of a study" (Creswell, 2003, p. 148). In order to narrow the theme of this research to a workable premise the following delimitations were set.

a. This study didn't go beyond the context of Nepal except for reviewing related literature. I have extensively used the research findings that came from the researches around the world for in-depth understanding of accreditation of non-formal and informal learning. I also got to know about the status of lifelong learning around the world. Nevertheless, none of my participants were from outside Nepal. The two interviewees to whom I talked using Google Talk were also the Nepali scholars pursuing PhD in Education in the US.

b. The data were obtained from top-level educational stakeholders such as development activists, educational administrators, educational policy actors and university professors. Thus the opinions, experiences and perceptions were delimited to only them, though there are other stakeholders responsible for the educational development in Nepal.

c. This study was of both qualitative and quantitative in nature. But only phenomenology and survey research methods were implemented to draw qualitative and quantitative findings respectively. Triangulation and substantiation of qualitative findings with the results obtained from quantitative data analysis

were the major process of drawing findings, making conclusions and implications

of the research.

d. Though the review of related literature encroaches to international level the scope

of the research findings were delimited to Nepal only. So the external validity of

the research remains within the domain of Nepalese education system.

e. So far as time delimitation is concerned the study was completed within a year.

Limitations

Best and Kahn (2002) define limitations as the "conditions beyond the control of the

researcher that may place restrictions on the conclusions of the study and their

applications to other situations" (p. 40). Limitations are the inherent weakness of the

research that must be acknowledged beforehand. This study is confined within the

following limitations.

a. Only 40 educational stakeholders were consulted for administering questionnaire

for the survey part of the research. The respondents were selected using stratified

random sampling procedure. I must confess that the participants who filled up the

questionnaire couldn't represent all the population of the study. The "sampling

error" (Fowler, 1993, p. 35) of this type may affect the validity of the research

finding.

b. Only 8 participants out of 40 were taken as the key informants for interview. They

were selected purposively. Thus they may not represent the opinion, experience

and feelings of all the participants over the phenomenon studied.

c. I have used pragmatism as a suitable paradigm of the research. Johnson &

Onwuegbuzie (2004) have identified some weakness of this paradigm. They claim

pragmatic researcher sometimes fail to provide satisfactory answer to questions to whom is a pragmatic solution useful (Mertens, 2003 as cited in Johnson & Onwuegbuzie, 2004). The answers of my research question may not be satisfactory for all the readers of this dissertation. One of the reasons could be that this study is neither extensively quantitative nor rigorously qualitative.

d. As I had to make a balance between the two methods, it may be precarious to some extent. A kind of compromise had been made to draw the findings. The research had been more qualitative than quantitative one at the end.

<div align="center">Definition of Key Terms</div>

Obviously, much misunderstanding in human communication results from people bringing different meanings to the words they use. A single term may have multiple connotations. I have anticipated the following words (Jargons) as key terms to understand this dissertation. These definitions also delimit my research.

Accidental learning. Learning that takes place in everyday activities. It refers to something that an individual learns which had not been intended or expected.

Accreditation. The granting of credit towards a qualification in higher education based on evaluation of the candidate's previous learning. In this dissertation this term has been synonymously used with the term validation or certification.

Alternative education. Alternative education encompasses any means to assist a student who is not learning in a traditional public school setting

Certification. This term refers to the documentary evidence (including a diploma, certificate, or other documented recognition of attainment) that a qualification has been awarded.

Constructivism. It is a research paradigm that asserts truth as a subjective entity. It assumes that truth or true knowledge is within the people under investigation, not outside. The realities are many as per the people involved in interpretation. Based on this paradigm I have taken phenomenology as a suitable research methodology under qualitative design.

Educational administrators. They are people involved in making policies and decisions of educational system of a country. In this dissertation, the terms refer to the educational administrators of Nepal, especially to those who work under the Ministry of Education and Sports (MOES).

Educational stakeholders. They are the specialists of education. These people include the university professors, development activists working in the field of education, educational policy actors, and educational administrators.

Equivalency test. This is a type of evaluation that tests the learning achievements of non-formal and informal learners to ensure whether they are equivalent to the formal learners.

Experiential learning. This term refers to the knowledge and skills acquired through life, work experience and study which have not been formally attested.

Indigenous knowledge. This term refers to knowledge held by communities and peoples that are indigenous. In this dissertation this term refers to the knowledge, skills, and experiences of the people known as Janajatis, Dalits and indigenous people of Nepal.

Interpretivism. It refers to a method, or group of methods, that holds that the social sciences ought to be concerned, not simply with quantifying what actually happens

in social phenomena, but in providing an interpretation of events and phenomena in terms of how the people perceive it.

Learning options. It refers to different modes of learning. In this research three options of learning are discussed. The students should have freedom of continuing their learning process through three options: formal, non-formal and informal.

Lifelong learning. This is the process of acquiring knowledge or skills throughout life through the means of education, training, work and general life experiences.

Mechanism. It refers to a structure or a framework that brings three forms of learning into a single domain in which all of them are perceived equally.

Mixed method. This term refers to the blending of two research methods for conducting a research. In this thesis the term refers to the mix up method out of two research methods *viz.* phenomenology and survey.

National Qualification Framework. It is a framework that includes all types of education: formal, non-formal and informal. It is a classifier that shows how existing qualifications relate to one another. It also shows where new qualifications would fit (Werquin, 2007, p. 466).

Paradigm. It may be defined as the worldviews or belief systems that guide researchers to draw conclusion. In this research two research paradigms: positivism and constructivism are dealt.

Parity of esteem. It refers to a state of being equal. In this research, the term refers to equality of status among three modes of learning: formal, non-formal and informal.

Positivism. It is a paradigm that bases its findings on observable facts and purely scientific inquiry. It asserts that reality is 'somewhere out' and the researcher has to discover it.

Pragmatism. This is a new paradigm in research that stands in between positivism and constructivism. Pragmatists, the advocates of this doctrine, believe that it has removed the weaknesses of earlier paradigms and have been a merger of good features.

Prior learning. This refers to the learning that has been achieved before entering a program of learning by means of previous experience, knowledge or skills acquired in the workplace, training center etc.

Recognition. The granting of credit based on recognition of prior formal and non-formal learning through the assessment of evidence. This term has been interchangeably used with validation, accreditation and certification in this dissertation.

Tacit knowledge. It refers to the domain of knowledge that people carry in their minds but it is difficult to access. People are not aware of the knowledge they possess. It is considered more valuable because it provides context for people, places, ideas, and experiences.

Validation. It is "the process of identifying, assessing and recognizing a wider range of skills and competences which people develop through their lives and in different contexts, for example through education, work and leisure activities" (Colardyn & Bjornavold, 2005).

Organization of Chapters

This chapter, Chapter 1, created a detailed background of the study, introduced the problem, stated the purpose of the study, formulated research questions, described the

significance of the study, set limitations and delimitations and finally defined some of the key terminologies/jargons used in the dissertation.

Chapter 2 reviews the literature regarding the three modes of learning and their relation with lifelong learning, importance of validating non-formal and informal learning, opportunities and challenges of validation in Nepal, and importance of NQF for validation. The second section of this chapter reviews some of the countries' literature regarding the validation.

After the Literature Review the methodology involved in this study is detailed in Chapter 3. The subsequent chapters report on the findings: the quantitative findings in Chapter 4 and the qualitative findings in Chapter 5. And finally, Chapter 6 deals with findings, discussions, implications and conclusions of the research.

<div align="center">Chapter Summary</div>

The concept of lifelong learning and continuing education is not new in the history of education. Scholars have unanimously agreed that people need to learn throughout their lives to adapt themselves as per the changing need of time. Different approaches have emerged on how to make them lifelong learners. It has been one of the policy agenda at international forums and symposiums.

The three modes of learning (formal, non-formal and informal) are the obvious constituents of lifelong learning, nonetheless, non-formal and informal learning are neglected in comparison to their formal counterpart. To motivate people to be true lifelong learners all these three modes of learning should be emphasized equitably. That is to say, they should get equitable degree of recognition, accreditation and validation.

This research was carried out to analyze and discuss the potential system of validating non-formal and informal learning to enhance lifelong learning and continuing education. Specifically, the research aimed at exploring the perceptions of educational stakeholders of Nepal.

This research would have been significant for formulation educational polices to educational stakeholders of Nepal regarding the issues such as recognition, accreditation and validation of non-formal and informal learning in Nepal.

The study has some delimitations and limitations. Though exhaustive in nature the study was carried out in small scale with the collection of opinions, perceptions and experiences of 40 educational stakeholders of Nepal. The semi-structured interviews were conducted with only 8 participants for the qualitative part of the research.

CHAPTER II

LITERATURE REVIEW

On the process of carrying out this research, I have consulted many sources for literature review. The literatures germane to the area of my research are reviewed and presented in this chapter. I browsed many articles through the Internet. I also read many books, journal articles, magazine articles, dissertations, documents of the Government of Nepal (GoN), and other international agencies such as of the UNESCO, the EU etc.

I have tried to organize the literatures giving different titles and subtitles. Two major areas of the reviews are lifelong learning and validation. Under the first component I have focused on non-formal and informal learning. Under the second component I have focused on the importance of recognizing these two types of learning as an inevitable prerequisite for enhancing lifelong learning. I have also shed some lights on the importance of developing National Qualifications Framework as a tool for systematizing formal learning, non-formal learning and informal learning under a framework for enhancing lifelong learning. At the end of this chapter a conceptual framework of the research has been drawn on the basis of the literature reviewed.

Section 1: Review of Literature Related to Validation of NFL and IL

Learning

How learning takes place? What happens in the brain when learning takes place? Is it a cognitive or behavioral process? What is learning and what is not learning? These perplexing questions puzzled many psychologists in the past. They conducted various

research and lab experiments to find the best possible answers of these questions. They have propounded many theories of learning. Some of the important theories described by (Mangal, 2007) are: Throndike's Trial and Error Learning, Watson and Pavlov's Classical Conditioning Theory, Skinner's Operant Conditioning Theory, Kohalar's Insightful Learning Theory, Lewin's Field Theory, Information Processing Theories, Roger's Experiential Learning Theory, and Maslow's Humanistic Theory.

These theories have focused more on formal education. That is to say these theories basically wanted to find how these theories can be implemented to teach in best possible way in the classroom. They have focused very little on adult education, lifelong learning and continuing education. Hence, the literature relating learning theories with non-formal and informal learning can hardly be found.

Education developed from the human struggle for survival and better life. It had developed before people developed reading and writing, when they struggled against natural forces and animal as nomads for survival. Their education was limited to hunting and gathering, making food, weapons etc. Gradually, the process of education involved in learning language, acquiring values, learning religious rites, etc. Through direct, informal education, parents, elders, and priests taught children the skills and roles they would need as adults (Gutek, 2006). They passed traditional knowledge from one generation to another through storytelling and cultural transformation.

In ancient Egypt, India, Greece, and Rome various forms of education appeared. In Egypt and India priests conducted educational endeavors (Gutek). Western formal education started in Greece. Different city-states focused on education. Two major city-states: Sparta and Athens focused on military and democratic education respectively. It

was the Athens where several scholars contributed for the development of education.

Sophists, a group of wandering teachers, taught students to make them able to argue.

Unlike them, the Greek philosopher Socrates advocated for truth, beauty and goodness

rather than mere argument.

In 387 BC Plato, the disciple of Socrates established a school in Athens called the

Academy. He described his educational ideal in his famous book *The Republic*. In 335 BC

Aristotle, the disciple of Plato founded another school called the *Lyceum*. He focused on

rational or reasoning for exploring truth. Isocrates, Cicero, and Quintilian were also

eminent philosophers of Greece.

Unlike Greeks, who were more concerned with philosophy, Romans were

preoccupied with war, conquest, politics, and civil administration. Like in Greece a very

few people attended schools. Schooling was for those who had the money to pay tuition

and the time to attend classes (Gutek).

During the medieval period (roughly from the 5th to the 15th century) western

education was influenced by Christianity, especially the Roman Catholic Church. In the

11th century medieval scholars developed scholasticism, a philosophical and educational

movement, that used both reason and revelations from the bible (Gutek). The famous

European universities of Paris, Salerno, Bologna, Oxford, Cambridge, and Padua grew

out of the doctrine scholasticism.

During Renaissance (the 14th to the 15th century), humanistic approach of

education came into limelight. The scholars of the time advocated for the separation of

education from Greek and Latin religious classics. Educators of the 17th century such as

Comenius and John Locke influenced education and learning. "John Locke asserted that

at birth the human mind is a blank slate, or tabula rasa, and empty of ideas" (Gutek). He believed that acquisition of knowledge comes from the senses that we make on the objects of the world.

The 18th century, the Age of Reason, brought some changes in education and educational theories. The contemporary scholars claimed that reasoning and critical thinking were important for learning.

In the 19th century, Swiss educator Johann Heinrich Pestalozzi put the foundation of modern education. He believed that teaching should use senses. Friedrich Froebel, a German educator, brought the concept of kindergarten school. Similarly, Herbert Spencer, the British sociologist, gave sociological influence to education on the basis of the theory of evolution propounded by Charles Darwin.

In the 20th century the concept of progressive education came into practice. Progressive education was a system of teaching that emphasized the needs and potentials of the child rather than the needs of a society or the principles of the religion (Gutek). A Swedish feminist educator, Ellen Key and other advocate like Hermann Lietz and Georg Michael Kerschensteiner (Germany), Bertrand Russell (England), and Maria Montessori (Italy) acclaimed for progressive education. Similarly, John Dewey and Jean Piaget remained important theorist of education in the 20th century.

Going through the history of education, it can be claimed that although the learning of the ancient and medieval education was of informal type the modern education system focused more on formal schooling. The educational psychologist paid relatively less attention towards non-formal and informal education. In the recent years,

especially after 1970s non-formal and informal education has also been taken into account as important forms of education.

Formal learning, Non-formal Learning and Informal Learning

The European Commission on lifelong learning (2001) defines the three types of learning as follows:

> *Formal learning* is typically provided by an education or training institute, structured and leading to certification. Formal learning is intentional from the learner's perspective.
>
> *Non-formal learning* is not provided by an education or training institution and typically it doesn't lead to certification. However, it is structured. Non-formal learning is intentional from learner's point of view.
>
> *Informal learning* results from daily life activities related to work, family or leisure. It is not structured. Typically, it doesn't lead to certification. Informal learning may be intentional but in most cases, it is non-intentional (or incidental/random) (UNESCO, 2005).

From the definition given above it can be said that the difference between formal, non-formal and informal learning is not absolute. It is a matter of degree. There may not be any demarcation line between them. Hence SEEQUEL (2004) has differentiated informal, non-formal and formal learning by putting them into the following learning continuum.

Table 2.1   Learning Continuum

Informal ⟷	Non-formal	⟷ Formal
Tacit knowledge base	←	Explicit knowledge base
Non-Documented	←	Documented
Unstructured	⟷	Structured
Accidental	⟷	Intentional
Active	⟷	Passive
Intrinsic	⟷	Extrinsic
Spontaneous	⟷	Planned
Self-evaluation	⟷	External-evaluation
Not formalized recognition	⟷	Agreed recognition
No credit transfer	←	Agreed credit transfer
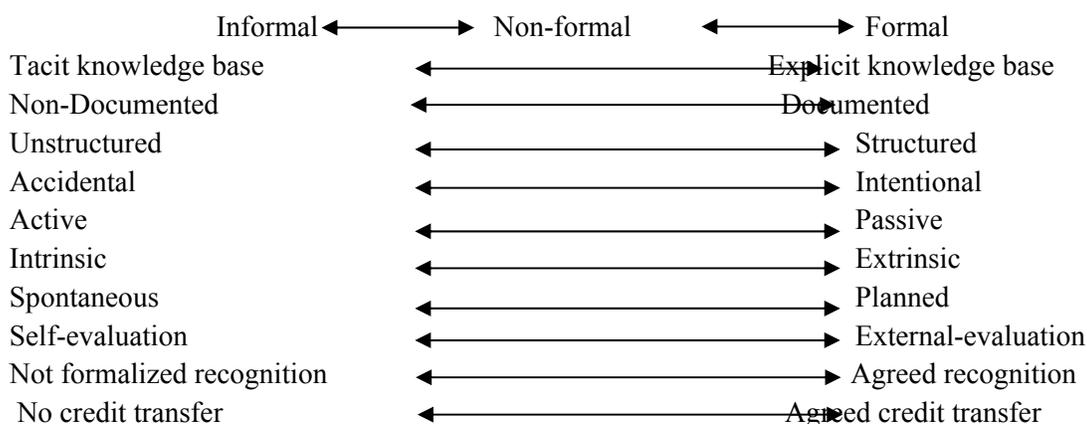
(SEEQUEL, 2004, p. 22)

The differences between formal, non-formal and informal learning can be seen through different perspectives. For example, in formal settings, the learning objectives assume that learning is homogeneous as defined by a discipline or as relating to the requirements of a job but in non-formal and informal settings the learning objectives assume that leaning is heterogeneous (Colardyn & Bjornavold, 2005). The content of the formal learning is specific to a particular discipline but the content of non-formal or informal learning is not specific as work and life experiences varies from person to person.

Normally, the conventional education system assumes that a good education can be obtained from formal schooling. Actually, this homogeneous type of education cannot be good for the diverse society. What is to be considered good education remains a key and a changing issue, deeply related to context, culture, and ideology (Torres, 2001).

With the emergence of non-formal and informal learning as the valid process of learning the perceptions so far cultivated about learner, curriculum, and learning institutions have changed. At the center of attention is no longer the curriculum that

learners have to master but their abilities to organize them and to perceive and use their circumstances as learning opportunities (Tuschling & Engemann, 2006).

Non-formal and informal learning can be a best alternative for the ones who are not able to go to school or continue their education as desired. Many people aspire to acquire knowledge of different fields to make them adoptable for the postmodern era. Some people may have faced different hardships while learning in formal schools. We can find people who perceive their past formal background as a disastrous experience and they see themselves failed learners. We can find informal and non-formal learning situations in which quality and positive results depend on variables which are not predefined (SEEQUEL, 2004).

The scope of non-formal and informal learning can be seen in different layers of our society. The learning process takes place within an individual, in his family, community, and the geographical and cultural regions where s/he lives and conducts different activities. Community based learning plays a critical role in widening participation among people who are educationally, economically and socially disadvantaged (SEEQUEL)

Learning comes from individual and group activities and interests. An individual has a dual role as far as the process of educating people in the society is concerned. He/she is both a learner and a teacher. He/she teaches himself/herself and others who are the member of his/her group. Thus learning and education shouldn't be viewed as a phenomenon that takes place only in formal setting; rather it should be taken as an aspect of living together. It is an arrangement where learner and educator merge into the same person (Tuschling & Engemann, 2006).

The tacit knowledge has a very important role in the lives of people. People may not be able to say how much knowledge they deserve but they can certainly solve the problems they encountered in their lives. For example, many people who have not seen the door of school and are illiterate (simply because they cannot read and write) are able to solve problems of their life as efficiently as the so-called literate ones do. It has become possible because the formers have tacit knowledge. The development of tacit knowledge comes from informal or non-formal learning.

There is value-based motivation in informal and non-formal learning because there is nothing to motivate externally. Learners are motivated in terms of the value of their learning outcomes that are instrumental for solving their life problems. This sort of learning is accessible for everyone irrespective of age, economic affluence, social status, etc.

There are different terms associated with NFL and IL. Some of the widely used terminologies are experiential learning, prior learning, accidental learning, etc. There may be some semantic nuances in the terms used in different parts of the world; nonetheless, all of them are the forms of learning that cannot be considered as formal. For example, the word experiential learning refers to the skills and competences that one gains from experiences that he/she accumulates in his/her life.

Relation of FL, NFL and IL with Lifelong Learning

The need of lifelong education is increasing rapidly. Due to the spread of globalization and explosion of knowledge, the world is getting more and more competitive. People are in need of acquiring knowledge more and more day-by-day to get successes in global

competition. Moreover, they need to update their existing knowledge in accordance with the changing scenario of global knowledge economy.

In the past formal education was regarded as the best and perhaps only means of getting success in the knowledge world. It is also true that formal education plays an important role. Traditional learning practice stereotypically involved the concentration of learning into formal education and training, undertaken while the learners are young. The resulting knowledge and skills were expected to suffice throughout adult life (ILO, 2004). But it has been inefficient and inadequate now. One of the reasons behind this may be that formal education covers very short period of time in our life. It starts from class Nursery and ends with university education. The limited knowledge confined within the framework of curriculum is negligible as per the demand of the dynamic world. Many people who are deprived of formal schooling and are unable to continue their studies after a few years are facing problem and are hopeless keeping themselves in the side of losers in the global competition. A best probable solution to this problem has been envisaged in the name of lifelong education or lifelong learning.

There may be many components of lifelong learning because of its widest scope in the field of learning and education. However, three main components are being taken as the most important ones. They are non-formal learning, informal learning and formal learning itself. The definition of lifelong learning covers all of them. For example, the EU definition of lifelong learning covers learning from pre-school to post retirement and includes formal, non-formal and informal learning. It includes all activities in life that improve knowledge, skills and competencies (Adam, 2007).

These three facets of learning (formal, non-formal and informal) are not exclusive to each other. They have been highly interrelated because of the growing demand of lifelong learning. Lifelong learning has to face the challenge of linking a variety of formal as well as informal and non-formal learning processes together (ECOTEC, 2005).

Formal learning becomes incomplete without informal and non-formal learning. For example, a child cannot attend formal schooling without learning a language. First language learning is certainly an outcome of informal learning. Therefore, formal learning, non-formal learning and informal learning are in a symbiotic relation. All of them collectively work as the constituents of lifelong learning. In a sense the three modes of learning orbit around the lifelong learning as planets do around the sun at the center. The core of this system is lifelong learning itself where formal, non-formal and informal learning are inevitable constituents of it. A proper balance among these three is very crucial for enhancing lifelong learning. The relation among them can be shown in the following chart.

Figure 1.1 Relation among formal, non-formal and informal learning

IFL

FL

LLL

NFL
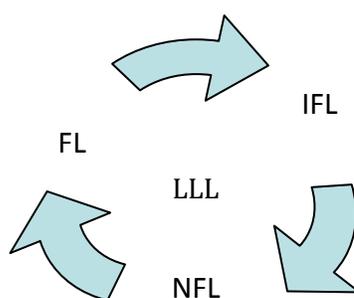
Unfortunately, the tradition of education system has not been able to create such harmonious and equilateral relationship among the three modes of learning that has impending impacts on the universal achievement of lifelong learning. Many countries in

the world have been attempting to strike an apt balance among the three modes of learning. But current educational system of our country has focused more on formal education by providing recognition, validation and certification. No systematic approaches have been made so far. It has become obligatory to validate non-formal and informal learning to complete the cycle of lifelong learning.

Lifelong learning has been a crucial part of academic discussion in recent years. It occupies a considerable amount of time in international symposiums and conferences. Various international organizations are involved directly or indirectly for the enhancement of lifelong learning in the world. Some of the major organizations include European Center for the Development of Vocational Training (CEDEFOP), European Commission (EC), Organization for Economic Cooperation and Development (OECD), United Nations Educational Scientific and Cultural Organization (UNESCO), UNESCO Institute of Lifelong Learning (UIL), International Labour Organization (ILO), Bologna Process (Adam, 2007), European Inventory on validation of non-formal and informal learning (ECOTEC), etc.

The documents of all of these organizations have acclaimed for the provision of lifelong learning through validation of non-formal and informal learning. International organization (e.g. G8, the ILO, OECD, UNESCO and the World Bank) and regional organizations (e.g. APEC, ASEAN, and the European Union) are developing policies and programs to make lifelong learning a reality (ILO, 2004). For example, the report of CEDEFOP documents that, in an increasing number of member states, validating non-formal and informal learning has become a permanent feature of education, training, employment, and learning policies (Colardyn & Bjornavold, 2005).

Validation of NFL and IL

There are different terminologies used interchangeably with the word validation. They are accreditation, certification, recognition, assessment, acknowledgement, equivalency test, identification etc. In deeper semantic level they may have some differences and give different connotations (Colardyn & Bjornavold). However, as far as non-formal and informal learning is concerned these terminologies can be taken as synonymous and validation has been used frequently because of its wider use and coverage. The terminological variations can be found in different countries. For example, Recognition of Prior Learning (RPL) is called Validation of Prior Learning (VPL) in the Netherlands and Prior Learning Assessment and Recognition (PLAR) in Canada (Adam, 2007).

So far as the notion of validation of non-formal and informal learning is concerned, validation can be defined as the process of identifying, assessing and recognizing a wider range of skills and competences which people develop through their lives and in different contexts, for example through education, work and leisure activities (Colardyn & Bjornavold).

The term validation has been associated mostly with the lifelong learning rather than formal learning because formal learning is always validated whereas validation of non-formal and informal learning is still in question. Validating non-formal and informal learning can be seen as a way of breaking down the isolation of formal education and training systems and of strengthening the links to working life and society (Colardyn & Bjornavold, 2005). The purpose of validation, as far as it relates to non-formal and informal learning, is to make visible the entire scope of knowledge and experience held by an individual. Undoubtedly, it is taken for granted that the knowledge acquired

through formal schooling is thought to be valid and awarded with certification and a proof for job market. The validation in non-formal and informal learning is done aiming to acknowledge the skills and learning outcomes without caring how it was acquired and when it was acquired. It neglects the authenticity of the source of the knowledge as well. When informal and non-formal learning outcomes are validated it opens up the ways forward for encouraging people to be involved in making learning a lifelong process. As long as learning, skills and competences acquired outside formal education and training remain invisible and poorly valued, the ambition of lifelong learning cannot be achieved (Colardyn & Bjornavold)

The importance of validation of non-formal and informal learning is ever widening because of its implication for the overall development of a society. It has multiple advantages for all the structure and institutions of society. "For an employer it is a question of human resource management, for individuals a question of having the full range of skills and competences valued and for society a question of making full use of existing knowledge and experiences" (Colardyn & Bjornavold, 2004, p. 70).

For the validation of the non-formal and informal learning there must be a good mechanism that decides what kind of skill, knowledge and experiences to be validated. The consistency and reliability is always a big challenge for any country adopting the validation approach. An approach expected for this is National Qualifications Framework (NQF) that is an obligatory precondition for the enhancement of lifelong learning by providing validation to non-formal and informal learning. "A precondition for lifelong learning is the existence of an overall qualification framework that covers any kind of learning" (UNESCO, 2005).

The validation of non-formal and informal learning was not reflected in traditional approaches of education until 1970. "Since the 1970s several changes have occurred leading to a rethinking of validation and certification procedures, stressing the importance of non-formal learning" (Bjornavold, CEDEFOP, 1997).

Due to the explosion of knowledge and growing need of acquiring it for living in the competitive world expansion and improvement of existing education structures and mechanisms are insufficient and ineffective (Torres, 2001). It is not only the problem of developing countries but also the developed countries. They are in the same limbo because the changed political, social and economic status due to globalization and liberalization has made people unable to cope with. For this there is a growing need of validating learning outcomes that people get through non-formal and informal means. Hitherto existing education system is in need of a paradigm shift.

A new paradigm of education system in which non-formal and informal education have a valid position needs political and social commitment of all concerned stakeholders of education. It "requires political and social commitment, strategic vision, holistic approach, and a focus on learning" (Bjornavold, CEDEFOP, 1997). Such commitment is likely to bring equity in the learning outcomes acquired in any place and at any time. The concept so far made on learning process and their inevitability for job market needs to be revitalized. It engenders a need for "revisiting the understanding of, and linkages between formal education, non-formal education and informal education" (Torres, 2001, p. 4).

Due to the expansion of mass media and Information and Communication Technology (ICT) the field of formal education has become more effective, efficient and convenient for both teachers and students. Now these technologies are not only confined

to formal education; rather they have been the integral part of non-formal and informal learning. These features have made formal and non-formal education as 'parallel education system' (Torres, 2001). Furthermore, self-learning or experiential learning has reached to a maximum level because of ICTs.

In this context "the outcomes of learning that occurs in non-formal and informal settings; at works, in voluntary organizations or at home must be properly acknowledged and valued" (Colardyn & Bjornavold, 2005).

Methods for Validating NFL and IL

One of the problems in validating non-formal and informal learning is to sort out the learning outcomes to be validated from the ones that are not likely to be validated. For this a suitable method of assessment has to be developed. According to the report of the Thematic Group of Leonardo da Vinchi program (2007), there are five approcaches of validation. They are tests and examination, declarative method, the portfolio method, observation, simulation and evidences extracted from works (Leonardo da Vinchi Thematic Group, 2007). Colardyn & Bjornavold (2005) have also discussed these methods which are being used in different parts of the world.

Traditional test and examination. In this method a candidate answers questions (oral or written) concerning a predefined domain of study. The assessor is a teacher, usually. Traditional tests can be divided into three forms: fixed response tests, closed response tests, and essay-forms.

In the first form candidates have to choose answer among fixed alternatives. The tests are generally in electronic form. The second form is closed response test in which candidates are expected to give description and reasons on the questions raised by an

assessor. And finally, the third form of traditional tests which is in essay form requires complex reasoning from the candidate and ability to apply knowledge to a particular question. The examples of traditional methods are found in the countries like Germany and France.

Declarative method. In this method the candidates declare (orally and written) that his or her knowledge and skill experience corresponds to a particular set of requirements specified in standards. This method is thought to be relevant to enterprises. Examples of this method can be found in France, Germany, the Netherlands and Norway.

Methods based on observation. In this type of method certain strict and precisely defined rules and methods are followed. An assessor (third party) observes a candidate *in situ* and judges whether he or she applies the knowledge, skills and competences described in a standard (Colardyn & Bjornavold, 2005) form. This method is being implemented in the Netherlands, in Belgium and the UK for the recruitment of teachers.

Simulation. In this method "candidates are placed in a context that present all the characteristics of real work (or other) situation and are then able to demonstrate their competencies" (Colardyn & Bjornavold, 2004, p. 82). The example of simulation method is found in France.

Evidence by work practice. According to this method, the candidate collects evidence of learning outcomes related to work situation, voluntary activities, family or other settings. The example of this method is found in the Netherlands where competence of shop assistant in wrapping up packages is tested.

An Official Bologna Process Seminar was held in Riga, Lativa on 24th to 26th January, 2007. It discussed the Accreditation of Prior Certified Learning (APCL),

Accreditation of Prior Experiential Learning (APEL), European Qualification Framework (EQF) and Work Based Learning (WBL). The seminar discussed some of the tools, techniques, and approaches applicable in the process of evaluating experiential learning that vary country to country. They are written examination or assignment without attending the course; creating a portfolio on the basis of learning that contains skills, achievement, knowledge and experience; submitting a project that encapsulates and demonstrates the prior learning claimed; Personal Development Plan (PDP) including previous learning experiences; and interview (Adam, 2007).

Authority for Validating NFL and IL

The process of validation is a systematic procedure. A good mechanism commensurate with the existing educational system of the particular country has to be developed. One of the basic constituents of such process is the declaration of an authority for validating non-formal and informal learning. Validation of formal learning is provided by the controller of examinations under the ministry of education in almost all the countries in the world. There are some countries where validation of non-formal and informal learning is carried out by the government organization. "In most countries it is done by nationally recognized qualification, recognized by the state through the ministries of education" (Bjornavold, CEDEFOP, 1997) but there is no consistency. Recognition of skills is typically provided by public authorities, educational institutions, professional bodies, or through collective bargaining (Colardyn, 1994).

The research carried out by the UNESCO in 2005 on 'Recognition, validation and certification of informal and non-formal learning' found different agencies involved in validation in different countries. For example, in Australia government bodies audit the

training organizations, in Sweden the responsibility of validation is shared between the education system and the labor market, in Macedonia there is a predominance of public authorities and government where formal education providers are the main agents for validating non-formal and informal learning.

The research found that the country doing best practice of validation is the Netherlands. Validation was started there in 1990s. In the Netherlands, if a person's competences meet the qualification structure, he or she is able to work on a job in the educational sector directly (UNESCO, 2005). Erkenning Verworven Competenities (EVC) is the term used to refer to Recognition of Acquired Skills in the Netherlands. Ministry of Education doesn't involve directly in validation. But several policy outlines have been made, but since the beginning of 2001, most responsibility has been placed in the hand of EVC knowledge centers (UNESCO).

Advantages of Validating NFL and IL

Validation of non-formal and informal learning may have some difficulties because of the nature of the skill and competences acquired in different contexts. A lack of transparency and coherence in the system is also regarded as a major obstacle to lifelong learning (ILO, 2004). Despite such difficulties, countries around the world are trying their level best to validate NFL and IL because of its role in enhancing lifelong learning. Validation is supposed to be beneficial for individual, enterprise and society.

> For individual the awarding of credit to non-formal learning may ease entrance into the formal training system and improve their labor market positions. For enterprise, awarding credit to non-formal learning may be of importance in order to increase their potential for human resource management. For societies as a

whole, awarding credit may help to simplify the transfer of skills between

different spheres (education, work, private), etc. (Bjornavold, CEDEFOP, 1997).

The five benefits of Recognition, Validation and Certification (RVC) of informal

and non-formal learning identified by the UNESCO (2005) are as follows.

Entrance into formal systems for further education or training. The outcome of

validation can be taken as allowing learners from non-formal and informal to enroll in

formal education system. The countries getting this benefit are Iceland, Swiss, Maldives,

New Zealand, Palestine, Rwanda, France and Mexico. For example, in Palestine the

objective of validation is not to certify prior learning but to recognize and certify the non-

formal course of the transfer to a further stage and integration into the formal system.

Similarly, Switzerland adopts validation to eliminate discrimination against people who

gain competences non-formally and informally (UNESCO, 2005).

Improving learners' employability in the labor market. Obviously, the people who

are deprived of formal education but have learned skills predominantly in workplaces are

often disadvantaged in securing employment. If their skills and previous experiences are

acknowledged and accredited their career prospects will increase. The countries having

this benefit are Norway, Benin, Malawi, Australia, The Netherlands, Palestine, France

and Iceland. For example in Norway the system has helped migrants and immigrants to

be more attractive for the labor market and create a demand for them in labor market.

Certification of prior learning for enterprises. Validation of skills and

experiences will help to increase the enterprises' potential for effective human resource

management. Lifelong learning passports can be used for making the competencies of

their staffs visible. UNESCO (2005) found only one country i.e. St. Lucia getting this type of benefit.

Transfer of skills. The system of validation would help to transfer the skills acquired from different fields. System of identifying, validating, and recognizing prior learning and non-formal learning can be viewed as tools for improving the transparency and transfer of skills (Bjornavold, CEDEFOP, 1997).

People learn different things at different spheres of life such as at educational institutions, work places and home. It is agreed that an important part of all learning takes place in the work place, at home or in leisure activities. The learning of these types has always been and still is indispensable to any individual, enterprise and society (Bjornavold, CEDEFOP).

It makes them visible for the learners themselves as well as for the future employers. The European countries including Germany are getting this type of benefit.

Enhancing universal basic education. In the globalized world the validation of non-formal and informal learning would help to achieve universal basic education because it brings flexibalization in existing formal and non-formal education system. The countries getting this benefit are Bhutan, Togo, Bangladesh, Egypt and Mexico.

Validation of NFL and IL in Nepal

In the ancient period (900 BC – 880 AD) and medieval period (880 to 1768 AD) of Nepal education was almost non-formal and informal (Panta, 2006). It was based on religion and limited to generational teaching. The formal schooling was started only in the modern period (1768 AD onward). The first Rana Prime minister set up a school as a beginning of formal education. Under Rana rule (between 1846 and 1951), only the

upper class had access to education. During the final part of Rana period general people were also allowed to get education but the mass schooling was started after the abdication of the last hereditary Rana prime minister in 1951.

Since then different plans and policies came into practice to systematize the education system of Nepal. Some of the major achievements are Nepal National Education Planning Commission (NNEPC, 1956), All Round National Education Committee (ARNEC, 1960), Nepal Education System Plan (NESP, 1971 to 1975), National Education Commission (NEC, 1990). NEC was formed after the restoration of democracy ending the single party rule in Nepal.

The historic mass movement of 2006 has brought a new phase in the history of Nepal. The country has become a republican state. Principally, it is expected that the country would be more inclusive where there would be the presence of all castes and creeds in the policy level. The inclusion of this kind is expected to bring accountability where all caste, their culture, language and skills have to be accounted equally. In this changed context, the entire hitherto existing educational structure has to be transformed as per the aspiration of the people. Without educational reform the objective of all these endeavors cannot be accomplished. One of the most important factors for this could be the commencement of the identification, validation and accreditation of skills, knowledge, and experiences of the people so far neglected by the ruling class of Nepalese society.

Nepal, from the very beginning of its history, is a multiethnic, multicultural and multilingual country. It is adorned by several castes and creeds with unique cultural heritage and philosophical wisdom. Nearly one hundred indigenous nationalities (known

as Janajatis) spread all over Nepal. With distinct language, religion, customs, folklore, culture, knowledge, ancient territory, 59 indigenous nationalities are legally recognized and have formed Nepal Federation of Indigenous Nationalities (NEFIN) as an umbrella organization (Sherpa, 2005).

This diversity present in Nepali landscape is a reliable proof to claim that Nepal is one of the richest countries in indigenous knowledge in the world. Undoubtedly, indigenous societies bear dynamic ancient epistemology, wisdom, knowledge, skills, technologies, indigenous or cosmological belief, folklore, customs, oral tradition associated with their nature, earth, biodiversity, and natural resources (Sherpa). These vast treasures of knowledge and wisdom are the sources of our national identities and fundamental infrastructure of our socioeconomic development. A bitter truth to mention here is that such knowledge has not been preserved. No significant attempt has been made to recognize and validate them.

An international workshop on traditional knowledge held in Panama City from September 21 to 23 in 2005 advocated for the recognition of the indigenous knowledge. The workshop reported that there is hundreds of indigenous knowledge in Nepalese traditional societies still in need of excavation through research. Some of the knowledge/skills listed in the report (Sherpa, 2005) of workshop include: pest management, weed control, *Singi Nawa* (traditional knowledge of the Himalayan people to conserve the forest and wildlife), water shade, using *Syosim* (a kind of medicine used to cure altitude sickness) for acclimatization, *Dhukuti* (small banking), *Kwanti* (mixed cereal soup), *Simrik* (Crimson as a medicine), Parma (exchange of labor), *Yarsagumba* (a

rare and unique herb that grows in the meadows above 3,500 meters), cross-bred animal,

dung (alternative fuel source), *Titepati* (a herb) etc.

Educational statistics of Nepal show that there is a large gap in the literacy rate

between different ethnic groups (UNESCO Kathmandu, 2006a; UIL, 2007). The literacy

rate of some caste such as Marwadis, Kayasthas, Brahmins, and Newar range from 60%

to 88% whereas some of the endangered Janajatis and Dalits such as Chepang, Chamar,

and Musahar range from 4 to 15%. When the indigenous knowledge of these Janajatis is

acknowledged they would be encouraged to foster their knowledge and skills. In recent

years, they are trying to get equitable rights responsibilities for state formation. Their

voice became louder in Peoples' Movement of 2006.

The need of validating non-formal and informal education has become more

pertinent in the aftermath of Peoples' Movement 2006. The demand of inclusion and

participatory approach has become visible. Inspired by the popular movement of 2006,

people voiced their aspiration for change in education system from dependency to

authority, from exclusion to inclusion, and from didactic to participatory (GON-MOES,

2006a).

Nepal's commitment for Education for All by 2015 has been revealed in different

conferences and seminars. Nepal has been the signatory of various conventions and

declarations. Nepal's progress in primary education over the past decade is noteworthy,

achieving 86.8% Net Enrollment Rate (NER) in 2005 from 67.5% in 1995. But such

progress has been overshadowed by low retention and completion rates (UNESCO,

2005). The estimation made by various statistician shows that the survival rate up to

grade 5 is 79% and completion of the primary education cycle is 55%. There are still

61% girls out of school in Nepal. The adult literacy rate (15 years +) is 48%. In this way the literacy rate is just 53.7%, according to official statistics up to 2005. Thus these figures clearly indicate that Nepal is not going to meet the EFA goal in the given time. The most challenging figure for this would be the low adult literacy (i.e. 48%) rate. Moreover, the women illiteracy that is 58% is a serious threat. UNESCO (2006 b) found that 1.4 million school age children and adolescents are out of school. The problem is compounded as remarkably high percentage of children dropouts every year in primary grades.

All of these factors directly or indirectly indicate for the special focus on non-formal and informal learning. If such learning outcomes through non-formal and informal means are recognized and validated the people who are unable to attend school and continue their education will be encouraged to learn more. The certification of this knowledge would certainly herald a better labor force useful for the socioeconomic development of the country.

Validation of non-formal and informal learning for lifelong learning and continuing education has been a burning educational issue these days in Nepal. Some of the documents at national level have kept this phenomenon as a prime concern. Some of them include The School Sector Reform (GON-MOES, September, 2007), Three Year Interim Education Plan (TYIEP, 2007-2010), Non-Formal Education Policy (NFEP, 2007), Open and Distance Learning Policy Framework (GON-MOES, 2006b), etc.

The SSR program has brought an issue of mainstreaming the students who have acquired knowledge through non-formal means into a formal system. "Non-formal students can be mainstreamed through school tests. Alternative and formal schooling will

be made compatible to permit students to complete their education through either system"
(GON-MOES, September, 2007, p. 15). It is further stated that "students who have
studied privately (self-study) will have to go through a qualifying test at the district level
in order to be eligible for the regional examination at grade 10. Graduates for regional
examinations will be qualified in two years of self-study for the grade-12 examinations"
(p. 35).

Similarly, The Three Year Interim Education Plan (2007-2010) of Government of
Nepal states "the provision of entering into formal education from non-formal and
vocational and technical education and vice versa will be made through equivalency
test." It further says that for bringing all [those who haven't gone through formal
schooling] into mainstream education system they will be provided with opportunities of
alternative, non-formal, open and distance education modes. For this the plan intends to
transform the educational structure in which students can enter to formal education from
non-formal education and vice versa. The Plan also aims to certify indigenous skills and
provide opportunity for higher education (GON-MOES, 2007a).

One of the policy actions stated in Non-Formal Education Policy (GON-MOES,
2007b) is providing education equivalent to formal school through open school system
and higher-level equivalent education to be provided through Open University. It further
says that the degree obtained by Open University will be made equivalent to the degree
of other universities. For the certification process the Policy says that a certified
education institute will assess, evaluate and provide equivalent certificate to the self-
learners on the basis of the learners' level of the study.

The Open and Distance Learning Policy Framework (2006) has highlighted the importance of lifelong learning and continuing education. It has also talked about the certification and preservation of vocational skills and indigenous knowledge of various tribal groups dwelling in different nook and corner of the country. It has indicated that one of the major challenges of the nation is to providing justice to those who have proven proficiency level acquired through independent learning by accrediting and certifying their skills and knowledge with value of qualification. It also envisages that a strong certification and accreditation mechanism will be set up by establishing a separate examination board to ensure the quality of open and distance learning programs after the establishment of Distance Education and Open Learning Council (DEOLC). It aims to use written, oral, portfolio and practical oriented evaluations system for the certification and accreditation purposes. In the purposed organization chart of DEOLC (GON-MOES, 2006b) the framework keeps 'Certification and Accreditation' division as one of the four constituent divisions of the Council.

Research Related to Validation in Nepal

Acharya and Koirala carried out a research entitled 'A comprehensive review of the practices of literacy and non-formal education in Nepal' in 2006. As suggested by the title the objective of the study was to review the good practices in the field of non-formal education in Nepal.

According to the research there were 23 out of 47 educational INGOs organizing literacy/NFE programs. OSP and FSP were the programs that directly linked with formal education. The NGOs and INGOs motivated the graduates of such programs to join formal schools that "established links between non-formal and formal education"

(Acharya & Koirala, 2006, p. 48). For example, Children Nepal, an NGO working in Pokhara, and Aasaman Nepal, a leading NGO in Dharan are providing programs that help NFE participants to join appropriate grades in formal schools. The researchers found some initiatives for enhancing lifelong learning and continuing education through five streams: literacy, conventional literacy, skills training, post literacy, and continuing education. However, these practices have not been able to yield good results due to the lack of consolidation and their institutional linkages with the formal education system. They suggested for the "simultaneous implementation of two approaches: consolidated implementation of all five streams and institutional linkages with formal education through equivalent certification" (Acharya & Koirala, 2006, p. 48).

Lamichhane and Wagley carried a research in 2008 entitled 'Consolidating national polices on equivalency towards accomplishing Universal Primary Education (UPE)' with the objectives of reviewing equivalency initiatives and research outcomes in other countries along with existing equivalency linkages of NFE to formal education structure and to recommend some operational modalities in the Nepali context.

The research found that "NFE can be looked upon as an alternative or complement to formal education" (Lamichhane & Wagley, 2006, p. 1). The NFE graduates want to go for further study hence their learning outcomes need to be accredited for the entry to formal education. The researchers have made claim that unless a system of bridging the alternative learning approaches to the formal schools system with the provision of legal recognition to the learning achievements from alternative learning strategies is institutionalized alternative approach to learning has little meaning.

They have made some significant recommendations on equivalency measures such as ASP and FSP outcomes to be made equivalent with Formal School outcomes, helping the graduates of ASP and FSP to go further based on their need, and screening the children on the basis of knowledge and skills learnt informally and non-formally to join them in appropriate grades because not all children need to join grade 1 (Lamichhane & Wagley, 2006).

A research was carried out in 2005 in collaboration with the UNESCO Bangkok and the UNESCO Kathmandu to explore the NFE policy for out of schoolchildren, especially the street children in four countries: Nepal, Indonesia, Pakistan and the Philippines. "The research found that there are no innovative, quality, and effective NFE programs, no clear equivalency and accreditation system, and no best practices of NFE programs" (Child Welfare Scheme, 2005). The research has strongly recommended that the policy should clearly cover these vital issues and act upon them accordingly.

In collaboration with the UNESCO Kathmandu, Non-Formal Education Center, Bhaktapur formulated 'A 10-Year Literacy/NFE Policy and Program Framework' in 2006. According to the report (UNESCO Kathmandu, 2006a) a number of programs in the name of literacy, post-literacy, and out-of-school programs were in practice in Nepal which can be taken as some of efforts to enhance lifelong learning. These programs were Adult Literacy Program (ALP), Adult Post-Literacy Program (APLP), Flexible Schooling Program (FSP), Women Literacy Program (WLP), School Outreach Program (SOP), Income Generating Program (IGM), and Community Learning Center (CLC).

Similarly, in collaboration with UNESCO-Kathmandu, Ministry of Education, Nepal formulated Nepal National Plan of Action in 2003 for the years 2001-2015 for the

implementation of EFA program. The Action Plan has taken some measures to avoid illiteracy that could be seen as green signals for Nepal's initiatives towards validation of non-formal and informal learning to enhance lifelong learning and continuing education. It focuses for establishing harmonious complementary relationship between formal and non-formal education system. Furthermore, it also plans for providing the system of accreditation and equivalency of non-formal education with formal education system to facilitate functional relationship and transferability of the students form one stream to another (MOE, Nepal, 2003) .

Challenges in Validating NFL and IL in Nepal

Though validation of non-formal and informal learning is an emerging issue and has been advocated by many scholars and educational administrators of many countries there are many challenges for its successful implementation. The educational system of developing and developed countries is certainly different. Thus, the challenges might be different. Moreover, each country has its own political, social, cultural and economic features. Therefore, it is difficult to figure out the possible challenges beforehand. For example, discussion on national and European approaches to validating non-formal and informal learning highlighted the following four challenges (Colardyn & Bjornavold, 2005, p. 18):

a. How to approach new roles and functions given to assessment and validation?

b. How to deal with complex questions of reliability, reflecting the diversity of learning contexts and experiences encountered?

c. How to deal with complex questions of validity, taking into account the tacit and highly contextual character of non-formal and informal learning?

d. How to manage the issues of standards setting?

Beside these challenges, there may be other things to be considered in the county like Nepal. Our country, which was developed in the culture of caste discrimination, religious discrimination, gender discrimination and many more, should be much more cautious while implementing the policy of validation. The indigenous skills, knowledge and competences that were neglected so far have to be recognized. It may not be as easy as one could think of because of our cultural norms and values. For example, the indigenous skill of a Brahmin in performing religious rituals and the skill of a cobbler (*Sarki*) in mending shoes may fall in the same category where they are assessed in terms of quality not caste. So the notion of cultural acceptance carries a big challenge.

Next challenge for our country will be the development of National Qualifications Framework. The skill and competences that are tacit and covert are really difficult to make visible and provide accreditation. The lack of association and recognition among educational institutions including CTEVT and other regular schools and colleges will be another challenge.

Next challenge could be the types of competences to be acknowledged. Colardyn and Bjornavold, 2005 have identified the following critical questions while validating non-formal and informal learning. They are equally applicable in the context of Nepal.

a. Which competence should be certified at national level? And which should not?

b. How should standards for non-formal and informal learning be defined?

c. Who should decide on standards and what interests are to be involved in these processes?

d. When do assessments enter into the personal domain where ethical

considerations ought to retain from further instruction?

Developing NQF for Validating NFL and IL

Every country has a qualification or education system at national or federal level. People

may think that national education system is similar to National Qualifications

Framework. Warquin (2007) makes it clear that there is a fundamental difference

between these interrelated terminologies.

A qualification framework can be seen as one of the components of a

qualification system. All countries have national qualification system in the sense that

they all award qualifications, but not all have a National Qualifications Framework. In

short, it is a classifier that shows how existing qualifications relate to one another. It also

shows where new qualifications would fit (Werquin, 2007, p. 466).

National Qualifications Framework (NQF) has been a challenging issue for many

countries. The developed western countries have gone a little further by giving legitimacy

to it. The developing countries are trying to draft it so as to make the ambition of lifelong

learning possible. NQF have been considered as obligatory technical tools because the

descriptors used in them cover complete range of learning outcomes. It covers the

knowledge, skills and experiences accumulated in work places, training institutions,

academic and vocational sectors. The validation or recognition of non-formal and

informal learning as a fundamental process of lifelong learning strongly believes that all

individuals irrespective of their age can learn everywhere. The skills and knowledge are

included in NQF.

The status of NQF in different countries in the world is not same. The research of UNESCO, 2005 put the countries into different divisions. They are as follows:

Category 1: Countries with legally based framework. There are 12 countries in this category. They are Korea, Finland, France, Australia, Austria, the Netherlands, Iceland, New Zealand, Benin, the Maldives, the Philippines and Ecuador. Among them some member countries such as Austria and Korea have highlighted the importance of enabling access to the formal system.

Category 2: Countries without a national qualifications framework but with certification activities that follow the formal national curricula. There are 7 countries in this category. They are St. Lucia, Czech Republic, South Africa, Egypt, Togo, Oman, and Rwanda.

Category 3: Countries without a framework. There are 8 countries in this category. They are Macedonia, Poland, Latvia, Kenya, Madagascar, Trinidad and Tobago, Palestine, and Germany.

Nepal hasn't developed qualification framework so far. But when the policy of validation has to be implemented NQF becomes obligatory. In this research, I have discussed about it with my research participants and discussed in detail in the final part of the dissertation.

Section 2: Review of International Practices on Validation of NFL and IL

Increased international cooperation and competition have led to a new appreciation of the importance of developing lifelong education. The ultimate goal (although nowhere achieved so far) is to give each individual the motivation, the financial means and the physical access to learning at any time in his or her life, so that he or she can develop

skills, upgrade or learn new skills for work or for his/her own satisfaction and personal development (ILO, 2004). In this context validation and certification have assumed greater significance, including the validation of non-formal and informal skills (Bjornavold, CEDEFOP, 1997).

There are a number of national and international organizations advocating validation of non-formal and informal learning. Some of them are European Center for the Development of Vocational Training (CEDEFOP), European Union (EU), European Commission (EC), Organization for Economic Co-operation and Development (OECD), United Nations Educational Scientific and Cultural Organization (UNESCO), the UNESCO Institute of Lifelong Learning (UIL), International Labor Organization (ILO), Bologna Process, ECOTEC etc.

Many countries have adopted the process of validation of non-formal and informal learning. Some of the most important initiatives and innovation during 1990s identified by Bjornavold (1997) include examples from Australia, Finland, France, Germany, Ireland, Japan and the United Kingdom.

UNESCO (2005) carried out a research on 'Recognition, Validation and Certification [RVC] of informal and non-formal learning' in 36 countries. It identified that Organization for Economic Cooperation and Development (OECD) had been carrying out research on the status of RVC in European countries. Similarly, International Labor Organization (ILO) is doing so in the developing countries of the world. The research found out that around 20 countries of the world have legally based national framework prepared for RVC of non-formal and informal learning. They are Korea, Finland, France, Australia, Austria, Iceland, New Zealand, Benin, the Maldives, the

Philippines, Netherlands, Ecuador, St. Lucia, Czech Republic, South Africa, Egypt, Togo, Oman, and Rwanda.

The effect of globalization has also been in the validation of non-formal and informal learning. This has now been an international agenda. The European Union has been working to bring consistency in validation procedures in all of its member states. A set of common European principles for validating non-formal and informal learning was agreed by 25 EU education and training ministers in May 2004 (Colardyn & Bjornavold, 2005). However, all the countries are not able to develop the system equally well. Some of the European countries are on the stage of experimentation regarding the validation of non-formal and informal learning. Some are still uncertain on the matter (Colardyn & Bjornavold)

The agenda of validation have taken considerable space in international conventions and conferences. For example, the Copenhagen Declaration (November 2002) and the Council Resolution (December 2002 a) acknowledged that priority should be given to developing a set of common principles on validating non-formal and informal learning (Colardyn & Bjornavold). Some of the practices in different countries of the world were reviewed and short descriptions of them are given below.

Asia

Different researches have shown that validation of non-formal and informal learning is less practiced phenomenon in Asian countries than the countries of other continents. In all Asian societies, formal educations is considered the primary and most important means of education whereas in many cases, non-formal education is not considered as education at all (Anonuevo, 2001). Non-formal education has been given equal status to

some extent in some of the Asian countries such as South Korea, the Philippines, Thailand, China, India, etc.

The UNESCO Bangkok carried out a research entitled 'Equivalency Programs (EPs) for Promoting Lifelong Learning' in 2006. The research found that some of the countries in Asia such as India, Indonesia, the Philippines, and Thailand, have considerable experiences in designing and implementing Equivalency Programs. It also found that some of the countries such as Bangladesh, Cambodia, China, Lao PDR, Myanmar and Mongolia were in the initial stages of developing Equivalency Programs (UNESCO Bangkok, 2006).

India. UNESCO Asia and Pacific Regional Bureau for Education carried out a research in 2006 to explore the equivalency practices in Asia-Pacific Region. According to the report The National Institute of Open Schooling (NIOs) offers "the Open and Basic Education (OBE) program as an equivalency program for primary and upper primary levels through open and distance learning methodology" (UNESCO Bangkok, 2006, p. 8) in India. The OBE program has three levels: Level A, Level B and Level C that are equivalent to formal school classes 3, 5 and 8 respectively. The program targets disadvantaged groups such as women, scheduled castes, scheduled tribes, daily wage earners, etc.

The OBE program follows the curriculum developed by NIOs, which is competency based where some key competencies have been identified. A learner has to acquire proficiency in these competencies in order "to qualify for a certificate" (UNESCO Bangkok, 2006, p. 8). The Continuing Education Centers (CECs) are the study centers of OBE program. The national, state and district level government and non-

government organizations implement the equivalency programs. There is flexibility for learners so that they can "take the final examination whenever they are prepared for it (UNESCO Bangkok, 2006, p. 9). The products of this program are ensured for employment opportunity as the Ministry of Human Resource Development, Government of India has recognized certificates obtained from OBE (UNESCO Bangkok, 2006).

The Philippines. In the Philippines, the NFE Accreditation and Equivalency (A & E) system carries out the work of validating non-formal and informal learning. The NFE Accreditation & Equivalency system "envisions the development of a society where people continue to learn on their own throughout their lives" (UNESCO Bangkok, 2006, p. 14). According to the report UNESCO Bangkok (2006) the equivalency programs are delivered mainly through service providers who are contracted by the Department of Education including NGOs, government organizations such as colleges and universities, and umbrella organizations with national or regional networks that have qualified affiliate members in the communities.

In the Philippines "the Philippine Association of State Universities and Colleges (PASUC) recognize NFE A&E secondary level passes as eligible candidates to join colleges and universities" (Lamichhane & Wagley, 2006, p. 8). The certificates obtained through NFE A&E system are recognized by the Civil Service Commission and they are as valid as elementary and secondary certificates for permanent appointment to government positions. A non-formal and informal learner has to take an Educational Placement Test to get accreditation and equivalency (Lamichhane & Wagley, 2006).

Thailand. A kind of equivalency program was started in Thailand during 1940s. Learners can get primary, lower secondary and upper secondary degrees non-formally.

The Office of the Non-Formal Education Commission (ONFEC) cooperates with the Department of Curriculum and Instruction and General Education to operate the equivalency program for people who are not able to go through formal schooling. "The learners can select from three types of study methods: distance learning, classroom learning and self-study. The credits earned in one type of learning can be transferred to the others" (UNESCO Bangkok, 2006, p. 20).

The Thai government has one of the most explicit pronouncements about the importance of informal learning in the perspective of lifelong learning. People are provided with informal learning opportunities by making some institutional arrangement such as libraries, museums, science and technology centers, community learning centers, agricultural offices, health offices, cultural leaning centers, etc. (Anonuevo, 2001). Though informal education is the least subsidized the authorities have realized that in the age of information technology people, both young and old, are spending much time watching television, reading newspapers, listening to radio, etc. that help to enhance informal learning.

Anonuevo (2001), a researcher of UNESCO, reported that the challenge ahead is to firmly establish the interconnection of informal education with formal and non-formal education by considering how the former could complement and strengthen existing learning opportunities.

Indonesia. According to Sukarso (2001), the Director-General of Out of School Education and Youth program of Indonesia, "an equivalency program has been developed to support basic education at the out of school channel" (Sukarso, 2001, p. 115). There are three programs: Package A; Package B; and Package C. Package A is

equal to six years of primary education, Package B is equal to three years of junior secondary school and Package C is equal to three years of senior secondary school (UNESCO Bangkok, 2006). After the completion of these three packages "a national examination is held to ensure quality control and to officially recognize those who have completed equivalency programs" (UNESCO Bangkok, 2006, p. 11). About 89.7% of out-of-school children participated till 1998 and got degree equivalent to Basic Education that made them eligible to pursue Lower Secondary School. The Package B program could facilitate about 90% of the children of such type.

Africa

The research of UNESCO carried out in 2005 to find the status of recognition, validation, and certification of non-formal and informal learning found that national frameworks for recognition, validation and accreditation have been developed and elaborated by several countries in the North Africa, many countries in the South Africa such as Central African Republic, Malawi, Egypt, Togo, and Oman lack this capacity and still have a long way to go. The synthesizer of the report Madhu Sigh reported that some validation strategies and mechanisms are existent, but they are mostly erratic. Many countries like the Central African Republic lack the basic parameters relating to validation of non-formal and informal learning. For example, in Malawi, formal teaching institutions work for the validation of competencies and knowledge acquired non-formally or informally. As these institutions follow formal guidelines for appraisal, learning elements, which are not taken into account by the national curricula, do not receive recognition (UNESCO, 2005).

 South Africa. The concept of RPL has been viewed as "effective means of redressing inequalities and making societies more inclusive" (UIL, 2007, p. 31). South

Africa has adopted this strategy to broaden the social base of universities and to promote

access to higher education for non-traditional student and adults. University of Western

Cape, one of the leading universities in South Africa, has introduced a Portfolio

Development Course. It is a "non-formal education program through which learners are

helped to present their informal and non-formal learning in order to gain access to the

university's formal courses" (UIL, 2007, p. 31). The UIL Annual Report writes that this

system has presented a genuine synergy between non-formal, informal and formal

education by meditation the experiential learning of an individual.

Uganda. Association for the Development of Education in Africa (ADEA, 2008)

reported that Uganda is in the process of establishing a Uganda Vocational Qualifications

Framework.   The programs and schemes towards recognition of non-formal and

informal learning considered as "stepping-stones towards establishing national

qualifications frameworks" (p. 15).

Uganda has started a program called Basic Education in Urban Poverty Areas

(BEUPA), basically, to empower out-of-school children and adolescents within 9 to 18

age groups. It has provided opportunities to the underprivileged children to re-enter into

formal education after the completion of BEUPA curriculum which is the condensed

form of regular primary school curriculum (Lamichhane & Wagley, 2006).

Madagascar. Madagascar has been providing some non-formal education

programs; however "there is no legislation, which could institutionalize a national system

of recognition, validation and accreditation. Social competencies and soft skills are

recognized, but often not certified (UNESCO, 2005).

The country has launched Accelerated Compressed Learning for Malagasy

Adolescents (ASAMA). This program is providing opportunities to dropout children to

re-enter formal schooling on condition that the concerned individual agrees to take the

examination so as to ascertain his/her qualification that helps to determine what level of

primary schooling is appropriate for his/her re-entry (Lamichhane & Wagley, 2006).

Madagascar. In Namibia there is a college named Namibian College for Open

Learning (NAMCOL) that has developed a policy framework to provide guidelines for

the use of Recognition of Prior Learning (RPL) to enable learners to gain entry to courses

offered by the college, or exemption from some course requirements, and to ensure that

consistent practices and standards are applied (UIL, 2007).

North America

In many of the countries the concept of validating non-formal and informal learning is

known as Accreditation of Prior Experiential Learning or APEL including North

America. The story of the current version of APEL begins in the USA in the early 1970s.

The body responsible of APEL was called "Cooperative Assessment of Experiential

Learning (CAEL), a 1974 to 1977 project chaired by Dr. Morris Keeton" (Evans, 2006, p.

17).

Canada. The effect of CAEL project of the US was also in Canada. About the

time that interest in APEL had quickened in the UK, in the mid 1980s in "Canada the

province of Quebec began to develop schemes of PLA drawing on CAEL's expertise and

support" (Evans, 2006). Now this system is operational in the name of Prior Learning

Assessment and Recognition (PLAR) in all provinces of Canada supported variously by

the Canadian Association of Prior Learning Assessment (APLA), a voluntary NGO of the country.

Europe

History reveals that Accreditation of Prior Experiential Learning (APEL) was an interest of discussion in today's developed countries such as the UK and the USA in the past. Evans (2006) claims that "APEL has aroused interest throughout the countries of the continental European Union, as it did earlier in the USA and the UK" (p. 17).

The member states of European Union at the end of 20th century came to realize that the lifelong learning agenda had to be discussed extensively at not only national level but also at continental level. Consequently, they started making necessary amendments at policy documents. Actually, "this began with the Lisbon Declaration of March 2000, when the Heads of State and Governments set out the strategic goal that the European Union should become the world's most competitive knowledge-based economy by 2010" (Adam, 2007).

Since then EU member states have been working for exploring a common ground so as to develop a compatible mechanism for validating non-formal and informal learning. In 2002 thirty-one European Ministers of Education and Training called for common guiding principles for the validation of non-formal and informal learning with the aim of ensuring greater comparability between approaches in different countries and at different levels (European Union 2002 as cited in Adam, 2007).

The Europen Commission has also aimed to develop a European Qualification Framework (EQF) which is perceived as a "broader meta-framework that would subsume the Bologna higher education framework" (Adam, 2007). It is also expected that the

overarching framework would encompass all education from school education to doctoral level study in a true lifelong learning framework (Adam, 2007).

During the last 10-15 years, the whole group of European countries and those beyond Europe have implemented systems in higher education to recognise, evaluate and validate informal and non-formal (experiential) learning (Tererseviciene & Zuzeviciute, 2007). "As learning outcomes and competences are included in almost all the current mechanisms of harmonizing educational and qualification systems in the EU these serve as a starting point for setting standards for validation and recognition of non-formal and informal learning" (Tererseviciene & Zuzeviciute, 2007, p. 235). The EQF is expected to "facilitate the validation of non-formal and informal learning" (Qualifications and Curriculum Development Agency, 2009).

According to the website of European Union, the EU has postulated EQF consisting of 8 levels. Each level is defined by a set of descriptors indicating the learning outcomes relevant to qualifications at that level in any system, of qualification. The descriptors are divided into three groups: knowledge, skill and competence (European Communities, 2008). The first level of EQF consists of basic general knowledge and skills required to carry out simple tasks whereas the eighth level consists of the most advanced and specialized knowledge and skills. The EQF descriptors at levels 5 to 8 refer to the higher education descriptors agreed under the Bologna Process.

European University Association formulated a Charter on Lifelong Learning in 2008 in the form of commitment both to the universities and the government of EU member countries. Both of the parties are made committed to "develop systems to assess and recognize all forms of prior learning" (European University Association, 2008). The

charter is particularly important in the context of lifelong learning in the era of globalization in which knowledge is acquired in many different forms and places.

CEDEFOP conducted a research entitled 'Recognition and validation of non-formal and informal learning for VET teachers and trainers in the EU Member States' in 2007. It studied the practice of validating non-formal and informal learning outcomes of teachers in nine European countries. They were Belgium, Denmark, Ireland, France, Italy, Lithuania, Slovakia, Finland and the UK. 33 cases were taken from these countries for close analysis. The report (CEDEFOP, 2007) writes as,

The case studies illustrated diverse outcomes for recognizing non-formal and informal learning, including: appointment and promotion as a VET trainer, and accreditation via a national trainers register. In most cases, VET teachers' and trainers' knowledge, skills, and competence gained through non-formal and informal learning experiences were recognized as meeting in part, or even in full, the certification requirements for awarding a professional qualification (P. 9).

The report has provided many examples of practice showing the various ways of validating the non-formal and informal learning outcomes of the VET teachers of the nine countries. It has tried to establish working principles for the recognition and validation of non-formal and informal learning.

A CEDEFOP (2008) report entitled 'Validation of non-formal and informal learning in Europe: A snapshot 2007' reported that the countries in Europe can be divide into three types: high degree of implementation – countries where validation is a practical reality for individuals; medium level of development – countries where validation is emerging; and low level of activity – countries at initial development stages.

The countries with high level of implementation of validation include Belgium, Denmark, Estonia, Finland, France, Ireland, the Netherlands, Norway, Portugal, Slovenia, Romania, Spain and the UK. The countries with medium level of development in validation include Austria, the Czech Republic, Iceland, Italy, Germany, Hungary, Lithuania, Luxembourg, Malta, Poland and Sweden. And finally the countries with an initial level of development of validation include Bulgaria, Croatia, Cyprus, Greece, Latvia, Lichtenstein, the Slovak republic, and Turkey.

According to Kamp (2006) quite a few countries have begun to "establish systems for validation of non-formal and informal learning in the context of removing barriers to further learning" (p. 221). Different approaches of validation exist, but common factors critical to promoting lifelong learning include the opportunity for systematic identification of competencies however and whenever acquired. The practices of some of the countries are described below.

Norway. One of the fundamental aspects of validating non-formal and informal learning is Recognition of Prior Learning (RPL). The system of RPL was introduced in Norway after a trial phase in selected institutions to broaden access to higher education. According to the Annual Report (2007) of the UNESCO Institute of Lifelong Learning (UIL) people can get "access to higher education without sufficient formal education" (UIL, 2007, p. 31) in Norway. The legislation of colleges and universities have been amended to "allow adults above 25 years of age to have their non-formal and informal learning assessed in order to gain admission to specific courses" (p. 31).

The Netherlands. Advies, Hagens, Hout, and Kraaijvanger carried out a research in 2007 and prepared a report as a part of a research by OECD, into policy options for

non-formal and informal learning. According to the report the recognition of informally acquired skills was initiated during the early 1990s in the country. There is "a system of providing recognition for non-formal and informal learning of migrant population. Portfolio method is used as a tool. In the portfolio the candidates give information on their personal data, educational and training programs they have taken, paid and unpaid working experience, knowledge of language and computer experience" (Advies, Hagens, Hout, & Kraaijvanger, 2007, p. 9).

The program that provides recognition is called EVC in the Netherlands. The assessment centers of EVC programs can be found in regular education institutions. Basically they are MBO Schools, Agricultural Vocational Centers, HBO Institutions, etc. Many schools or training centers are united in the senior secondary vocational education (MBO) council and many higher education institutions are united in the higher education (HBO) council to fulfill the aim of EVC program. EVC seems to be a very useful in determining the eligibility of future students on the basis of other requirements that the formal education and training program in the secondary phase (Advies, Hagens, Hout, & Kraaijvanger, 2007).

The Netherland's EVC program has two fundamental aims: economic development and fighting social problems. Recognition of non-formal and informal learning is an instrument for solving inequalities in society. EVC can be a starting point for the integration of marginalized persons (Advies, Hagens, Hout, & Kraaijvanger, 2007).

The United Kingdom. The first exploration in APEL started in the UK that was based on the work of CAEL project of the US. CEDEFOP conducted a research entitled

'Recognition and validation of non-formal and informal learning for VET teachers and trainers in the EU Member States' to find the practices of validating the knowledge and skills acquired informally and non-formally by the Vocational Education and Training (VET). The research found that in the UK statutory recognition of vocational competences gained through experiential learning and assessed through on-the-job performance, was introduced in 1986. Awards, at different levels of achievement, are known as National Vocational Qualifications (NVQs) or Scottish National Vocational Qualifications (SNVQs) (CEDEFOP, 2007).

Ireland. NQF was launched in Ireland in 2003. The Framework doesn't espouse a particular philosophy of education and training, but embodies a vision for the recognition of learning. This is the vision based on an understanding of learning as a lifelong process. This vision requires the recognition of all learning activities throughout life with the aim of improving knowledge, skills and competences within a personal, civic, social, or employment related perspectives (National Framework of Qualifications, 2009). The NQF in Ireland is designed to provide recognition to the learning outcomes achieved through formal means, non-formal means and informal means equally well. Ireland has been the first European country to publicly indicate how its national qualifications levels relate to the European Qualifications Framework for Lifelong Learning (EQF) (European Commission, 2009).

France. In France one's competence obtained through non-formal and informal means can be validated through two procedures. The first one is giving an exceptional admission to higher education which is known as Validation des Acquis Professionals

(VAP) and the second is providing the partial or complete award of a degree which is called Validation des Acquis de Experience (VAE).

The VAP authorizes dispensatory access to all levels of further education on the basis of both personal and work experience for anyone over the age of 20 years who has been at least two years out of initial education and doesn't hold degree of normally required (Haeringer, 2006).

On the other hand, the VAE procedure creates a right to anyone who for at least 3 years has been engaged in paid, unpaid or voluntary employment to have their experience accredited and a corresponding official degree awarded to them taking into consideration their whole experience (Haeringer, 2006).

There are some outstanding achievements of VAP and VAE procedures of validation of non-formal and informal learning. Haeringer (2006) has cited the following two cases where Marie and Michel have been advantaged.

Marie, out of secondary school, entered university to obtain a Bachelor's degree. She left university during the first year to bring up her daughter and later began working in a company as an assistant. For ten years she was employed in various positions and gained additional experiences in the field of Human Resource Management. In order to be promoted, she went back to university and was accepted to start a Master's program – although she hadn't obtained a BA – thanks to the   recognition of her professional competence (p. 85).

Michel was awarded a BA in physics 30 years ago. He then worked for seven years in various ICT companies and reached a managing position. Michel easily

convinced the university VAE jury about the competences he had acquired during his career. He has therefore been awarded a Master's degree in ICT. With this new degree he plans to become a consultant (p. 85).

According to Haeringer (2006) 3165 applicants were awarded higher education degrees in 2004 through VAE procedure out of which 40% gained a full degree.

According to Evans (2006) the tool for measuring the competence and skill of non-formal and informal learners was portfolio. This method has a long history in France as it became the contemporary version of a practice, which was established as long ago as 1934 (Evans, 2006).

Denmark. In Denmark there is a provision for "recognition of prior learning according to the individual competence assessment programs (IKV) within the adult vocational training program" (The Ministry of Education -Denmark, 2008, p. 16). A legislative amendment in 2007 gave each individual the right to have their prior learning experiences validated in relation to adult education and continuing training (CEDEFOP, 2008). The IKV program has the aim of recognizing competences acquired in education and training, on the labour market or from spare time activities as the basis for composition of an individual training plan including one or several adult vocational training programs for the participant. The systems for validation of informal and non-formal learning stretch from general upper secondary to vocational, adult education and tertiary education (CEDEFOP, 2008).

UNESCO Institute of Lifelong Learning (UIL)

Much works have been done in the international level in the field of validating non-formal and informal learning. UIL has played an important role in the international

Recognition, Validation and Accreditation of Non-formal and Informal Learning (RVA) agenda since 2004. The work of UIL on this regard started when UNESCO's General Conference entrusted UIL for conducting and disseminating research and practice on Recognition Validation and Accreditation (RVA), on an international scale. (UIL, 2009).

UIL has made a systematic approach to share knowledge and experiences on validating non-formal and informal learning in different countries of the world. It has made an interagency group of experts which includes the organizations such as Association for the Development of Education in Africa (ADEA); European Union (EU), European Training Foundation (ETF); French National Commission for UNESCO; International Labor Organization (ILO); and Organization for Economic Cooperation and Development (OECD). For completion of this task UIL has launched the International Observatory on country approaches to the Recognition, Validation and Accreditation of informal and non-formal learning and experiences. The overall purpose of the UIL RVA program is to promote a society offering lifelong learning for all by emphasizing the importance of both formal and non-formal learning in achieving Education for All goals, and building bridges between formal, non-formal and informal learning (UIL, 2009).

Conceptual Framework of the Research

Figure 2.1   Conceptual framework of the research
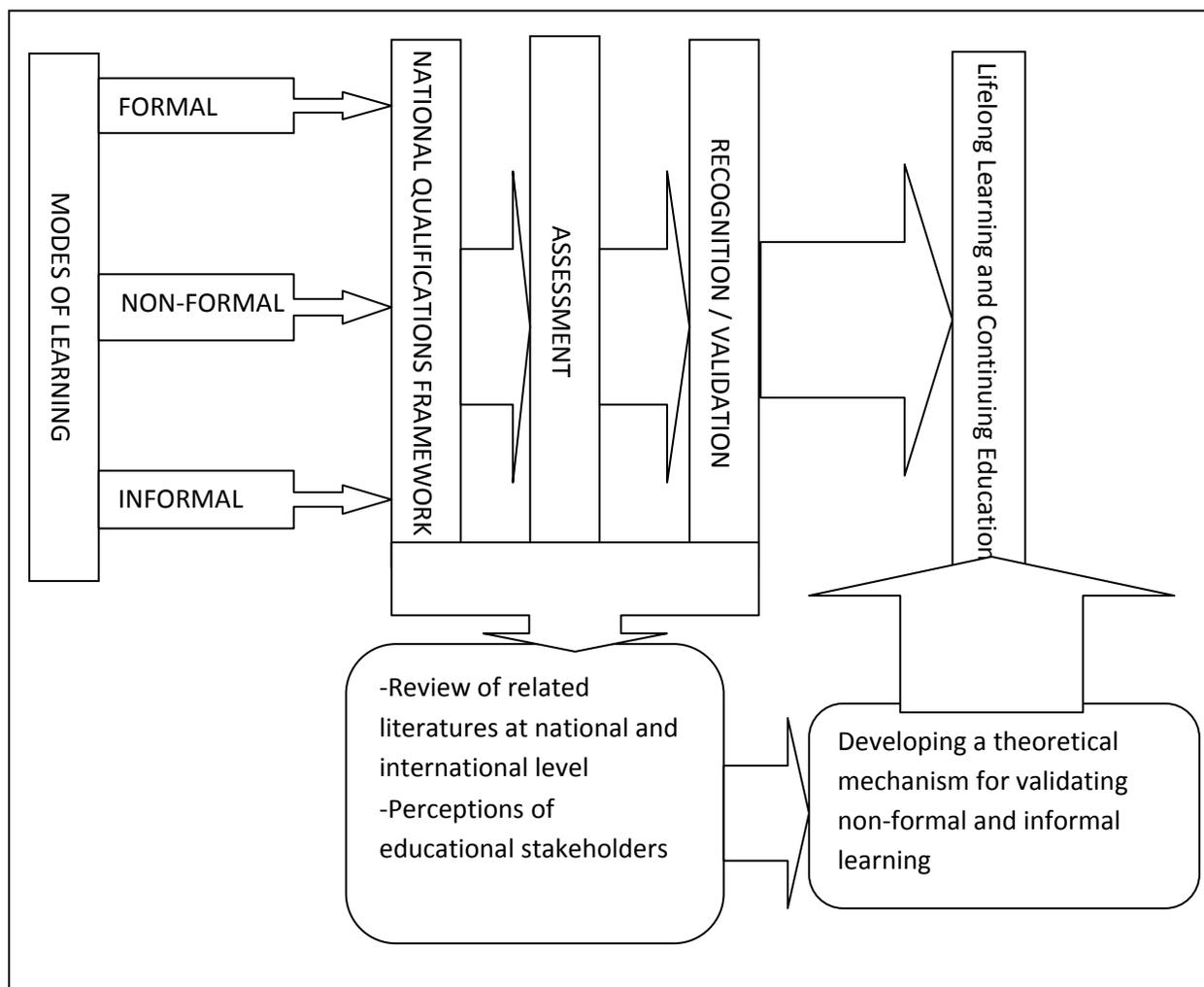
As shown above the conceptual framework of my research takes the three modes of

learning: Formal (FL), Non-Formal (NFL), and Informal (IL) as of equal importance.

The skills and knowledge that could be acquired from any of the modes should be

covered by the NQF. These skills and knowledge need to be assessed, recognized, and

validated equally. This type of validation would ensure for lifelong learning and

continuing education.

For finding the answers of my research questions I reviewed related literatures of national and international level. For primary data I took the perceptions of different educational stakeholders such as development activists, educational administrators, policy actors and university professors. For secondary data I reviewed the literatures related to validation of non-formal and informal learning to enhance lifelong learning. The finding would be developing a theoretical model at national level for validating non-formal and informal learning.

Chapter Summary

Several theories developed in the past to address the issue of human learning; however, almost all of them focused on formal learning. Diachronic overview of the phenomenon 'learning' provides a lot of evidences on the domination of informal learning in the past. But formal learning was able to keep its hegemonic status for a long time. Gradually, in the middle half of the 20th century the three modes of learning were perceived as complementary to each other.

There are no clear demarcations among formal, non-formal and informal learning, however, it can be claimed that formal learning is provided by an educational institution in a structured form and leads to certification; non-formal learning is less structured and doesn't lead to certification; and finally, informal learning results from daily life activities related to work, family and leisure and doesn't lead to certification.

The need of lifelong learning is increasing rapidly due to the spread of globalization, explosion of knowledge and burgeoning competition in the job market. To mitigate this need validation of non-formal and informal learning has been obligatory. Validation is the process of identifying, recognizing and assessing a wide range of skills

and competencies which people develop through their life activities. Different methods of validation have been practiced in the world by different types of authorities for validation.

Some progresses have been made in Nepal in the area of enhancing non-formal education, and some documents have shouted for the equivalency measures with formal learning. However, so far no concrete efforts have been made to recognize, accredit, and validate non-formal and informal learning. There are several challenges and opportunities of validation of in Nepal.

One of the preconditions for validation is the development of National Qualifications Framework (NQF). An NQF is a framework of qualifications that encompasses all types of learning outcomes and levels them according to the complexity in learning.

Several countries of the world have been working diligently for recognizing, accrediting, and validating non-formal and informal learning to enhance lifelong learning and continuing education. Some of the European countries have already developed and implemented NQF and the European Union has developed EQF to make the qualifications of member countries compatible and valid to each other. Besides these, several international organizations such as UIL, CEDEFOP, OECD, etc. are working for making this aim successful.

CHAPTER III

RESEARCH METHODOLOGY

This chapter discusses the philosophical, ontological, epistemological, axiological and methodological bases of my research. I have tried to review the literature of research method propounded by various scholars and present them in a comprehensive way. At the end of each base I have discussed why the particular philosophical and methodological orientations are important for this research.

As I have used mixed method approach, I have used pragmatism as a suitable paradigm for the research. As per this paradigm, survey and phenomenology research methods have been selected; each representing quantitative and qualitative facets of the mixed method approach respectively. And finally I have discussed questionnaire and interview as suitable data collection tools and techniques.

Research Paradigm

There are a lot of things to be discussed while talking about the methodology part of any research. No truth is indisputable. Same thing can be of different value according to the perspective that we use to see and analyze it. It is called knowledge claims in research. These claims might be called paradigms (Creswell, 2003, p. 6). Paradigms may be defined as the worldviews or belief systems that guide researchers (Guba & Lincoln, 1994, as cited in Tashakkori & Teddlie, 1998, p. 3).

Creswell (2003) discusses four schools of thought about knowledge claim: post-positivism, constructivism, advocacy/participatory, and pragmatism. The post-positivistic

position which comes after positivism asserts that absolute knowledge is one and it can be obtained if we follow systematic scientific inquiry. This paradigm accepts scientific method out of which quantitative research is driven. It is also linked with the concepts such as cause-effect relationship and reductionism. This doctrine believes that social observations should be treated as entities in much the same way that physical scientists treat physical phenomenon.

Constructivism, which is related to interpretivism, asserts that truth is a subjective entity. The researchers under this knowledge claim seek understanding of the world in which they live and work (Creswell, 2003, p. 8). It assumes that truth or true knowledge is within the people under investigation, not outside. The realities are many as per the people involved in interpretation. It is not appropriate to generalize one theory or reality because reality changes context to context. Trying to obtain such reality through the collection of numeric or quantitative data is not suitable. So in-depth understanding of the phenomenon is desirable. The philosophy of constructivism leads to the emergence of qualitative research.

The third knowledge claim is advocacy or participatory. This dogma starts when social science researcher come to realize that reality comes from the combined knowledge and experience of researcher and marginalized groups of people in society. "The research should contain an action agenda for reform that may change the lives of the participants, the institutions in which individuals work or live, and the researcher's life" (Creswell).

The last but not the least, knowledge claim is pragmatic knowledge claim. This claim comes from the assumption that problem is more important than methods. A

researcher can use any method for solving his/her problem or unraveling the answer of his/her research question. Mixture of two or more than two methods can be applied to understand the problem. Creswell (2003) writes,

> As a philosophical underpinning for mixed methods studies, Tashakkori and Teddlie (1998) and Patton (1990) convey the importance for focusing attention on the research problem in a social science research and then using pluralistic approaches to derive knowledge about the problem (p.12).

In this research I have drawn conclusion through the pragmatic knowledge claim that comes from the combination of two distinct paradigms: constructivism and positivism.

Ontology, Epistemology, Axiology and Methodology

As discussed above, philosophically, researchers have to make claims about what is knowledge, how we know it, what values go into it, and how we explore it systematically. The knowledge claims made about what is true knowledge is the ontology of the research. "Ontology that is concerned with 'being' is the starting point of all research" (Jalil, 2007). It deals with what constitutes or composes the truth. "Ontological assumptions are concerned with what we believe constitutes social reality" (Jalil, 2007).This assumption comes from the cosmology of the research. Cosmology is a broad doctrine that includes the types of knowledge claims under investigation. So ontology comes under cosmology in philosophical hierarchy of any research.

The philosophical foundation related to ontology is epistemology that deals with "how we know the knowledge" (Creswell, 2003, p. 6) or truth. It is concerned with the theory of knowledge and possible ways of gaining knowledge or social reality, whatever

it is understood to be" (Jalil, 2007). Hence, if ontology deals with the "nature of knowledge" epistemology deals with "means of generating knowledge" (Bazeley, 2002, p. 1). Similarly, axiology deals with the "role of values in inquiry" (Tashakkori & Teddlie, 1998, p. 10). Whether values and beliefs of researcher have to make influence in research or not depends on the paradigm we follow. So this foundation of research philosophy guides researcher to follow a particular methodology.

Under epistemology and axiology we, as researchers, try to find appropriate methodology. Methodology refers to general principles which underline how we investigate the social world and how we demonstrate that the knowledge generated is valid. Finally, the research method that includes tools and techniques of research refers to "the more practical issues of choosing an appropriate research design" (Tashakkori & Teddlie). Method is the level which practically applies in doing research for finding the answer of research questions.

The ontological, epistemological, axiological, and methodological orientations of my research come from the combination of these orientations of quantitative and qualitative paradigms that I have discussed in the succeeding pages of this chapter.

Paradigm War

Among these four knowledge claims or paradigms discussed above there are two major paradigms of social science research: positivist/empiricist and constructivist/phenomenological engendering quantitative approach and qualitative approach of research respectively.

Positivism (also called logical positivism) that dates back to the nineteenth century philosopher Auguste Comte (1798-1857) is a paradigm that bases its findings on

observable facts and purely scientific inquiry. Constructivism (that is also related to interpretivism or naturalism) that emerged against positivism is a paradigm that believes in subjective reality. Lincoln and Guba (1985, as cited in Tashakkori & Teddlie, 1998) describe several axioms on these rival paradigms as shown in the table below.

Table 3.1   Axioms of Positivism and Constructivism

Positivism	←	Constructivism
There is a single reality	*Ontology (nature of reality)*	There are multiple, constructed realities
The knower and the known are independent	*Epistemology (the relationship of the knower to the known)*	The knower and the known are inseparable
Inquiry is value free	*Axiology (role of values in inquiry)*	Inquiry is value-bound
Time and context free generalizations are possible	*Generalizations*	Time and context free generalizations are not possible
There are real causes that are temporally precedent to or simultaneous with effects	*Causal linkages*	It is impossible to distinguish causes from effects
Deductive - There is an emphasis on arguing from the general to the particular, or an	*Logic*	Inductive – There is emphasis on arguing from the particular to the general, or an emphasis

emphasis on priori hypothesis   on grounded theory

(or theory)

(Tashakkori & Teddlie, 1998)

As shown in the table these two paradigms of research are opposite in ontology, epistemology, axiology, generalizations, casual linkages and logic. There is a never-ending confrontation between the two, both trying to establish a superiority for finding the answer of a research question. These paradigm wars have been fought across several battlefields concerning "important conceptual issues, such as the nature of reality or the possibility of casual linkages" (Tashakkori & Teddlie, 1998, pp. 3-4). There have been severe dogmatic tussle. Both of the paradigms have been blamed for their weaknesses, however, both of them have been able to keep rivalry existence because of their strengths in working as pathfinders for social science researchers having interest in various fields.

Pragmatism or Mixed Method Paradigm

There have been several attempts to pacify the war between constructivism and positivism. With the growing polarization between the two a new dimension has emerged. The neo-paradigm is based on the assumption that it is not the paradigm the prime concern but the problem of a researcher. Questions of method are secondary to questions of paradigm (Guba and Lincoln, 1994, p. 105 as cited in Tashakkori & Teddlie, 1998, p. 21). Focusing the importance of research question over research philosophy Niglas (2004) quotes

It is the concrete problem or aim rather than the philosophical position which

determines the design (or overall strategy) of the study whereby depending on the

nature and the complexity of the problem, the design can be either qualitative or quantitative or a combination of both (Hammerley 1992, Bryman, 1988).

The paradigms, which once were thought as rivalry, have now come to stay together. Now the social science researchers have come to realize that they are not mutually exclusive and have the potential to complement each other (Niglas, 2004). They are free to utilize any of them as per the nature of research. Such theory of flexible approach is known as paradigm relativism. This notion is based on the pragmatic ground. The non-aligners but the advocates of both methods and research questions over methods are known as pragmatists. Hence from the battle of positivism and constructivism a new paradigm has emerged and it is known as pragmatism or mixed paradigm (Niglas).

Mixed methodologies have been advocated by many social science researchers. Tashakkori and Teddlie (2003a) discussed explicitly about the importance of mixed method design. They declared it as 'a third methodological movement' claiming that the movement would end the paradigm wars of earlier times. Flick (2006) quotes them as,

We purpose that a truly mixed approach methodology (a) would incorporate multiple approaches in all stages of the study (i.e. problem identification, data collection, data analysis, and final inferences) and (b) would include a transformation of the data and their analysis through another approach (Tashakkori and Teddlie 2003b, p. ix).

Tashakkori and Teddlie (1998) claim mixed method as the best paradigm of research because of a number of reasons. First of all it gives a paradigm that philosophically embraces the use of mixed model designs. Secondly, it eschews the use

of metaphysical concepts that has caused much endless discussion and debate. Finally, it presents a very practical and applied research philosophy.

Pragmatism rejects either-or view on constructivism and positivism, rather embraces both points of view. It believes that researchers may be both objective and subjective in epistemological orientation over the course of studying research question.

On the axiological ground pragmatists believe that inquiry is value free. They believe that values play a large role in conducting research and drawing conclusions from their studies. Cherryholmes (1992, as cited in Tashakkori & Teddlie, 1998) writes "pragmatic research is driven by anticipated consequences. Pragmatic choices about what to research and how to go about it are conditioned by where we want to go in the broadest senses".

Ontologically, a pragmatist believes that there is an external world independent of our minds. On the other hand, pragmatists deny that 'truth' can be determined once and for all. Howe (1988) says,

> 'truth is normative concept like 'good' and 'truth is what works' is best seen not as a theory or definition, but as the pragmatists' attempt to say something interesting about the nature of truth to suggest, in particular, that knowledge claims cannot be totally abstracted from contingent beliefs, interests and projects' (pp. 14-15, cited in Tashakkori & Teddlie, 1998).

The axioms related to pragmatism can be as follows:

Table 3.2   Axioms of Pragmatism

Axioms   Pragmatism

Ontology (nature of reality)	Accept external realities. Choose explanations that best produce desired outcomes
Epistemology (the relationship of the knower to the known)	Both subjective and objective points of view
Axiology (role of values in inquiry)	Values play a large role in interpreting results
Generalizations	Time and context free generalizations are not possible
Causal linkages	There may be casual relationships, but we will never be able to pin them down
Logic	Inductive + Deductive

(Tashakkori & Teddlie, 1998)

Though the mixed method paradigm in social science research seems to be new, the concept of mixing different methods probably originated in 1959 (Creswell, 2003, p. 15). Any methods can be mixed up to draw a valid and reliable conclusion from the research; nevertheless most of the mixed method includes "both qualitative and quantitative methods" (Wiersma & Jurs, 2005, p. 274). Different terminologies are used to refer the concept of mixed method paradigm. For example, Tashakkori and Teddlie (1998) call it mixed model studies, Brewer and Hunter (1989) call it composite method design, Creswell (1995) and Pattan (1980) call it mixed-methodology design, Bryman (1988) calls it methodological hybrids, etc.

Mixed method is also known as triangulation method. The term triangulation refers to a surveying/nautical process in which two points are used to determine the unknown distance to a third point (Tashakkori & Teddlie, 1998). Denzin (1978), who

used the concept for the first time, discussed four types of triangulation: data triangulation, investigator triangulation, theory triangulation and methodology triangulation. The mixed method refers to the last one.

Selection of Mixed Method Research

The researchers in the field of social science have been interested in adopting Mixed Method (MM) in order to expand the scope of their findings and to avoid methodological bias. "Yet there is still relatively little direction and much confusion about how to continue qualitative and quantitative techniques" (Sandelowski, 2000).

I reviewed many books in research methodology. I also browsed different websites related to the philosophical foundation of various research methodologies. I read different philosophical orientations of research. I didn't know which the best methodology for my research was. I was looking for a book that could satiate my curiosity. When I was reading the book of Creswell (2003) I found that Tashakkori and Teddlie have discussed the mixed methodology. I thoroughly read their book 'Mixed Methodology' published in 1998 that gave me a new insight on the philosophical orientations of mixed methodology.

This research is based on the pragmatic knowledge claim as discussed above. I was wondering on which two methods would be mixed up so that my research would become more valid and reliable. According to the research questions I decided to apply two methods: survey and phenomenology. The former comes under quantitative research paradigm whereas the latter one comes under qualitative one.

There are several rationales behind the selection of mixed method for my research. The most important one is to "avoid possible mono-method bias (Tashakkori &

Teddlie, 1998, p. 276). This sort of bias can be avoided only by the reciprocal

triangulation between qualitative and quantitative designs. "Triangulation means

combining qualitative and quantitative methods" (Flick, 2006).

Obviously, there is not any method so far propounded without weaknesses. In

some context qualitative method is regarded better than quantitative one and vice versa.

So they are not in binary position rather complementary to each other. "Qualitative and

quantitative methods should be viewed as complementary rather than the rival camps"

(Jick 1983, p. 135, as cited in Flick 2006, p. 37). According to Brewer and Hunter (1989)

multi-method approach allows investigators to attack a research problem with an arsenal

of methods that have non-overlapping weakness in addition to their complementary

strengths (p. 17, as cited in Tashakkori & Teddlie, 1998, p 21). So, as a complementary

compensation of the weaknesses for both of the methods I selected mixed method.

Furthermore, mixed method allowed me to see the phenomenon under investigation

through multiple perspectives.

<p align="center">Research Design</p>

Going through different philosophical orientations of research paradigm I came to know

that mixed method, which is called pragmatism in its philosophical level, comes from

two paradigms: positivism and constructivism. The methods and techniques for a mixed

approach come directly from these two paradigms. The research findings came from

both of the sides and have merged into one.

Tashakkori and Teddlie (1998) have discussed three types of mixed methodology.

They are equivalent status designs, dominant-less dominant designs, and design with

multilevel use of approaches.

The equivalent status design is one in which both qualitative and quantitative parts of research have almost equal weight. There can be two possible options when we follow the equivalent status design. They are: sequential design and parallel/simultaneous design. In sequential design either quantitative or qualitative parts of mixed method come first. In simultaneous or parallel design both of the strands come together.

Creswell (2006) discussed four major types of mixed method designs. They are the Triangulation Design, the Embedded Design, the Explanatory Design, and the Exploratory Design.

The explanatory design is similar to the sequential design as discussed by Tashakkori and Teddlie (1998). "The explanatory design (also known as explanatory sequential design) is a two-phase mixed methods design. This design starts with the collection and analysis of quantitative data and this phase is followed by the subsequent collection and analysis of qualitative data" (Creswell, 2006, p. 72).

According to him there are two variants of the explanatory design. They are follow-up explanations model and the participant selection model. Both model have quantitative strand as the first phase, nonetheless they differ in connection with two facets of research. The first variant focuses more on results to be examined in more detail and the second one focuses on the appropriate participant to be selected for the next phase. Creswell writes,

> The follow-up explanations model is used when a researcher needs qualitative data to explain or expand on quantitative results (Creswell, Plano Clark, et al, 2003). In this model, the researcher identifies specific quantitative findings that need additional explanation, such as statistical differences among groups,

individuals who scored at extreme levels, or unexpected results. The researcher

then collects qualitative data from participants who can best help explain these

findings (p. 74).

On the other hand, the participant selection model is used when a researcher needs

quantitative information to identify and purposefully select participants for a follow-up.

The follow up is an in-depth qualitative study. In this study, the emphasis of the study is

usually on the qualitative strand of the mixed method research.

These two variants of the explanatory sequential mixed method design can be

shown in the figure as follows. The second figure is used in this research so new shapes

have been added in order to add survey and phenomenology methods as quantitative and

qualitative strands of my research design respectively.

Figure 3.1   Explanatory Design: Follow-up Explanation Model

(Creswell, 2006)

Figure 3.2   Explanatory Design: Participant Selection Model
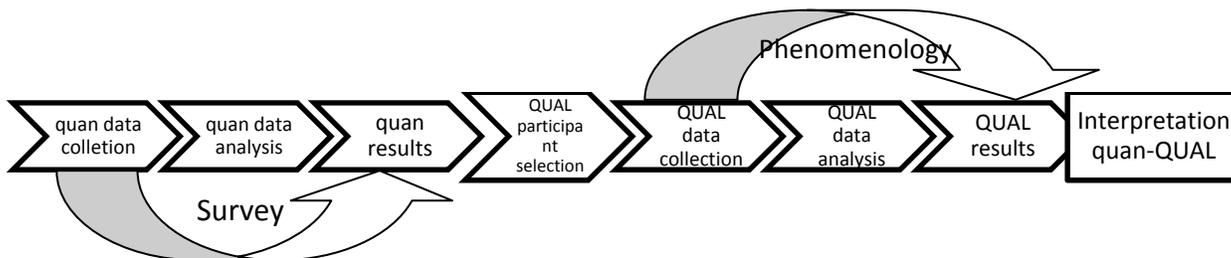
(Creswell, 2006)

The second variant of explanatory design comes from equal (equivalent) status mixed method designs in which "an investigator conducts a study using both the quantitative approaches about equally to understand the phenomenon under study" (Tashakkori & Teddlie), however I decided to give more emphasis on qualitative part as advocated by Creswell (2006). Out of the two domains of equal status of mixed method design I selected sequential one which is also supported by Tashakkori and Teddlie as they claim "in sequential mixed method designs the researcher conducts a qualitative phase of study and then separate quantitative phase, or vice versa" (1998, p. 46). In this research the quantitative (QUAN) part would come first followed by qualitative part (QUAL). "In the QUAN/QUAL sequence, the investigator starts with a quantitative method and then proceeds with a follow up qualitative study. Hence the survey part of my research that is QUAN strand comes first followed by phenomenology i.e. QUAL strand of the mixed method design.

As shown in above figure the designs of my research are based in pragmatism as a knowledge claim which comes from the combination of positivism and constructivism. On the basis of knowledge claim I drew a mixed method that comes from two methods survey and phenomenology that are related to two distinctive paradigms of research i.e. quantitative and qualitative respectively. On the basis of methods two separate techniques – questionnaire and semi-structured interview were used for collecting data. The data of these two types were analyzed and interpreted using appropriate techniques of interpretation. Finally, findings of the research were gauged out of interpretation.

For the interpretation of the data from the questionnaire I used statistical techniques such as descriptive statistics, correlation, ANOVA, etc. For the interpretation

of the data obtained from the interview, I followed the method thematic analysis based on hermeneutics.

Quantitative Part of Research-Survey

As another facet of my mixed method research design I have selected survey design. A survey design provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population (Creswell, 2003, p. 151). There are two types of survey research: longitudinal and cross-sectional study. The former needs the collection of data over time and at specified points in time whereas the second one "involves the collection of data at one point in time from a random sample representing some given population at that time" (Wiersma & Jurs, 2005, p. 162). I have used the cross-sectional survey research design because of my time limitation and the purpose of the research.

There are a number of reasons behind selecting survey research as a suitable quantitative research paradigm. Firstly, I wanted to know the opinion of Nepalese educational stakeholders on the prospects of validating non-formal and informal learning. For this, public opinion survey (Best & Kahn, 2002) is the best way of getting their opinions. Hence other methods except survey may not yield needed numeric data for my research.

Secondly, survey design is quick and short for the collection of data and interpretation. Some of the features of survey design such as "the economy and the rapid turnaround in data collection" (Creswell, 2003, p. 154) also motivated me to use this method.

Thirdly, survey data play "an important role in education policy research" (Dismone, 2006, p. 641). As this research tried to explore the possibility of validating non-formal and informal learning it aims to bring instrumental changes in the educational policy of Nepal. The subjects of this study were policy makers that consisted of scholars and educational administrators. For this, survey data became important for "policy development and improvement" (p. 642).

Fourthly, "surveys are the most cost effective means of collecting representative data on important policy issues, and to that extent are valuable in providing information about education reforms" (p. 642).

And finally, another constituent part of my mixed method study was phenomenology which intends to find the perceptions of the research participants. Survey method could be a best constituent as it intends to find the opinions of the respondents on a particular phenomenon.

Qualitative Part of Research-Phenomenology

The term phenomenology was inducted in the field of social science by German Philosopher Edmund Husserl. He discussed phenomenology in his famous book 'A General Introduction to Pure Phenomenology' that was published in 1931. He believed that subjective information should be important to scientists seeking to understand human motivation because human actions are influenced by what people perceive to be real (Lopez & Willis, 2004).

It is the 20th century philosophical movement dedicated to describing the structures of experience as they present themselves to consciousness, without recourse to theory, deduction, or assumptions from other disciplines such as the natural sciences

(Dreyfus, 2006). This theory or philosophy believes that producing factual data is impossible all the time in social science. The most the sociologist [social science researchers] can hope to do is to understand meaning that individuals give to particular phenomena (Haralombos & Holborn, 1995, p. 15).

In Husserl's term the goal of researcher is to achieve transcendental subjectivity. Transcendental subjectivity means that the impact of the researcher on the inquiry is constantly assessed and biases and perceptions neutralized, so that they do not influence the object of study (Lopez & Willis, 2004).

Since the time of Husserl the term phenomenology has been viewed through different perspectives and has many variants. The Encyclopedia of phenomenology (Embree, 1997) identifies seven unique perspectives. According to Wojnar & Swanson (2007) they are: descriptive (or transcendental) phenomenology, naturalistic constitutive phenomenology, existential phenomenology, generative historicist phenomenology, genetic phenomenology, hermeneutic (or interpretive) phenomenology, and realistic phenomenology.

Among the types of phenomenology the descriptive and hermeneutic approaches of phenomenology are most widely used in the field of social science. The inventor of the former was Husserl himself whereas the later was propounded by his student Heidegger.

Descriptive phenomenology. Husserlian or transcendental or descriptive phenomenology is "a complex philosophical tradition and a method of inquiry. It calls for exploration of phenomena through direct interaction between the researcher and the objects of the study" (Wojnar & Swanson, 2007).

Descriptive phenomenology gives less emphasis to the subjective judgment of the researcher to a phenomenon being studied. Personal biases and perceptions of the researchers are neutralized. For this the proponents of this approach have proposed specific techniques to maintain such neutralization known as bracketing. Bracketing involves the researcher holding in abeyance ideas, preconceptions and personal knowledge when listening to and reflecting on the lived experiences of participants (Drew, 1991 as cited in Lopez & Willis, 2004).

Interpretive phenomenology. The word hermeneutic is derived from the name Hermes, a Greek god, who was responsible for making clear, or interpreting, messages between gods (Thompson, 1990 as cited in Lopez & Willis, 2004). As advocated by its prime proponent Heidegger, Spielgeberg (1976) has identified hermeneutics as a process and method for bringing out and making manifest what is normally hidden in human experience and human relations (Lopez & Willis, 2004).

In Heidegger's term the relation to the individual to his life world should be the focus of phenomenological inquiry. He asserted that humans are embedded in their world to such an extent that subjective experiences are inextricably linked with social, cultural, and political contexts. This concept is called situated freedom (Leonard, 1999, as cited in Lopez & Willis, 2004). This approach gives considerable importance to the expert knowledge on the part of the researcher over the phenomenon being studied. Personal knowledge of the researcher is both useful and necessary to phenomenological research. The meanings that the researchers arrive at in interpretive research are "a blend of the meanings articulated by both participant and researcher within the focus of the study"

(Lopez & Willis, 2004). Gaclamer (1976) used the metaphor 'fusion of horizons' to explain the act of inter-subjectivity, understanding and interpretation' (Lopez & Willis).

These two approaches of phenomenology are different in many respects. Wojnar & Swanson (2007) have listed the following differences between these approaches:

Table 3.3

Key Distinctions between the Descriptive and Interpretive Approach

Descriptive Approach	Interpretive Approach
1. The emphasis is on describing universal essences	1. The emphasis is on understanding the phenomena in context
2. Viewing a person as one representative of the world in which he or she lives	2. Viewing a person as a self-interpretive being
3. A belief that the consciousness is what humans share	3. A belief that the contexts of culture, practice, and language are what humans share
4. Self-reflection and conscious "stripping" of previous knowledge help to present an investigator-free description of the phenomenon	4. As pre-reflexive beings, researchers actively co-create interpretations of phenomenon
5. Adherence to established scientific rigor ensures description of universal essences or eidetic structures	5. One needs to establish contextual criteria for trustworthiness of co-created interpretations
6. Bracketing ensures that interpretation is free of bias	6. Understanding and co-creation by the researcher and the participants are what makes interpretations meaningful

(Wojnar & Swanson, 2007)

I applied interpretive or hermeneutic phenomenology for the interpretation of the data obtained from semi-structured interview. Not only I showed my active participation during the time of interview with my respondents, but I also used my conscience to interpret the meaning of their utterances in relation to the context of my overall research.

Nature and Sources of Data

In order to carry out this study the researcher used both primary and secondary sources of data. The data were of both qualitative and quantitative nature.

Primary Sources

As per the selected design i.e. mixed method design, I needed to collect both qualitative and quantitative data. The primary sources of both types of data for the study were the responses from the educationists and educational stakeholders who were involved directly or indirectly for formulating the policy of validating non-formal and informal learning in Nepal. To be more specific the respondents of this research were those people who work in the policy level in NCED, CTEVT, DEOL, DOE, MOE, and university professors.   The responses were collected by conducting interviews for qualitative and by conducting a survey for quantitative data.

Secondary Sources of Data

 I used the secondary sources of data that especially consist of books, journals, research reports, policy documents of GON etc. The Internet and e-resources were massively utilized for the collection of secondary data. The secondary sources of data were used for

the preparation of interview tools and for the refreshment of my knowledge and better understanding in the field of study.

<div align="center">Sampling</div>

Sequential MM Sampling

"A sample is a set of elements selected in some way from a population" (Schofield, 2006, p. 26). Teddlie and Yu (2007) have made four taxonomy of sampling techniques for the social and behavioral sciences. They are probability sampling, purposive sampling, convenience sampling, and mixed methods (MM) sampling. "MM sampling strategies involve the selection of units or cases for a research study using both probability sampling (to increase external validity) and purposive sampling strategies (to increase transferability)" (Teddlie & Yu, 2007, p. 79).

As the MM research design intends to have both breadth and depth of the information both probability and purposive sampling techniques should sequentially or simultaneously be utilized. Teddlie and Yu (2007) have called the combined designed as purposive-mixed-probability sampling design as the sampling design of MM research moves within the periphery of purposive and probability sampling.

Teddlie and Yu (2007) have given five provisional typologies of MM sampling strategies. They are basic MM sampling strategy, sequential MM sampling strategy, concurrent MM sampling strategy, multilevel MM sampling strategy, and sampling using multiple MM sampling strategies.

The sequential MM sampling, which I thought is suitable for this research, "involves the selection of units of analysis for an MM study through the sequential use of probability and purposive sampling strategies (QUAN-QUAL) and vice versa" (Teddlie

& Yu, 2007, p. 284). In this type of study, information from the first sample (probability) is often required to draw the second sample (purposive). Hence the sample from the quantitative strand influences the sample of the qualitative strand. The instrument scores that were obtained from survey directed me towards selection of the participants for qualitative data collection (Sandelowski, 2000).

   Stratified random sampling. As one of the facets (quantitative one) of my mixed method is survey research sampling was an important part of the research. "A major development in the process of making surveys useful was [is] learning how to sample: to select a small subset of a population representative of the whole population" (Fowler, 1993, p. 4).

   The population out of which a sample is drawn needs to be well defined. The first step in sampling is to "define the population of interest clearly and accurately" (Schofield, 2006, p. 27). So far as the population of this study is concerned there were mainly four types of people: development activists, educational administrators, policy actors and university professors. The total number of people was not found; hence the universe of my population became unknown.

   According to Kothari (2004), when the universe of population is unknown we have to select "sample haphazardly without aim or purpose and should treat the samples as random sample for study purposes" (Kothari, 2004, p. 61). As per the budgetary constraint, time constraint and methodological constraint (because MM study is obviously a lengthy procedure) I selected 40 respondents as sample population using the stratified random sampling method for the quantitative part i.e. survey part of the research. The total population was grouped into four strata: development activists,

educational administrators, policy actors and university professors. From each stratum 10/10 people were selected randomly. Thus, there were 40 respondents altogether in the sample for the survey part of the research. These people are directly or indirectly involved in formulating educational policies and devising educational plans in Nepal.

Purposive sampling. The purposive sampling is also called non-probability sampling or qualitative sampling. This sampling is typically designed to pick up "a small number of cases that will yield the most important information about a particular phenomenon" (Teddlie & Yu, p. 83). It leads to greater depth of information from a smaller number of cases. The ones who could "provide best information to achieve the objectives of the study" (Kumar, 1999, p. 162) have to be selected as the sample population.

I selected 8 key informants purposively for interview from the 40 respondents to whom the questionnaire had been administered (Flick, 2006) during the survey. The key informants certainly included renowned educationists and topmost level educational stakeholders of Nepal. To get the consent of key informants for semi-structured interview necessary steps were taken. They were requested by phone and email and were visited for a number of times (for detail see Chapter 5).

Sequential MM Sampling Frame

The frame given below depicts that educational stakeholders of Nepal were my population of study. They were divided into four strata and 10 people were selected randomly from each stratum constituting 40 people altogether. After administering questionnaire to them for the survey part of the research 8 research participants were purposively selected on the basis of sequential MM sampling procedure (Creswell 2006).

Table 3.6

Sampling Frame

Population	Strata of population	Randomly selected for survey	Purposively selelected for phenomneology
Educational	Development activists	10	
	Educational administrators	10	
	Policy Actors	10	(8)
stakeholders	University professors	10	

Tools and Techniques

There are several strategies or techniques for collecting data. Tashakkori and

Teddlie (1998) have discussed four main strategies. They are:

1. Asking individuals for information and/or experiences (or self report

    technique)

2. Seeing what people do, recording what they do, or making inferences

3. Asking individuals about their relationship with others

4. Using data collected or documented by others

Self-reports, which I used in this research, are measures in which individuals are

asked to report on their feelings, beliefs, attitudes, and other attributes that generally

consists of "interview and questionnaire" (Tashakkori & Teddlie, 1998, p. 100).

I used two tools and their corresponding techniques to collect data. Obviously, I

used mixed methodology for the completion of this research. Thus I needed both

quantitative and qualitative data. For the collection of qualitative data I conducted

interview (Corbetta, 2003, p. 269) and for quantitative data I used questionnaire.

Validity of Research Tools

The validity of the research tools (both questionnaire and interview guide) were ensured

by adopting two strategies: expert judgment and pre-test. After the preparation of these

tools I asked four experts (Research Committee members) of School of Education,

Kathmandu University to evaluate the tools. Necessary corrections were made by

incorporating their suggestions.

The questionnaire was pretested to 5 educational stakeholders. From the feedback

of pretest some of the ambiguous statements were made clear and understandable. Some

of the alternative questions of the multiple-choice question set were removed and some

additions were made. Similarly, two people were interviewed to pretest the interview

guide and as a rehearsal of the real interview. The issues to be probed in the interview

guide were made more flexible to deal with in order to elicit the real perceptions and

opinions of the educational stakeholders.

Questionnaire

 For the collection of quantitative data I had prepared a questionnaire. In simple words "a

questionnaire is a written list of questions" (Kumar, 1996, p. 110). It consisted of a

number of "structured set of questions containing all necessary instructions" (Wilson &

Sapsford, 2006, p. 121). It is used when "factual information is desired" (Best & Kahn,

2002, p. 230).

As I used survey research methods as a first or quantitative strand of my MM study I used two types of questions in the survey questionnaire. The first was attitude scale and the second was multiple-choice questions.

Likert scale statements. Attitude scales – one of the types of Likert scales are "questionnaires commonly used in survey research" (Tashakkori & Teddlie, 1998, p. 104). The scales include measures of attitudes, beliefs, self-perceptions, intentions, aspirations, and a variety of related constructs (Tashakkori & Teddlie). There are various types of scales to test the attitudes and similar constructs. I used Likert scale. Describing this scale Tashakkori and Teddlie (1998) write,

> Likert-type scales ask the respondents to express their degree of
> agreements/disagreements with issues (or presence/absence of an attribute) on
> response scales consisting of 4 or 5 options (strongly agree, agree, disagree, or
> strongly disagree). A number is assigned to each response (e.g. +2, +1, -1, -2)
> according to the direction and magnitude of agreement (p. 104).

The Likert scale is also known as summated rating scale. The name was taken from psychometrician Rensis Likert, "who first proposed it at the beginning of the 1930s" (Corbetta, 2003, p. 170). "The scale is based on the assumption that each statement/item on the scale has equal attitudinal value, importance, or weight in terms of reflection as attitude towards the issue in question" (Kumar, 1996, p. 129). Though it is assumed that this scale is used to measure the attitude of respondents it doesn't measure per se rather it "does help to place different respondents in relation to each other in terms of the intensity of their attitude towards an issue" (Kumar, p. 130).

I used five point Likert scale (strongly agree, agree, uncertain, disagree, and strongly disagree). There were 12 statements each relating to my research questions. There were six statements giving positive meanings and six questions giving negative meaning.

As there are three themes (research sub questions) in my research. There were four questions for each theme. The three themes are providing Options for Learning (OFL), bringing Parity of Esteem (POE) among FL, NFL and IL and developing a National Qualifications Framework (NQF).

Multiple-choice questions. Besides these Likert scale, I used nine multiple-choice questions. Three themes included three questions/statements with a number of options to be selected. For questionnaire, see the Appendix of this dissertation.

After preparing questionnaire, I sent them to the respondents requesting them to complete and return to desired destination. Some of the questionnaires were sent through e-mail, some of them through mail (Kumar, 1996, p. 113) and for few of them I gave them in hand.

Interview

Kvale (1996) claims "the qualitative research interview attempts to understand the world from the subjects' points of view, to unfold the meaning of peoples' experiences, to uncover their lived world prior to scientific explanation" (p. 1). He argues that knowledge comes from talks or conversation. Through interactions we know other people, get to learn about other people, learn their experiences, feelings and hopes. A researcher can find the world where they live in through conversation.

Interview can be defined as a "type of conversational face-to-face interaction" (Wengraf, 2001, p. 4). Etymologically, the word 'interview' is made up of two morphemes (parts of a word): 'inter' and 'view'. These morphemes suggest that it is the interchange of views or opinions between two or more interlocutors.

The word 'views' that is a part of the word 'interview' literally suggests that it is a qualitative phenomenon. It shuns scientific approach. "The qualitative interview based on interpersonal interaction must appear unscientific" (Kvale, 1996, p. 62). Hence it also goes beyond the limitation of positivist paradigm of research.

Different types of interviews can be used to collect required data as per the objectives of research. Flick (2006) talks about five different types of interview. They are the focused interview, the semi-standardized interview, the problem center interview, the expert interview, and ethnographic interview. The semi-structured interview that has been extensively discussed in Kvale (1996) was used for this research.

In this research I followed the seven stage of an interview investigation as identified by Kvale (1996). The table which I extracted from (Kvale, 1996, p. 88) gives the seven stages in an abridged form.

Table 3.4   Stages of Interview

Stages	Name	Activities
1st	Thematizing	Formulate the purpose of an investigation and describe the concept of the topic to be investigated before the interviews start
2nd	Designing	Plan the design of the study taking into consideration all seven stages of the investigation, before the interview starts.

3rd	Interviewing	Conduct the interviews based on an investigation guide with a reflective approach to the knowledge sought and the interpersonal relation of the interview situation
4th	Transcribing	Prepare the interview material for analysis, which commonly includes a transcription from oral speech or written text
5th	Analyzing	Decide on the basis of the purpose and topic of the investigation, and on the nature of interview material, which methods of analysis are appropriate for the interviews
6th	Verifying	Ascertain the generalizability, reliability, and validity of the interview findings
7th	Reporting	Communicate the findings of the study and the methods applied in a form that lives up to scientific criteria, takes the ethical aspects of the investigation into consideration, and that results in a readable product.

(Kvale, 1996)

Interview guide. I used an interview guide as a tool for collecting data for the phenomenological part of this research. An outline of topics to be covered were included in the guide. For the semi-structured type of interview the guide contained "an outline of topics to be covered with suggested questions" (Kvale, 1996, p. 130). The questions were made relevant both thematically and dynamically. To ensure thematic dimension each question were made relevant to the topic or the theme of the research as a whole. Similarly, to ensure dynamic dimension the questions were prepared in such a way that

they "promoted a positive interactions; kept the flow of the conversation going and motivated the subjects to talk about their experiences and feelings" (p. 130)

Interview questions. Kvale (1996) talks about nine types of questions for qualitative interviewing. They are as follows:

Table 3.5   Types of Interview Questions

S. N.	Types	Description
1	Introducing questions	They are the opening questions that aim to yield spontaneous, rich descriptions where the subjects themselves provide what they experience as the main dimension of the phenomenon investigated.
2	Follow up questions	They are the questions prepared to get answer of the persistent curiosity and critical questions of the interviewer.
3	Probing questions	These questions are asked to probe the content of the conversation under discussion.
4	Specifying questions	These questions are used to get specific information that has not been elicited from general questions during the interview
5	Direct questions	The interviewee directly introduces topics and dimensions to get straightforward response from subjects.
6.	Indirect questions	They are projective questions useful for getting the attitudes, feelings and experiences of the subjects that they don't flash directly. `
7.	Structuring	These types of questions will be useful when the interviewer feels

questions	that the discussion is exhausted and wants to break off long answers by bringing slight changes in the matter of discussion.
8. Silence	By allowing pauses in conversation the researcher can give time to his/her subject for reflection
9. Interpreting questions	These sorts of questions are asked to rephrase the statement of interviewee to bring better clarity.

(Kvale, 1996)

In this research the questions that were used comprised almost of all these nine types of questions according to the situation of the interview.

Ethical Considerations

The question of ethics is not a separate part of any research. It "arises throughout the entire research process" (Kvale, 1996, p. 110). As stated by Creswell (2003) the following ethical considerations were made.

a. The research respondents for administering questionnaire and research participants for conducting interviews were made well aware about the purpose of the research and procedure of the research.

b. The samples of the population were selected voluntarily. It was their right whether to give information or not to give. They were also allowed to terminate from the interview even in the middle of the interview sessions.

c. Consents were taken from the participants of the research, especially from the interviewees. "The subjects were informed about the overall purpose of investigation and the main features of design" (Kvale, 1996, p. 112)

d. The privacy of the participants was protected by making signatures in agreement papers before sitting for the first round of interview. The "confidentiality of the data" (Kvale, 1996, p. 114) was ensured.

e. While analyzing the data to protect the anonymity of the respondents instead of using their real names aliases and pseudonyms were used.

f. While writing the dissertation the researcher didn't use language or words that are biased against persons because of gender, sexual orientation, racial or ethnic group, disability, and age.

g. The chances of suppressing, falsifying, or inventing findings to meet researcher's need were completely eliminated by applying proper validation measures of the research. The transcribed and translated copies of their interview scripts were sent them for necessary corrections and modifications.

Chapter Summary

Paradigms are the worldviews or belief systems that guide researchers. Paradigms decide ontology, epistemology, axiology, and methodology of researches. Positivism and constructivism are the rival paradigms of the past. Now they have shown a kind of co-existence in the form of pragmatism. Pragmatism comes from the assumption that research problem is more important than methods of research. This philosophical doctrine has given birth to mixed methodology. Several methods are mixed up to find the answers of research questions in more reliable and valid way.

As a researcher under pragmatic paradigm, ontologically I have accepted external realities that can be obtained from research participants. Epistemologically, I have explored the phenomenon from both objective and subjective points of view. Similarly,

on the axiological ground my values and beliefs have played significant roles in interpreting results.

Obviously, mixed methodology gave birth to mixed method in which two or more than two method can be used. I have used survey from quantitative strand and phenomenology from qualitative strand and they were applied subsequently to find the answers of my research questions. Among the various designs of mixed method the Explanatory Participant Selection Design was selected.

Questionnaire for survey and interview for phenomenology were the tools used to collect primary data for the research. Mixed Method Sampling procedure was used to frame the sample size. Among the educational stakeholders 40 experts were selected using stratified random sampling procedure and requested to fill up the questionnaire set. Among the 40 educational experts 8 people were selected purposively to take part in the interview.

CHAPTER IV

QUANTITATIVE DATA ANALYSIS AND INTERPRETATION

After preparing the questionnaire and getting it judged from experts for its validity the sets of questionnaires were administered to the required number of respondents. Although only 40 respondents were expected nearly one hundred sets of questionnaires were prepared. Some of the questionnaires were sent through email, some of them through friends and some of them were given in hand by me. When required number of questionnaire sets were returned the data collection process was stopped.

After the data were collected they were sorted out by category (in terms of respondents). They were arranged in four separate files. Then the process of coding the responses was started. The statements for the Likert Scale questionnaire and multiple-choice questions were based on three themes of the research. The main research question was 'How do educational stakeholders perceive the possibility of identifying, recognizing and validating non-formal and informal learning to open up avenues for lifelong learning and continuing education?' The three themes were coded as follows:

Themes for Quantitative Data Analysis

The themes for quantitative data analysis and interpretation were generated directly from the research sub-questions. The themes and the codes used for the themes throughout this research are given below.

Table 4.1   Themes and Codes for Quantitative Data

S N	Research Sub-Questions	Themes	Codes
1	How do educational stakeholders perceive the significance of providing options for learning through formal, non-formal and informal means?	Providing Options for Learning	OFL
2	How do educational stakeholders perceive the possibility of bringing parity of esteem among formal learning, non-formal learning and informal learning?	Bringing Parity of Esteem	POE
3	How do educational stakeholders perceive the importance of developing a National Qualifications Framework for providing eligibility for further learning for those who have been through the process of non-formal and informal education?	Developing National Qualifications Framework	NQF

Likert Scale Statements

There were two types of Likert Scale statements: statements giving positive meaning and the statements giving negative meaning. There were six questions for each. Arrangement was made in such a way that each positive statement had corresponding negative statements. The statements were arranged as per the themes of the research and on the basis of the positivity and negativity in their meanings.

The 12 statements used in the Liker Scale Questionnaire were related to three themes of the research. The first theme included 4 statements (Statement No. 1, 4, 7 and 10) where there were 2 positive (1 and 7) and 2 negative (4 and 10). The second theme

included 4 statements (Statement No. 2, 5, 8 and 11) where there were 2 positive (5 and 11) and 2 negative (2 and 8). The third theme included 4 statements (Statement No. 3, 6, 9, 12) where there were 2 positive (3 and 9) and 2 negative (6 and 12). The statements are analyzed in terms of the themes.

Table 4.2   Themes and Likert Scale Statements

S N	Themes	Statements	Positive	Negative	Total
1	OFL	1, 4, 7, 10	1, 4	7, 10	4
2	POE	2, 5, 8, 11	5, 11	2, 8	4
3	NQF	3, 6, 9, 12	3, 9,	6, 12	4
Total	3	12	6	6	12

Multiple-Choice Questions

There were 10 multiple-choice questions having 3 to 4 options to be selected. Question number 4 was cancelled in order to bring uniformity in the number of questions in three themes. Hence there were three questions for one theme of the research.

The respondents were made free to tick more than one option. The arrangement of the questions was not according to the theme. To make data processing analysis comfortable the questions were rearranged in the following ways.

Table 4.3

Themes and Multiple Choice Questions

Original	Arranged	Rearranged	Themes
1	1	1	OFL
2	2	2	OFL
3	6	3	OFL

4		Cancelled	
5	3	4	POE
6	5	5	POE
7	7	6	POE
8	8	7	NQF
9	9	8	NQF
10	10	9	NQF

Precisions and codes. After rearranging the questions/statements according to the themes precision and codes for each of them were made in the following ways.

Table 4.4   Precisions and Codes

S N	Questions	Precision	Codes
1	The most important approach/approaches to learning is/are	Approaches to Learning	ATL
2	Knowledge and skills relevant to one's life can best be acquired by …	Acquisition of Knowledge	AOK
3	How does/do learning take place?	Judging Quality of Learning	QOL
4	How should one's competence be determined for selecting him/her as an employee?	Selecting as Employee	SAE
5	The best means for enhancing lifelong learning and continuing education is/are…	Enhancing Lifelong Learning	ELL
6	How does/do learning take place?	Ways of Learning	WOL
7	What is/are important while one's competence is assessed?	Assessment of Competency	AOC
8	What is true about lifelong learning?	Truth about Lifelong	TLL

		Learning	
9	To maintain complementary and supplementary relationships between formal, non-formal and informal learning, which of the followings should be done?	Complementary and Supplementary Relationship	CSR

Options for multiple choice-questions. After having codes for each statement/question the options given for each were analyzed. The positive and negative statements were finalized. According to the nature of the research there were more positive options than negative ones. The negative options were given only for cross checking otherwise the 'any other' option given at the end of each statement/question would work for the alternative views of the respondents regarding validating non-formal and informal learning as a whole.   The respondents were requested to add any other options if they thought relevant regarding the statements/questions.

<div align="center">Analysis of Likert Scale Data</div>

There were two types of statements in the Likert Scale: statements supporting the research questions; and statements opposing the research questions. The score for the statements were assigned as follows:

Table 4.5   Score Value of Likert Scale Options

Scale	Score assigned to positive statements	Score assigned to negative statements
Strongly Agree	5	1
Agree	4	2

Uncertain	3	3
Disagree	2	4
Strongly Disagree	1	5

According to Best and Kahn (2002, p. 250) the score values were analyzed. As there were 12 statements the following analyses were made:

Table 4.6   Total Score Value for Likert Scale Statements

12   X   5   =   60   Most favorable response possible

12   X   3   =   36   A neutral attitude

12   X   1   =   12   Most unfavorable attitude

On the basis of the assigned scale value the total scores were calculated using descriptive statistics. Among the 40 respondents the maximum score was 58 and the minimum was 36 with the range of 22. It shows that the Educational Stakeholders are positive to validate non-formal and informal learning to open up avenue for lifelong learning and continuing education in Nepal. The result has been further clarified with the average score 44 which is more than the average score 36 for neutral attitude.

Table 4.7   Descriptive Statistics of Total Likert Scale Data

Score obtained	N	Range	Minimum	Maximum	Mean	Std. Dev.	Variance
in Likert Scale	40	22.00	36.00	58.00	44.8000	5.48284	30.062

Statement-Wise Analysis of Likert Scale Data

For statement wise analysis the data were entered into SPSS Package. The values were assigned as 1, 2, 3, 4, and 5 for the options Strongly Agree, Agree, Uncertain, Disagree

and Strongly Disagree respectively. The frequency and percentage of each type of respondents were calculated through Cross Tabulation.

Similarly, mean, minimum and maximum frequencies for each option (Strongly Agree, Agree, Uncertain, Disagree, and Strongly Disagree) were calculated using the statistical tool Compare Means. The mean score were interpreted in terms of the approximate value for each option. For example, the mean value near to 1 (i.e. 0 -1.4) means Strongly Disagree, the mean value near to 2 (i.e. 1.5-2.4) means Disagree and in the same way the mean value near to 4 (i.e. 3.5-4.4) means Agree for the positive statements and just opposite of the respective values for the negative statements. The finding of each statement was drawn on the basis of all calculated values from the Cross Tabulation and Descriptive Statistics.

Theme 1- Providing Options for Learning

Among the three themes of the research the statement numbers 1, 4, 7, and 10 belong to the first theme i.e. providing options for learners.

Statement No. 1. The statement was written as 'People should be made free to acquire knowledge through formal, non-formal and informal means.' This is the statement with positive meaning. Among the 40 respondents 67.5% (27) people ticked the option 'Strongly agree' 27.1% (11) persons ticked the option 'Agree', 2.5% (1) person remained 'Uncertain' and one person ticked 'Disagree' (see Table A1).

The mean scores of Development Activists, Educational Stakeholders, Policy Actor and University Professors were 4.7, 4.5, 4.7 and 4.5 respectively (see Table A2). It shows that Development Activists and Policy Actors were found more positive than others. The average of total mean was 4.6 which indicate that Educational Stakeholders

agreed that people should be made free to acquire knowledge through formal, non-formal and informal means.

Statement No. 4. The statement was written as 'People from less formal background are unable to adjust with the formal education system.' It is negative statement whose corresponding positive statement was Statement No. 1. Among the 40 respondents 12.5% people ticked the option 'Strongly agree' 50% persons ticked the option 'Agree', 12.5% person remained 'Uncertain', 22.5% people ticked the option 'Disagree', and 2.5% ticked the option' Strongly Disagree" (see Table A3).

The mean scores of Development Activists, Educational Stakeholders, Policy Actor and University Professors were 2.6%, 2.4%, 2.4%, and 2.7% respectively (see Table A4). It shows that University Professor and Development Activists were found more positive than others to the statements. The average of total mean was 2.5 which indicated that Educational Stakeholders agreed people from less formal background are unable to adjust with the formal education system. The respondents as a whole are either agree or uncertain to the statement as the mean value 2.5 comes between the scale value of Uncertain (3) and Agree (2). This statement gave me a typical result which I have explored in my qualitative part of the research and discussed extensively under Theme 5 of the qualitative data analysis.

Statement No. 7. The statement was written as 'Students from non-formal and informal background should be allowed to enter into formal schooling after an equivalency test.' The Educational Stakeholders were found much positive regarding this statement. Out of the total respondents 47.5% agreed it strongly and 47.5% chose the

option 'Agree'. There were 5% uncertain and none of them who disagreed (see Table A5).

The mean score of DA, EA, PA and UP were 4.7, 4.4, 4.4 and 4.2 respectively (see Table A6). It shows that Development Activist seemed to be much more positive and University Professors were less positive than other two groups. The average of the total mean score was 4.2 which indicate that Educational Stakeholders were very much favorable on allowing learners from non-formal and informal background to enter into formal education after an equivalency test.

Statement No. 10. The statement was written as 'Learning outcomes from formal, non-formal and informal means cannot be equated.' In this statement the respondents have mixed responses. It was one of the negative statement related to the first theme of my research that tries to explore the opinion of the educational stakeholders on providing different options (i.e. formal, non-formal, and informal) for learning. Majority i.e. 30% of the respondents disagreed with the statements. The percentages for the options Strongly Disagree, Disagree, Uncertain, Agree and Strongly Agree were 15%, 30%, 15%, 27.5% and 12.5% respectively (see Table A7). Maximum selections were made in the options Agree and Strongly Agree.

The mean scores were 2.2, 3.4, 3.5, and 2.6 of the respondents DA, EA, PA and UP respectively (see Table A8). It shows that Policy Actors are more favorable than others. The average of the total mean score is 2.9 which were too near to the scale value assigned to the option 'Uncertain'. From this data I have claimed that the educational stakeholders are uncertain on whether learning outcomes from non-formal and informal means could be equated with the learning outcomes acquired from formal schooling. This

issue was raised during the interview in the qualitative part of the research and was extensively discussed under Theme 2 of the qualitative data analysis.

Theme 2- Bringing parity of esteem

This theme relates to the second research question i.e. 'How do educational stakeholders perceive the possibility of bringing parity of esteem among formal learning, non-formal learning and informal learning?' There were 4 statements under this theme. They were Statement No. 2, 5, 8, and 11. Statement No. 2 and 8 were negative where as 5 and 11 were positive ones.

Statement No. 2. In the questionnaire the statement was written as 'Work based learning, experiential learning, and accidental learning cannot be equated with formal learning. This statement was negative one. There were 15%, 45%, 5%, 27.5%, and 7.5% of the total respondents who ticked the options Strongly Agree, Agree, Uncertain, Disagree and Strongly Disagree respectively (see Table A9). About 45% of the respondents agreed with the statement. Among them Educational Administrators were higher in number. The mean scores of four types of educational stakeholders DA, EA, PA and UP were 2.6, 2.6, 2.4, and 3.1 respectively (see Table A10).

From these quantitative results it was decided that educational stakeholders were not in favor of making formal learning, informal learning and non-formal learning equal or giving equal parity as the mean score is 2.6 which is between Disagree and Uncertain in the score value. This result is against the overall result of the quantitative data hence it was further probed in qualitative enquiry. It has been discussed under the second Theme of the qualitative data analysis part in Chapter 5.

Statement No. 5. The statement was written as 'Non-formal and informal learning has to be given same degree of recognition, validation, and certification as formal learning.' This question is directly related to the main research question. As 35.0% of the total respondents ticked the option 'Agree' and the same percentage ticked the option 'Strongly Agree' the educational stakeholders were found much more favorable on giving same degree of recognition, validation and certification to non-formal, formal learning and informal learning. There were only 20% of the total respondents who ticked the option 'Disagree' (see Table A11).

Among the four types of educational stakeholders the Development Activists were found more positive than others as the mean sore were found 4.3 for DA, 3.9 for EA, 3.7 for PA and 3.5 for UP (see Table A12). Majority of the respondents of each group ticked the option 'Strongly Agree'.

Statement No. 8. The statement was written as 'Nepalese education system should focus more on formal learning than on non-formal and informal learning'. Out of the total respondents 47.5% didn't agree that Nepalese education system should put more emphasis on formal education than on non- formal and informal learning. Those who agreed with the statement were 15% and who strongly agreed were just 7.5%. There are also a significant number of respondents who strongly disagreed (17.5%) the statement (see Table A13).

A majority of the respondents who supported the statement was Educational Administrators with the mean score 3.1; however it is near to Uncertain in the scale value. The total mean was calculated as 2.4 (see Table A14). Hence I came to the conclusion that educational stakeholders disagreed with the statement means they

perceive that Nepalese Education system should give more emphasis on formal education than it has given to non-formal and informal education.

Statement No. 11. The statement was written as 'A country has to give equal emphasis to formal, non-formal and informal education.' It was a statement giving positive connotation. Agree this statement means to support the proposition that three forms of learning should have equal esteem and hence non-formal and informal learning to be validated to enhance lifelong learning and continuing education in Nepal.

Majority of the respondents i.e. 22% of the total educational stakeholders sampled ticked the option 'Strongly Agree'. The antipodal option i.e. 'Strongly Disagree' received just 3% of the total preferences (see Table A15).

Among the four types of answerers policy actors made their strong choice in favor of this statement. The means score of the overall response was calculated as 4.17 which was slightly more than the score value of the option 'Agree' (see Table A16). Hence it can be concluded that the educational stakeholders accepted that Nepal has to give equal emphasis to formal, non-formal and informal learning modalities. The development activists acquiesced with the statement securing slightly less score i.e. 3.6 than the score assigned to the option 'Agree'.

Theme 3 - Developing a National Qualifications Framework

This theme was related to the second research question i.e. 'How do educational stakeholders perceive the importance of developing a structure that provides eligibility for further learning for those who have been through the process of non-formal and informal education?' There were four statements under this theme. They were Statement

No. 3, 6, 9 and 12. Statement No. 3 and 5 were positive whereas 6 and 12 were negative ones.

Statement No. 3. The statement was written as 'Formal education, non-formal education and informal education should be kept under a single National Qualifications Framework.' This statement was the first one related with the third theme i.e. exploration of the perceptions of educational stakeholders on developing a national qualifications framework. About 40% of the total respondents embraced the option 'Agree' against only 17.5% embracing 'Disagree' (see Table A17).

The mean score of DA, EA, PA and UP were 3.6, 3.9, 3.4 and 3.8 computing 3.67 total mean score which approximates with the scale vale assigned for the option 'Agree' (see Table A18). Hence I concluded that educational stakeholders have a preference to bring all three forms of learning into a single national qualifications framework. Educational Administrators were found more inclined and the Policy Actor less inclined among the four types of respondents, however majority of them falling into one of the four groups opted for the 'Strongly Agree'.

Statement No. 6. This statement was written as 'Non-formal and informal learning outcomes can't be brought under a single National Qualifications Framework'. This statement stood as an antithesis of the previous statement. Thinking this as a true statement meant giving an antipodal assertion with bringing all forms of learning into an NQF. Out of total respondents, 16% opted for the option 'Disagree', which is followed by 13% that is for 'Agree' (see Table A19). There were more people to 'Disagree' than to 'Agree' with the statement.

The total mean score was measured 2.7 which approximates with the scale value assigned to the option 'Uncertain' (see Table A20). In this way I concluded that educational stakeholders were found uncertain on putting the learning outcomes from non-formal and informal modalities. More Policy actor seemed negative towards this view than other three groups.

Statement No. 9. This statement was written as 'People from less formal means should be made eligible for entering into formal education system for further learning'. The opinions of the educational stakeholders on allowing people from non-formal and informal learning backgrounds to enter into formal education system were very positive. There were no respondents who have preferences to either for 'Agree' or for 'Disagree'. Out of the 40 respondents 62.5% went in for the option 'Agree' 25% went in for 'Strongly Agree'.

Development Activists and Policy Actors came out as the confident advocates of the proposition with the mean score 4.3 for each, which is near to the Likert Scale value 4 and can be interpreted as Agree. The maximum tick was put on the option 'Strongly Agree' and minimum tick on the option 'Uncertain'. It showed that there should be the system of ventilation from one mode of learning to another mode.

Statement No. 12. This statement was the last statement in the Likert Scale Questionnaire. The statement was written as 'People from less formal means can't achieve equivalent standard with the people who come from formal education.' It tried to get the opinion of the educational stakeholders on whether the people who come from alternative mode of education, especially from non-formal and informal background are able or unable to achieve the standard equivalent to the one who come from regular

formal schooling. The frequency percentage calculated from cross tabulation gave a

mixed result. Majority of the respondents i.e. 45% of the total respondents agreed with

the statement (see Table A21). The people who fancied for the option 'Disagree' were

only 27.5%. The mean score was calculated 2, 2.9, 3, and 2.4 of the respondents DA, EA,

PA, and UP respectively (see Table A22).

While comparing means it seemed that Policy Actor and Educational

Administrator were found uncertain. The total mean score is 2.5 which approximates to

the option 'Uncertain' from which I can conclude that the educational stakeholders are

uncertain on whether the people from less formal background are unable to achieve

equivalent standard of the people from less formal background.

<center>Theme-wise Analysis of Likert Scale Data</center>

Descriptive Statistics for Themes

The three themes of the research were regarded as the three variables of the research.

Descriptive statistics were calculated using the SPSS software. The calculations were

made for Minimum, Maximum, Mean values. To see the variance of the data Standard

Deviation was also calculated. The table below is the output of the calculation.

Table 4.8   Descriptive Statistics of the Themes

<center>**Descriptive Statistics**</center>

	N	Minimum	Maximum	Mean	Std. Deviation
Providing options for learning	40	9.00	19.00	15.2750	2.28695
Bringing parity of esteem	40	10.00	19.00	14.9250	2.62520
Developing a national qualifications framework	40	9.00	20.00	14.6000	2.46826
Valid N (listwise)	40				

The maximum score was found for developing an NQF (20) followed by providing different options for learning (19) and bringing parity of esteem (19) for validating non-formal and informal learning in Nepal. The mean score was found higher for providing options for learning (15.28) followed by parity of esteem (14.92) and NQF (14.60). The result showed that educational stakeholders seemed to be more positive to provide different options for learning than developing the national qualifications framework and bringing parity of esteem of three forms of learning. The standard deviation of the second theme was found higher (2.6). It showed that educational stakeholders have variance in perception of bringing parity of esteem than in providing options for learning (2.28) and developing a national qualifications framework (2.46).

Checking the normality of data. To run the ANOVA test checking the normality of the distribution of variables is very important (The Library, 2007). I used Shapiro-Wilk test as the sample size was less than 50. The significant values for all the variables were found more than 0.05 except for Policy Actor in the case of bringing parity of esteem in the three forms of learning, which is negligible. The distribution was normal when the Shapiro-Wilk significant value is more than 0.05 (The Library, 2007). See the table below.

Table 4.9   Tests of Normality

Tests of Normality

	Type of respondents	Kolmogorov-Smirnov [a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Providing options for learning	Development Activist	.230	10	.143	.927	10	.421
	Educational Administrator	.204	10	.200*	.909	10	.272
	Policy Actor	.224	10	.169	.899	10	.213
	University Professor	.244	10	.094	.926	10	.414
Bringing parity of esteem	Development Activist	.154	10	.200*	.898	10	.209
	Educational Administrator	.260	10	.055	.919	10	.351
	Policy Actor	.361	10	.001	.747	10	.003
	University Professor	.179	10	.200*	.950	10	.672
Developing a national qualifications framework	Development Activist	.210	10	.200*	.955	10	.732
	Educational Administrator	.253	10	.070	.876	10	.118
	Policy Actor	.213	10	.200*	.860	10	.076
	University Professor	.266	10	.044	.877	10	.121

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Setting Hypotheses and Running the ANOVA

Generally, in a quantitative research we have to formulate hypotheses and test them. A hypothesis is a proposition or a set of propositions set forth as an explanation for the occurrence of some specified group of phenomena either asserted merely as a provisional conjecture to guide some investigation or accepted as highly probable in the light of established facts (Kothari, 2004). So for the quantitative findings of this research I have formulated a number of hypotheses based upon the research questions listed above in Chapter 1.

Level of significance for testing hypothesis. It is always some percentage (usually 5%) which should be chosen with great care, thought and reason (Kothari, 2004). In case we take the significance level at five percent, then this implies that Null Hypothesis (Ho) will be rejected when sampling result has a less than 0.05 probability of occurring. The five percent level of significance means that researcher is willing to take as much as 5 percent risk of rejecting the Null Hypothesis (Ho) when it happens to be true. In this research, I have taken the significance level at 5 percent.

Hypothesis 1. According to the main research question of the research the opinions of educational stakeholders on validating non-formal and informal learning to open up avenues for lifelong learning and continuing education were explored. Hence, it was necessary to calculate whether there is significant difference on the opinion in three themes of the research: OFL, POE and NQF. For this the null hypothesis (Ho) and alternative hypothesis (Ha) were set in the following ways:

Hypothesis 1

Ho: There is no significant difference among the opinion of DA, EA, PA and UP regarding OFL, POE and NQF.

Ha: There is a significant difference among the opinion of DA, EA, PA and UP regarding OFL, POE and NQF.

The four types of respondents were kept under independent variable list whereas the three themes were kept under dependent variable list. The One-Way ANOVA was run to see the significance differences among the variables. The output of the ANOVA test is given below.

Table 4.10   ANOVA for the Themes

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Providing options for learning	Between Groups	15.875	3	5.292	1.013	.398
	Within Groups	188.100	36	5.225		
	Total	203.975	39			
Bringing parity of esteem	Between Groups	20.075	3	6.692	.969	.418
	Within Groups	248.700	36	6.908		
	Total	268.775	39			
Developing a national qualifications framework	Between Groups	29.000	3	9.667	1.668	.191
	Within Groups	208.600	36	5.794		
	Total	237.600	39			

When the calculated value that is P Value or Significance (Sig.) Value is less than 0.05 than we have to conclude that there is a significant difference among the variables being tested (Kothari, 2004). Here the P Value for the first theme was calculated as 0.398, P Value for the second theme was calculated as 0.418 and for the third theme it was 0.191. Hence none of the values were less than the tabulated value i.e. 0.05. Hence the null hypothesis was accepted and concluded that there was no significant difference in the opinion of four types of respondents on the three themes of the research.

Hypothesis 2. The three themes of the research were generated out of three research sub-questions. Though they are the constituents of the main research question it was necessary to compare whether there is any significant difference among the three themes. For this second hypotheses and their sub-hypotheses are set. To calculate the significant difference the statistical tool Paired Sample T-Test at 95% Confidence Interval of the Difference was used. The precondition for running a Paired Sample T Test is that the data should be normally distributed. The Shapiro-Wilk value was found more than 0.05 for all the variables. Hence it was concluded that the data were appropriate for Paired Sample T Test. The hypotheses were as follows:

Hypotheses 2a

Ho: There is no significant difference between the means of the theme OFL and the theme POE

Ha: There is a significant difference between the means of the theme OFL and the theme POE

Hypothesis 2b

Ho: There is no significant difference between the means of the theme OFL and the theme NQF

Ha: There is a significant difference between the means of the theme OFL and the theme NQF

Hypothesis 2c

Ho: There is no significant difference between the means of the theme POE and the theme NQF

Ha: There is a significant difference between the means of the theme POE and the theme NQF

In this way the three themes while compared with each other three pairs were made and paired differences were calculated using Paired Sample T Test. The output of the calculation was found as follows.

Table 4.11 Paired Samples Test for the Themes

Paired Samples Test

		Paired Differences							
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Providing options for learning - Bringing parity of esteem	.35000	2.68471	.42449	-.50861	1.20861	.825	39	.415
Pair 2	Providing options for learning - Developing a national qualifications framework	.67500	2.37926	.37619	-.08593	1.43593	1.794	39	.081
Pair 3	Bringing parity of esteem Developing a national qualifications framework	.32500	3.42231	.54111	-.76951	1.41951	.601	39	.552

To interpret the calculated values we have to compare them with the tabulated value. "If the significance value is less than 0.05, there is a significant difference"

(Archambault, 2000) between two variables and "if the significant value is greater than 0.05, there is no significant difference" (Archambault) between the variables.

The significance value for Hypothesis 2a, 2b and 2c were found as 0.415, 0.81 and 0.552 which are greater than the tabulated value i.e. 0.05. Thus the null hypotheses of all three sets to compare the three pairs of variables were accepted and it was concluded that there was no significant differences on the score obtained for the three themes of the research. It means that the three themes are equally important to validate non-formal and informal learning to open up avenues for lifelong learning in Nepal.

Correlation among the Three Themes of the Research

Correlation is a statistical measure of the relationship, or association, between two or more variables (Shapiro, 2008). The Pearson Correlation of the three variables was calculated using the statistical tool Bivarite Correlation in the SPSS. The output was found as follows.

Table 4.12   Correlations among the themes

Correlations

		Providing options for learning	Bringing parity of esteem	Developing a national qualifications framework
Providing options for learning	Pearson Correlation	1	.409**	.501**
	Sig. (1-tailed)		.004	.000
	N	40	40	40
Bringing parity of esteem	Pearson Correlation	.409**	1	.098
	Sig. (1-tailed)	.004		.273
	N	40	40	40
Developing a national qualifications framework	Pearson Correlation	.501**	.098	1
	Sig. (1-tailed)	.000	.273	
	N	40	40	40

**. Correlation is significant at the 0.01 level (1-tailed).

The value of the correlation between any two variables is typically given by a correlation coefficient (Shapiro, 2008), which can take on any value between and including ˜1.00 (indicating a perfect negative relationship) up to and including +1.00 (indicating a perfect positive relationship). Among the three themes of the research significant correlation was found between the themes 'Providing options for learning' and 'Bringing parity of esteem'.

A positive correlation between two variables means that as the value of one variable increases, the value of the second variable tends to increase. A negative correlation means that as the value of one variable increases, the value of the second variable tends to decrease (Shapiro, 2008). The correlation of the three variables was found positive between the themes 'Providing options for learning' and 'Developing a national qualification framework' i.e. 0.501 and between the themes 'Providing options for learning' and the theme 'Bringing parity of esteem'. In this research these correlations strongly suggested me that providing different learning options (formal, non-formal and informal) for people can be ensured when these forms of learning are kept in equal parity i.e. giving equal status in the society and when type of skills, learnt either formally, non-formally or informally are kept in a single National Qualifications Framework (NQF).

<p align="center">Analysis of Multiple-Choice Questions Data</p>

Data Entry Procedure

A separate file was created in SPSS to enter the data obtained from Multiple-Choice Question. There were 9 questions consisting of 3 to 4 options to be ticked. There were 31 options altogether. As the respondents were made free to tick more than one option there was the probability of ticking all of the options and not ticking any of them at all. Hence

all of these 31 options were treated as 31 different variables. The options that were ticked were given value '1' that means 'Yes' and the options which were not ticked were given value '2' that means 'No'. Then through the 'Analyze' menu of the 'Multiple Response' button was selected to define sets. The options that belonged to a particular question were kept under a single set. For example, the first question i.e. 'What is/are the most important approach/approaches to learning?' had 4 options (variable) –formal schooling, self-learning, non-formal education modality and work based learning – were kept under the Set 'Important approach to learning'. In this way all other 9 sets of variables were defined.

Statistical Tools Used for Calculation

For each set or question three different types of calculations were made using three types of statistical tools. The statistical tools and their roles to calculate desired values are given below.

Frequency Percentage. To calculate the frequency percentages of each of the options (variables) of a set (questions) from the Multiple Response button of the SPSS window 'Frequency' was selected. As shown in the tables below frequency (N), percent and percent of the cases were calculated, where 'N' refers to the number of times the corresponding response ticked.

Analysis of variance. Analysis of Variance (ANOVA) refers to a family of statistical procedures that use the *F* test to test the overall fit of a linear model to the observed data (Field, 2006). The resulting *F* test is, therefore, an overall test of whether

group means differ across levels of the categorical independent variable or variables. The value calculated along with *F* Value is Significance Value which is also called *P* Value.

In practice, 0.01, 0.05, and 0.1 are the most commonly used values for alpha. If the *p-value* of a test is equal to or less than the chosen level i.e. alpha value, then it is deemed statistically significant; otherwise it is not (Noymer, 2008).

While analyzing the variables of each set were kept under Dependent Variable List and Types of Respondents under Factor list or Independent Variable list. The types of respondent represent a single variable.

The alpha value was virtually chosen at 0.05 level and it was decided that if the calculated Significance Value or the P Value is equal to or less than 0.05 then it was concluded that the variance among the variables were significant (Stockburger, 2009). That is to say if the calculated values were found equal to or less than 0.05 then it was concluded that the four types of educational stakeholders have statistically significant differences in their opinions on validating non-formal and informal learning to open up avenues for lifelong learning and continuing education.

Correlations. The Pearson Correlation of the variables was calculated using the statistical tool Bivarite Correlation in the SPSS (Shapiro, 2008). As stated above the Correlation Coefficient from -1 to +1 referred to strong positive correlation and strong negative correlation respectively. The Coefficient value '0' means no significant relationship exists between the variables.

The nine sets of variable each corresponding with nine research questions were analyzed using the above-discussed three statistical tools: frequency percentage, One-

Way ANOVA and Correlations. The nine questions belonged to the three themes of the research.

Theme 1-Providing Options for Learning

This theme was related to the first research question i.e. 'How do educational stakeholders perceive the significance of providing options for learning through formal, non-formal and informal means?' The multiple choice questions designed under this theme were Question Nos. 1, 2 and 6 which were rearranged as 1, 2 and 3 at the time of data processing (See, Arrangement of question numbers at the beginning of this Chapter).

Question No. 1. In the multiple choice questionnaire the first question was written as 'What is/are the most important approach/approaches to learning?' The tables consisting outputs are given below.

Out of 40 respondents 33 persons (82.5% of the total respondents) chose formal schooling as the most important approaches to learning, which was followed by 'work based learning' (60%) and 'non-formal education modality' (45%) and 'self learning' (42.5%) respectively (see Table A25). This finding indicated that the educational stakeholders of Nepal perceived formal schooling as the most important means of learning where as non-formal and informal (self-learning) is of the least preference.

A One-Way ANOVA test was administered to see the significance difference among the different types of educational stakeholders. There was no significant difference among the four types of respondents (DA, EA, PA, and UP) on the different approaches of learning as the significant values were more than 0.05 for 'Formal Schooling' (0.619), and 'Self-learning' (0.165), 'Non-formal education modality' (0.

595). There is a significant difference in the case of work-based learning as the P Value is only 0.023 (see Table 26).

The variable 'self learning' has a strong positive correlation with 'Non-formal education modality' (0.422) and 'Work based learning' (0.599). Similarly, a negative correlation was found between 'formal schooling' and 'work-based' learning (see Table A27).

Question No. 2. The question was written as 'How knowledge and skills relevant to one's life can can be acquired?' The question was abridged like 'Best way of acquiring knowledge' or 'aok' in short. The findings are given below.

This question was also based on the first theme, i.e. providing different learning options for learners, of my research. With this question I wanted to get Educational Stakeholders' perceptions on the best way of acquiring knowledge. Out of four variables majority of the respondents (72.5%) opted for the second one i.e. 'Involving oneself in learning activities at home, community, religious venues, etc (see Table A28). It clearly indicated that the best means of acquiring knowledge in informal and non-formal (72.5% and 67.5%) rather than formal ones (57.5%).

From the One-Way ANOVA test it was found that there were no significant differences among the different types of educational stakeholders on the best way of acquiring knowledge. The significant value or the P Values were found as 0.611 for 'Attending good schools and colleges, and securing good scores in the exams', 0.951 for 'Involving oneself in learning activities at home, community, with peers, religious venues, workplaces, media, libraries, education and cultural centers', 0.762 for 'Getting involved in learning through occupational experiences and reflecting real life situations',

and 0.864 for 'Acquiring knowledge and skills relevant for his/her life with the help of ICTs'. In this way, none of the significance value was more than 0.05 (see Table 29).

None of the variables have strong correlation (i.e.> -0.4 or +0.4). A significant (moderate) correlation (0.280) was found between 'Involving oneself in learning activities at home, community, with peers, religious venues, workplaces, media, libraries, education and cultural centers' and 'Acquiring knowledge and skills relevant for his/her life with the help of ICTs.' A negative correlation (-0.57) was found between 'Attending good schools and colleges, and securing good scores in the exams' and 'Getting involved in learning through occupational experiences and reflecting real life situations' (see Table A30).

Question No. 3. The question was written as 'How can we judge the quality of learning outcomes?' in the questionnaire set. For SPSS data entry the precision was made as 'Judging quality of learning'. The output and their interpretations are as follows.

This question was related to the first theme i.e. 'Providing different options for learning'. From the frequency percentage I found that Educational Stakeholders are positive towards providing freedom for learning i.e. through formal, non-formal and informal modes of learning. The option supporting this view got highest percentage i.e. 48.6% against the options opposite to this view that is only 2.7% (see Table A31). The respondents also favored to ensure freedom for learning through any of the means by validating the knowledge and skills acquired through non-formal and informal means.

No significant differences were found among the four types of respondents on judging the quality of learning outcomes. None of the variables have the significance value more than 0.05. The respondents seemed to be more consistent in the option 'By

providing freedom for learners to learn as per their capacity and interests' (0.595)

followed by the option 'By focusing on contents offered in the curriculum' (0. 472). The

significance value for the option 'By placing more emphasis on formal education' was

0.404 and for the option 'By validating learning outcomes acquired through non-formal

and informal means' was 0.076 (see Table A32).

Among the four options given as the ways of judging the quality of learning

outcomes some significant correlations were found. A strong negative correlation (i.e. -

0.522) was found between the option 'By focusing on the contents offered in the

curriculum' and the option by 'By providing freedom for learners to learn as per their

capacity and interests'. Another negative correlation (i.e. -0.406) was found between the

option 'By focusing on contents offered in the curriculum' and the option 'By validating

learning outcomes acquired through non-formal and informal means' (see Table A33).

These negative correlations infers that those who opted formal ways of assessing learning

outcomes do not opt for the non-formal and informal ones. A positive correlation was

found between the options that favor formal ways of judging the learning outcomes.

Theme 2 – Bringing Parity of Esteem

This theme was related to the research sub-question 'How do educational stakeholders

perceive the possibility of bringing parity of esteem among formal learning, non-formal

learning and informal learning?' The three questions designed under this theme were

Question Nos. 3, 5, and 7 in the questionnaire which was rearranged as 4, 5 and 6

respectively during the time of data processing.

Question No. 4. This question was written as 'How should one's competence be

determined for selecting him/her as an employee?' It was related to the second theme i.e.

bringing parity of esteem of the research. The question was précised as 'Selecting as an employee'. The findings are as follows.

Among the three options given as the ways of assessing people as an employee, the respondents have similar kind of preferences. The first option that supported formal/traditional way of assessment i.e. 'Evaluating learning achievements secured in the formal education structures: school, college, training institutions etc.' got 62.2% which is equal to the option 'Administering tests to ascertain equivalency of learning achievements obtained through NFE Modality (for example CLC)'. The third option in favor of assessing the learning outcomes through informal means got slightly less percentage i.e. 59.5% (see Table A34). These data tell me that Educational Stakeholders perceived the three forms of learning in equal esteems. Actually, this is one of the important quantitative results that clearly addressed my second theme on the perception of Educational Stakeholders on bringing parity among formal, non-formal and informal means of learning.

By conducting an ANOVA test I came to know that there is no significant difference among the four types of educational stakeholders on the ways of selecting an individual as an employee. All the options have the P Values more than 0.05 (see Table A35).

Among the three options given as the ways of selecting an individual as an employee, none of the options had any significant correlation with other options because none of the Pearson Correlation Coefficients were found more than 0.2 (see Table A36). It shows that the three ways of assessments are equally important for selecting an

individual for a job. None of which can replace another. The options are mutually inclusive.

Question No. 5. This question was written as 'What is/are the best means for enhancing lifelong learning and continuing education?' The shortened form for the SPSS entry was 'Enhancing lifelong learning'. The findings are as follows:

The first option i.e. 'Recognizing and validating self-learning, prior learning, work-based learning and experiential learning' got the highest percentage (65.0%) followed by the option 'Establishing parity among formal, non –formal and informal learning' (55.0%) and the option 'Providing learning options such as through formal, non-formal and informal means' (50.0%) (See Table A37). From these statistical data I made a claim that the best means of enhancing lifelong and continuing education is by recognizing and validating the skills and knowledge acquired by both formal and informal modes of learning.

There is no significant difference in the opinion of the four types of Educational Stakeholders i.e. DA, EA, PA, and UP on the best means of enhancing lifelong learning and continuing education as non of variable have the significance value more than 0.05. The P Values were 0.560, 0.162, 0.521, and 0.311 for the options 1, 2, 3 and 4 respectively (see Table A38).

A strong positive correlation (i.e. 0.465) was found between the option 'Providing learning options such as through formal, non-formal and informal means' and the option 'Developing a National Qualification Framework (NQF)' (see Table A39). It is a clear indication for me to claim that the Educational Stakeholders who opted for providing

different options for learning also opted for developing a NQF to ensure lifelong learning and continuing education by validating non-formal and informal learning.

Question No. 6. The question was written as 'How does/do learning take place?' The precision used for the SPSS entry was 'Ways of learning'. The frequency percentages, ANOVA and Correlation outputs of the variables of this question were found as follows.

This question was related to the second theme of my research i.e. "bringing parity among the three forms of learning'. Among the three options there were 2 options supporting non-formal and informal learning and the 1 option supporting the formal learning as the important ways of learning. Majority of the respondents opt for the option 'Through one's reflection of his/her day-to-day activities' (72.5%) followed by the option 'through individual initiative and group sharing' (70%) (see Table A40). The option supporting formal learning received only 67.5% of total choice which is less than options supporting non-formal and informal learning. These data are ample proof for concluding that the Educational Stakeholders put non-formal and informal learning in the equivalent esteem as formal learning.

A Significant Difference test administered using a statistical tool One-Way ANOVA yielded that all of the educational stakeholders had homogeneous opinions on the best ways of learning. That is to say the P Value of the first option i.e. 'Through individual initiative and group sharing' was 0.084 which is greater than 0.05 i.e. the tabulated value of P. Similarly, the P Value of the second option i.e. 'Through interactive process among teachers and students at school and colleges' was 0.762 and the third

option i.e. 'Through one's reflection of his/her day to day activities' was 0.734 (see Table A41).

A significant correlation (i.e. 0.290) was found between the option 'Through interactive process among teachers and students at school and colleges' and the option 'Through one's reflection of his/her day to day activities', however the correlation is weak as it is less than 0.3 to make an assertion that the one who opted for formal learning also opted for the non-formal and informal learning. These Pearson Correlation Coefficients indicated that Educational Stakeholders had homogeneous opinion regarding the second theme of my research that is bringing parity among the three ways of learning (see Table A42).

Theme 3 – Developing a National Qualification Framework

This theme was related to the research sub-question 'How do educational stakeholders perceive the importance of developing a structure that provides eligibility for further learning for those who have been through the process of non-formal and informal education?' The three questions designed under this theme were Question Nos. 8, 9, and 10 in the questionnaire which was rearranged as 7, 8 and 9 respectively during the time of data processing.

Question No. 7. This question was written as 'What is/are important while one's competence is assessed?' The question doesn't seem directly related to a National Qualifications Framework, however, if an NQF is developed it is comfortable to assess the competence of an individual, no matter however and wherever he/she has acquired skill and knowledge. So, it was kept under the third theme of the research. The précised form of the question was 'Assessment of competence'.

There are different types of abilities that could be taken into consideration while making an assessment of an individual's competence. The abilities were grouped into four categories: ability to perform in exams; ability to solve life problems; ability to get job in the market and ability to adjust oneself in the competitive modern world. Out of four options the last one got the highest percentage (74.4%) followed by ability to solve the life problems (69.2%). Both of these options cover the skills and knowledge that should be delineated while preparing an NQF. The first option which has been used traditionally as the only means of assessing one's competence got the lowest percentage i.e. 17.9% (see Table A43). These quantitative results clearly indicate that an NQF is mandatory for ensuring lifelong learning and continuing education by validating all sorts of learning skills and knowledge acquired irrespective of time, place and process.

Through an ANOVA test it was found that there was no significant difference in the opinion of different educational stakeholders regarding the important ability to be taken into account while once competency is assessed. None of the Significance Value is less than 0.05 i.e. the tabulated Value of P. The P values for options 1, 2, 3, and 4 are 0.112, 0.566, 0.560 and 0.951 respectively (see Table A44).

Among the four variables (options) significant correlations were found among four variables. A strong correlation (0.490) was found between the option 'Ability to get the job in the market' and 'Ability to perform in the exam'. It indicates that one who secure high score in traditional exams are likely to get job in the market. A moderate correlation (0.320) was found between the options 'Ability to solve life problems' and 'Ability to get job in the market' (see Table 45). These data do not have any noteworthy significance; however it can be inferred that while developing a National Qualifications

Framework all sorts of these activities should be focused as per their need and importance so as to enhance lifelong learning and continuing education.

Question No. 8. This question was written as 'What is true about lifelong learning?'This question was designed to get the opinion of educational stakeholders on enhancing lifelong learning through the development of an NQF.

This is the second question that comes under the third theme i.e. developing an NQF for enhancing lifelong learning and continuing education by validating non-formal and informal learning. It looked for the opinion of the educational stakeholders regarding the importance of formal, non-formal and informal learning for lifelong learning. Majority of the respondents opined that the three forms of the learning are the constituents of lifelong learning and continuing education. Statistically, this option got 66.7% followed by the second option that stated that non-formal and informal learning are more important than formal learning (38.5%) (see Table A46).

The first option stating the three forms of learning provide equal credible for lifelong learning and continuing education got 30.3%. From this data I can claim that the educational stakeholders perceive non-formal and informal learning are more important than formal learning. Hence the skills and knowledge that could be acquired through less formal means should be delineated in the NQF.

So far as the differences in the opinion of the different types of educational stakeholders regarding the importance of three forms of learning due to their professional affiliations, no significant differences were noticed among them. The Significance values to each of the variable were found more than 0.05. The P Values were 0.619, 0.594, and 0.560 for the options 1, 2 and 3 respectively (see Table A47).

A significant negative correlation (-0.320) was found between the first and the third variables (see Table A48). It shows that these two variables are in inverse proportion. In a sense it gives me an indication that while developing an NQF the three forms of learning should be taken as obligatory constituents of lifelong learning and continuing education rather than taking them as providing equal credible for lifelong learning.

Question No. 9. This question was written as 'To maintain complementary and supplementary relationships between formal, non-formal and informal learning, which of the followings should be done?' The precision for data entry was made as 'Maintaining complementarily and supplementary relationships'. The SPSS outputs were as follows.

This question was listed in the questionnaire in order to elicit the opinion of the educational stakeholders regarding the provision to be made in order to maintain a complementary and supplementary relationship among formal, non-formal and informal modes of learning. The third option that is 'developing a national qualifications framework' got the highest percentage i.e. 68.4% followed by the first option that stated that there should be a single board at national level for accreditation and certification of the three forms of learning (42.1%) (see Table A49). This quantitative finding indicated that an NQF should be developed in order to enhance lifelong learning and continuing education. The NQF would provide a framework for validating knowledge and skills acquired through non-formal and informal modes.

From the ANOVA test administered putting the types of respondents as independent variable it was found that there is no significant differences in the opinions of different types of educational stakeholders regarding the provision for maintaining

complementary and supplementary relationship among formal learning, non-formal learning and informal learning because none of the significance values exceeded the tabulated value of P i.e. 0.05. The P values of the 1st, 2nd and 3rd Variables were 1.000, 0.951, and 0.285 respectively (see Table A50).

A significant correlation i.e. -0.370 was found between the second and the third variable (option). The correlation is moderate and negative (see Table A51). It indicates that when a separate authority for providing validation for non-formal and informal learning is made it is less likely that the NQF to be developed, however there is not enough evidence that the authority is not related with the NQF to be developed.

<div align="center">Summary of Quantitative Data Analysis</div>

Three themes - providing options for learning, bringing parity of esteem and developing a National Qualifications Framework – were generated from the three research sub-questions. The Likert scale data and Multiple-choice question data were arranged and processed for analyzing comfortably and coherently using proper precisions and codes.

Each statement and question was analyzed under the themes of the research to which they were associated with. Cross tabulation, descriptive statistics, ANOVA, Paired Samples Test, Correlation, frequency, etc. were used as significant statistical tools for the data analysis.

Statement-wise analysis of Likert scale data revealed that Educational Stakeholders were in favor of making people free to acquire knowledge through the three modes of learning. They strongly agreed to allow people from less formal means to enter into formal education system after equivalency tests. They were also found very positive on providing equivalent degree of recognition, accreditation, and validation to non-formal

and informal learning. They also showed agreement on focusing non-formal and informal learning as equally as formal learning to enhance lifelong learning in Nepal.

Some significant results were obtained from the theme-wise analysis of Likert scale data. The overall result of the thematic analysis showed that Educational Stakeholders were positive on providing options for learning, bringing parity in three modes of learning and developing an NQF. The ANOVA result of thematic analysis showed that there were no significant differences among the opinions of four types of Educational Stakeholders on the three themes of the research. Similarly, the correlation analysis of the three themes showed that there was a significant positive correlation between the themes OFL and POE; and the themes NQF and OFL.

From the analysis of multiple-choice question data, it was found that knowledge and skills relevant to one's life can be acquired by involving oneself in learning activities at home, community, religious venues, etc. There were no significant differences in the opinions of four types of Educational Stakeholders on this regard. The analysis also revealed that quality in learning can be achieved by providing freedom for learners and by validating their learning outcomes learnt non-formally and informally. The best means of enhancing lifelong learning was found as recognition and validation of self-learning and experiential learning, prior learning, and work based learning. From the correlation analysis it was found that for validating non-formal and informal learning development of a National Qualifications Framework is crucial. On the basis of NQF the competence of an individual should be assessed. While assessing his/her ability the knowledge, skill, and competence necessary for making him/her fit in the competitive modern world should be

prioritized. The educational stakeholders also opined that to enhance lifelong learning the three modes of learning should be enhanced equally well.

However, in some of the issues the Educational Stakeholders were found uncertain. They were not certain on whether people from less formal background would be able to adjust with the formal education system even if they agreed to allow them to enter into the system for further study. Similarly, they were also uncertain on whether the learning outcomes obtained from the three modes of learning would be equal. These issues were taken seriously and further probing was made on the qualitative part of this research (see Chapter 5).

CHAPTER V

QUALITATIVE DATA ANALYSIS AND INTERPRETATION

This research was a two phased mixed method study, which explored the perception of educational stakeholders on validating non-formal and informal learning to strengthen lifelong learning and continuing education in the context of Nepal. In the first phase of the research I administered a set of questionnaire to four different types of educational stakeholders (Development Activists, Educational Administrators, Policy Actors and University Professors). The quantitative data elicited from the questionnaire sets were analyzed and presented in the preceding Chapter. This Chapter includes how I carried out the qualitative phase of the research and the findings that came out of it.

Revisiting the MM Research Design

As discussed in Chapter 3 (Methodology) of this dissertation I had discussed about "Mixed Methods Sequential Explanatory Design" (Creswell, 2006, p. 72). According to this design an MM researcher selects participants on the basis of the findings of the quantitative results. Creswell (2006) writes,

> If one phase is followed by another phase, the first phase is quantitative, the qualitative phase is emphasized, the second phase is connected to the results of the first phase, and the intent is to purposefully select participants to best address the qualitative research question, then the choice of design is the Explanatory Design–participant selection model (pp. 85-86).

According to Creswell (2006) the rationale behind the first phase and second phase sequencing is that "the quantitative data and their subsequent analysis provide a general understanding of the research problem" (p. 87). The quantitative data obtained from selected participants and their analysis "refine and explain those statistical results by exploring participants' view in more depth" (p. 87).

The following results of the first phase (quantitative survey) were taken as the most significant measurements for selecting participants for the second phase of the study (hermeneutic phenomenology).

a. The educational stakeholders perceived the possibility of identifying, recognizing and validating non-formal and informal learning positively to open up avenues for lifelong learning and continuing education in Nepal.

b. There was no significance difference in the opinion of four types of educational stakeholders (DA, EA, PA and UP) on validating non-formal and informal learning to open up avenues for lifelong learning and continuing education in Nepal.

c. There was no significant difference in the opinion of educational stakeholders on the three themes of the research i.e. providing options for learning through formal, non-formal and informal means, bringing parity of esteem among the three forms of learning and developing a National Qualifications Framework.

<center>Shifting to Qualitative Inquiry</center>

As discussed in the Methodology part (Chapter 3) of this dissertation it was the time situating myself in the hermeneutic background and venturing into the world of qualitative inquiry and constructing meaning out of the lived experiences of research

participants and my interaction with them in a long discourse. Sifting my practices from browsing the Internet for better pages for literature review and distributing questionnaire I had to make myself ready for "direct interaction with individuals" (Hancock, 2002, p. 9). My quest was adventurous and thirst needing "richness of data giving deeper insight into the phenomenon" (Hancock, p. 9) that comes through experiences accumulated by the people involved and to be involved either directly or indirectly in the field of validating non-formal and informal learning to ensure lifelong learning and continuing education.

Furthermore I had to prepare myself not as a barrage - questioner but an active interlocutor full of knowledge not only to elicit information but also to share practices and prospectuses of validating non-formal and informal learning in the world and in Nepal. I had to "probe the interviewee to elaborate on the original response or to follow a line of inquiry introduced" (Hancock, p. 9) for further exploration. For this I not only plunged myself into reading oceanic literature in the field of inquiry but machinated my schedules into systematic stages for well preparation.

<div align="center">Conducting Interviews</div>

Pre-Interviewing Stage

Taking consent. The selected participants' backgrounds were explored via the Internet and discussion with friends and teachers. I especially focused on their experiences and fields of study while exploring their background. Their publication, if found any by whatever means, were perused and necessary notes were made so as to make the interview comfortable and successful. Their telephone numbers and email addresses were collected from friends and visiting their respective offices. Some of them

were contacted through telephone and some of them through email for the first time. I

vividly narrated my research interest and my study background and the purpose of the

inquiry. Their convenient times for first visit were asked and noted down. Then I went to

visit them ate the scheduled times.

With proper greeting I further elaborated my area of research and their

contribution for its accomplishment. I asked them about their willingness to participate in

the research. Those who showed their approval were asked to sign two sets of consent

forms and one was given to them. The date, time and venue for the interview were fixed.

Then I returned to my residence. Some of them who wanted to know more about my

research were sent an email with an attachment consisting of the purpose of the research,

research questions, procedures of the research and the provision of confidentiality

(Groenewald, 2004).

Building rapport. To elicit desired information from the participant it was a very

important thing. I was well alert for this and acted accordingly. While I met face to face,

online in the Internet and on the telephone I addressed them with honorific terms 'Sir' for

males and 'Madam' for female. To express my due respect I showed common courtesies,

introduced myself with full name, etc. I didn't share my knowledge and experiences

much in the phenomenon being investigated, nevertheless, whenever I felt necessary for

probing the issues more profoundly I gave some examples of validation of non-formal

and informal knowledge and skill at international level. To touch the ground reality of the

phenomenon under investigation I acted according to the need of the interviews and the

interests if the interviewees. During the interview I tried to maintain proper balance in

turn - taking. The presuppositions and shared world knowledge were inculcated in the interview.

Interviewing Stage

After asking some of the throw way questions and replying some of curiosities of the participants I asked for their consent to record the speech. The recorder was on and the first issue was raised with brief background and supporting examples so as to make the issue crystal clear. The first open-ended question, which is called as "grand tour question" (McCaslin & Scott, 2003) included the true essence of phenomenological research. I got an interesting experience during the interviews that the first speech acts were virtually long and covered the overall impressions of the participants over the issues that were going to be raised. Some of them went on speaking for 5 to 15 minutes and I went on encouraging and co-operating them to share their experience and opinion, however, due to the time limitation and sometimes too much deviation from the mainstream discussion I had to make polite and mild interruptions to probe another issue. Fortunately, some of the issues were made redundant by their opinion on the first issue. Some participants were found more elaborative whereas a few of them just gave brisk reactions to the issues and I acted accordingly.

Post-Interviewing Stage

  Translating and transcribing. What left now was a time consuming task of translating and transcribing the interviews. The respondents were, undoubtedly, all Nepalese educational stakeholders. Though they could talk in English they preferred the Nepali language as the medium of interview. I also realized that they could express their opinions and experiences more fluently in their mother tongue than in the foreign

language i.e. English (Lyons, 2008). So, the first work after interview was to translate all Nepali utterances into English. However, I translated them mentally and only the transcribed versions of the interviews were made ready for analysis. Transcription is "the procedure for producing a written version of the interview" (Hancock, 2002, p. 14). Some of the interviews which were about 60 minutes long in speech took me a whole day to transcribe. Transcribing doesn't mean that rendering individual words into written script only. Mere juxtaposition of words may not carry the intended meaning of the interlocutors. During the time of transcribing considerations were made on how the meanings of oral discourses can be "communicated on papers by using punctuations" (Hancock, 2002, p. 14).

All the excerpts of the interview were not transcribed as they were not essential. The "tape analysis technique" (Hancock, 2002, p. 14) was used to sort out the parts of the recorded interview.

<div align="center">Selection of Research Participants</div>

There are different types of sampling strategies for a qualitative research. The snowball, purposeful and criterion sampling methods are believed to be particularly suited to phenomenological inquiry (Kleiman, 2004 as cited in Park, 2006). Obviously, it was a Mixed Method study. Now in the second phase of the study what I had to consider was how I could collect a rich amount of data. When addressing a QUAL strand of a study, the MM researcher typically utilizes sampling techniques that yield information rich cases (Teddlie & Yu, 2007). The educational stakeholders to whom the questionnaire sets were administered had to be selected in such a way that there wouldn't be selection bias

on the one hand and the participants should give the best information required for the study being investigated (Flick, 2006).

As it was an MM study I needed to do the double task if I compared myself with the one who conducts a unimethod study (Creswell, 2003). Thus I have to make sampling decisions accordingly "on the basis of time and resources available" (Teddlie & Yu, 2007, p. 86). Though it would have been better if I had been able to interview to all the educational stakeholders who provided me with quantitavie data but I had to make a compromise between the requirement of the QUAN and QUAL samples in their study which is known as "representativeness/saturation trade-off" (Teddlie & Yu, 2007, p. 86). Following this principle I reducaed the number of respondents to an adequate number.

For a phenomenological study "a sample of six to a maximum ten in optimal" (Creswell, 1998; Giorgi, 2003; Spiegeberg, 1994 as cited in Park, 2006, p. 45) is enough. Because Boyd (2001) regards two to 10 participants or research subjects as sufficient to reach saturation and Creswell (1998, pp. 65 & 113) recommends "long interviews with up to 10 people" for a phenomenological study (Groenewald, 2004). Selections of interviewees were made on the basis of the following criteria:

1. The educational stakeholders who participated in the quantitative phase (Flick, 2006) of the inquiry by returning the completed survey questionnaire.

2. The development activists who held topmost positions in INGOs that worked in the field of education, especially to enhance non-formal and informal education at the time of research undertaken.

3. The educational administrators who held the position above than section officer (joint secretary, under secretary or secretary) and working under MOE and have

expertise and experience in the field of non-formal and informal education in Nepal.

4. The policy actors who held senior positions in formulating educational, especially non-formal and informal learning policies in Nepal and who held special positions in the line agencies of GON at the time of this research.

5. The university professors who have great deal of experience in formal education and have been involved in research activities in the field of non-formal and informal education in Nepal.

Description of participant

In order to "protect the privacy of the participants" (Willing & Rogers, 2007, p. 268) their real names are not given but in order to keep the scientific spirit of the research (Willing & Rogers) they are given pseudonyms along with the following descriptions.

Table 5.1   Description of Research Participants

S. N.	Participants	Pseudonyms	Short Description of the Research Participants
1	Participant 1	Shyam	University Professor, KU, Nepal
2	Participant 2	Nayan	Under Secretary, MOE, Nepal
3	Participant 3	Chandra	University Professor, TU, Nepal
4	Participant 4	Lokendra	University Professor, KU, Nepal
5	Participant 5	Bhopal	Director of an INGO working in Nepal
6	Participant 6	Samira	A Nepali scholar doing Ed D in the US
8	Participant 7	Dev	Joint Secretary, MOE, Nepal
8	Participant 8	Badri	University Professor, TU, Nepal

Validity of the Qualitative Study

Different scholars talk about different types of validity; however, there is "a general

consensus that qualitative inquirers need to demonstrate that their studies are credible"

(Creswell & Miller, 2000, p. 124). There are four criteria to establish validity in

qualitative research (Lincoln and Guba, 1985 as cited in Park, 2006). They are credibility,

dependability, confirmability and transferability. Given the nature of qualitative study,

credibility and confirmability are deemed suitable criteria to determine methodological

rigor of the study (Park, 2006). According to Creswell and Miller (2000) qualitative

researchers routinely "employ member checking, triangulation, thick description, peer

reviews and external audits" (p. 124) as important tools for establishing validity.

The qualitative paradigm of a research assumes that reality is socially constructed

and it is what participants perceive it to be (Creswell & Miller, 2000). I used member

checking and external audits as suitable and feasible tools for establishing credibility in

the study. The depiction of a participants' experience of reality must be credibly

represented (Park, 2006). The copies of translated and transcribed version of the

interview were sent back to the respective interviewees for "member checking" (Lincoln

and Guba, 1985, p. 314 as cited in Creswell and Miller, 2000) requesting to review

whether the discourse could capture their opinion and experiences. Minor modifications

such as deletion and addition were made by them. It confirmed me that the transcripts of

the interviews really captured what they felt, realized and experienced regarding the

phenomenon under investigation.

Another tool that I used to establish the validity of the research was "audit trial"

(Creswell & Miller, 2000, p. 129). I provided clear documentation of all research

decisions and activities such as interview transcripts, description of the participant etc. to the research committee that evaluated my research.

<div align="center">Data Analysis Procedure</div>

Obviously, analyzing qualitative data was a difficult and tiresome task. It became further complicated to me as I had begun this Herculean task as a fledgling of qualitative research. In order to convert my naivety into connoisseurship I read some dissertation carried out qualitatively, reviewed a number of journal articles and perused a few books that dealt with various ways of analyzing qualitative data. Denzin and Lincoln (2005 b, p. 4) refer to QUAL researchers as bricoleurs, who employ a wide range of available data collection methodologies and analysis strategies. I was in a condition as stated by Teddlie and Tashakkori: "the choice of which analytical tools to use is not set in advance but depends on what is available within a particular research context" (Teddlie & Tashakkori, 2009, p. 252).

Among various methods of phenomenological analyses I found thematic analysis as a suitable method.   Thematic analysis is "a search for themes that emerge as being important to the description of the phenomenon" (Daly, Kellenhear & Gliksman, 1997 as cited in Fereday and Cochrane, 2006, p. 3) under investigation.

Thematic analysis follows some systematic processes. The process "involves the identification of themes through careful reading and re-reading of the data" (Fereday & Cochrane, 2006, p. 4). It is a form of pattern recognition within the data, where emerging themes become the categories for analysis. I had interview transcript of about 30 pages. In order to find the pattern of the data or the themes it was difficult at first. Different people have different perspectives to see the same phenomena. Sweeping all of these

perspectives into some specific categorical themes became really chaotic at first. But after perusing several times I found some common grounds in their views and I thought they would be the themes of the qualitative data analysis. However, the problem still remained unsolved when I came to realize that the opinion that were different from each other were more important than the ones included in the common themes. Then I decided to add several other themes that represented distinguished opinion of the interviewees.

Most QUAL analytic techniques involve generating emergent themes that evolve from the study of specific pieces of information that the investigator has collected (Teddlie & Tashakkori, 2009, p. 252). The quantitative finding of my research helped me a lot to categorize themes of the qualitative data because the interview guide was prepared based completely on the quantitative result of this mixed method research. As delineated by Teddlie and Tashakkori some QUAL data analyses use "deductive data analysis and a priori themes based on theory or extensive research findings" (p. 252). In this respect the processes generating themes of my qualitative data became neither completely inductive nor completely deductive but a pragmatic application of both strategies.

On the process of finding a best procedural way to analyze qualitative data I found several models. However, as the nature of qualitative research and the nature of qualitative data are not uniform the models so far developed may not be useful for another research. I found the same scenario in the case of my research too. The table below that I found in Braun & Clarke (2006) helped me to decide the systematic process to analyze the data elicitated by conducting interview.

Table 5.2   Phases of thematic analysis

S. N.	Phases	Description of the process
1	Familiarizing yourself with your data	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2	Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3	Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme.
4	Reviewing themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5	Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6	Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

(Braun & Clarke, 2006, p. 87)

However, I have manipulated the process according to my need and obligations. For an instance the steps 1st and 2nd are merged into one in my analsysis as I didn't generate any codes for finding the themes. The themes were generated after reading and rereading the interview transcripts by keeping the issues I probed into during the interview in my mind. As I conducted semi-structured interview the Interview Guide I used during the interview helped me to generate the themes out of the qualitative data.

Thematic Analysis of the Qualitative Data

The experts whom I interviewed pinpointed various challenges, opportunities and raised a number of issues that made me realize that the approach of validating non-formal and informal learning is a complex but a crucial task. Their perceptions, opinions and experiences were analyzed through the hermeneutic perspective (Wojnar & Swanson, 2007). Themes were generated out of qualitative data using phenomenological data analysis technique (Park, 2006). The themes are given below;

Table 5.3   Themes of Qualitative Data

S. N.	Theme No.	Themes of qualitative data
1	Theme 1	Making people free to acquire knowledge
2	Theme 2	Making FL, NFL and IL equal
3	Theme 3	Recognition, accreditation and certification NFL and IL
4	Theme 4	Recognizing, accrediting and certifying indigenous knowledge
5	Theme 5	Assessing NFL and IL
6	Theme 6	Adaptability and employability of non-formal and informal learners
7	Theme 7	Developing a National Qualifications Framework
8	Theme 8	Enhancing lifelong learning and continuing education

While presenting the themes and explaining them in detail important quotations from the interview transcripts were used to illustrate the themes and making the analysis lively and fresh. The overview of each theme is described briefly. All quotes are direct from the verbatim transcripts. To make them distinguished from the rest of the texts they are single-spaced, and indented within the text. The quotations from different participants

are separated by a space. All identifying information of participants was deleted or changed to ensure confidentiality. Grammatical errors were found in most transcripts, and the participants' speech is corrected so as to make their meaning clear as they expressed during the interview. The pseudonyms of the participants are given at the beginning of each quote with the use of parenthesis.

Theme 1: Making People Free to Acquire Knowledge

The educational stakeholders perceived that people should be made free to acquire knowledge through the three forms of learning. These learning modes have their unique importance and people shouldn't be denied with the proper utilization of all of them for making their learning process whole-hearted. Among the educational stakeholders I interviewed Shyam described as:

> (Shyam) Promoting equal opportunity to learn through all these means will be a maximum benefit to the learners. The charm and value of each of these forms of education cannot be complemented   by others.

> Obviously, there are more schools and colleges in Nepal. They all impart formal education. Everyone who is concerned with uplifting educational status of Nepali people is worried how they could improve formal education system. Though much of human learning comes informally the concerned authorities, especially the government, seems indifferent to promote informal learning system. The participants whom I consulted during my data collection expressed their thought in a rather bitter tone that government or the national education system couldn't reach to the grass-root level of the rural communities where informal and non-formal knowledge and skill, in the form of

indigenous and cultural knowledge and skill, are in practice. The version of Nayan was like this:

> (Nayan) Conflict is mounting in our country because the nation couldn't identify …it couldn't reach   to the   grass-root level and encompass the indigenous skills and knowledge. The state applied blanket approach in this diversified nation in the name of formal schooling that killed indigenous skills and knowledge. Even formal schooling couldn't provide indigenous security.

There is an unspoken agreement among the authorities of the nation to make people free to acquire knowledge through the three forms of learning. Non-formal education has not been neglected completely. However, the efforts so far we have made have not been adequate so that there is a feeling of incompleteness among the stakeholders. Lokendra expressed his opinion on this regard in the following ways:

> (Lokendra) Though there is more investment in formal learning non-formal learning has also got little investment. So far as the case of making the three modes of learning equivalent is concerned, there is no doubt that they have to be made equal but the question of how to make them so is still not completely answered. Some documents have spoken on this regard. MOE has worked on this to some extent, for example, the School Sector Reform Plan. However, it is not enough. It needs to be discussed extensively in order to find its opportunities and challenges at level wise and discipline wise and some sort of qualification standard has to be maintained.

Samira also viewed the issue of providing options for learners by making them free to acquire through their best feasible mode of learning positively. She also claimed

that the attention of the nation is more on formal education. Even though there have been

some attempts to facilitate non-formal and informal learners these have been inadequate.

She shared her perception in the following ways:

> (Samira) The nation should have clear policy, resources and other essential things.
>
> Though the nation's attention is on formal education basically however, they have
>
> non-formal education program too. They should make it more effective that
>
> provides more choices.

The educational stakeholders gave some constructive suggestions to create an

educational environment conducive to provide freedom for the learners to learn as per

their need, interest and compulsion. Shyam focused on sorting out the national population

on the basis of their need for formal mode of learning, non-formal mode of learning and

informal mode of learning and making interventions accordingly. He also hoped that it

would enhance unnoticed informal knowledge and skills. He urged that the nation

shouldn't depend on other foreign nations support. He also hinted that NGOs and INGOs

that have been working in Nepal have become obsolete as they couldn't influence the

deteriorated educational status of Nepal. He said:

> (Shyam) At first the education system as a whole should focus on target groups of
>
> formal, informal, and non-formal education. Then based on mapping of these
>
> target groups, the education policy should be made on "how the out of school
>
> children, less or non educated adults and olds (senior citizens) be engaged in
>
> learning through their daily life activities, motivate them for meaningful learning
>
> and bring their skill   into account". Their need should be heard, their ideas
>
> should be appreciated and their way to learn should be valued. For that first of all

non-formal and informal media or methods of learning should be promoted in the society by the national and local government, not totally depending on foreign supported NGOs/INGOs.

Badri asserts that if we see the relation between formal, non-formal and informal learning from complementary perspective all of them should be taken equally well. The people who are unable to go to school should be provided some alternative mode of learning that could compensate the formal learning.

> (Badri) If I study in Grade 1 and can't go to school today because I have to graze cow, then I need to have something that compensates my today's class such as self-module package, radio, peers' facilitation design, cassette, etc.

Theme 2: Making FL, NFL and IL Equal

All of the research participants highlighted this issue very much during the interview. They narrated their perceptions and understandings through retrospective aspect of the development of education system as a whole. According to Dev in order to understand the issue of making the three forms of learning equal we have to see it through historical perspective. He averred that the three forms of learning are not the rival paradigms competing to each other; rather they emerged when one was not able to fulfill the need of transferring knowledge and skills to the new generation. For him the foundation of hitherto existing education system is informal education; when it became unable to fulfill the need of education formal mode of delivery came into being. He said the following on this regard:

> (Dev) Informal learning is the beginning of education. Gradually, people realized that informal education couldn't deliver knowledge completely. To compensate

this formal education came into practice. The foundation of our knowledge or education is informal education.

He further highlighted the importance of informal learning in the life of an individual. He claimed that more than 80% of human learning comes informally. It leads our life and it is enhanced by formal and non-formal learning. The basics of our knowledge are informal where formal education developed to add values to these basics. But sometimes the formal education became unable to provide appropriate delivery and we adopted non-formal education as an alternative to formal education. Thus the concept of giving importance to either one or the other modes of learning is not so important. The three modes of learning take place in the life of all individuals.

Some of the experts whom I conducted interview tried to see the upbringings of the three modes of learning through state-relation perspective. They claimed that formal education is the state business where as informal education is the societal business. In Nayan's opinion formal schooling fulfils the interests and need of the state. There is a direct correlation between the state and the formal schooling. Unraveling the mystery shrouded on this regard he said:

(Nayan) Formal schooling protects the state. Whatever the state wants the formal schools fulfill. If you weaken formal schools it weakens the state. So, the state has given the responsibility of protecting it to formal schooling.

Dev too has similar opinion on the issue of making the three forms of learning in state-relation perspective. He gave a clear historical scenario of the development of three modes of learning as per the interest of the state. He said:

(Dev) Informal education grows as per the interest of a family or a society. Schooling is organized by a state. So school is a state agency, it's a state business because it quenches the thirst of the state. The state uses it to fulfill its objectives. Hence informal is societal business and formal is state business. Non-formal overlaps to them. Sometimes it is societal business and sometimes state-business. Broadly, non-formal and formal are in state-territory whereas informal education is in non-state territory.

For Nayan making the three forms of learning equal will be an advantageous work but to make them equal the government has to make contextual interventions. He put-forth his optimistic vision like this:

(Nayan) To overcome with this problem the state should make intervention on the basis of context, content and culture. The three forms of learning should go in equal footing, I mean in a triangular approach so that it will be easier to ventilate from one form of learning to another. It will have multiple advantages. There will be the possibility of bubble economy. People will be self-sustained leading to the development of micro economy. People will be self-employed that will engender the feeling of recognition and respect in the society. If we became able to do so there would be true respect of all three forms of learning. It will not denounce the one and appreciate the other. The approach of appreciative enquiry would work on this regard.

Some of the participants gave some fruitful means to make the three forms of learning equal. Bhopal claims that making the three forms of learning is a nice reform in our education system. He seemed to be profoundly concerned with the politics of Nepal.

He opined that the commencement should be made from political level. Asserting this he said the followings:

> (Bhopal) Making the three forms of learning is a reform in education. It has to be started from political level. It needs a political commitment. In our country political parties are strong in the sense that they have good and unified cadres. They should be trained for educational purpose. Educational reforms should be the agenda of political parties. Including political leaders and their cadres all the citizens of this country have to improve their attitude. The best means of improving one's attitude is informal education. So, a firm political commitment for education reform is obligatory.

In Badri's view, to promote informal learning and make it equivalent with formal learning teachers have to be made more accountable. Informal learning and formal learning can go side by side if teachers provide opportunities for the informal learners to come up with their own understanding. Metaphorically, he said that a cow grazer learns science, sociology, mathematics, and economics of cow which when assessed by the teacher he can be a scientists, sociologists, mathematician and economist of cows. If teachers give their assignment on them who are learning by grazing cows in those areas then there will be an apt link between formal learning and informal learning.

> (Badri) A person who grazes cow can be scientist, sociologist, economist, etc. on grazing cows. The student thinks on how he could link his knowledge with the knowledge imparted by the teacher. The   teacher has to ask to complete the project on the science of cow grazing, sociology of cow grazing and economics of cow crazing.

Badri further said that our teachers have to understand that lesson learnt at home (informally) and the lesson learnt at school are the same. The only difference is that the value given to them.

Theme 3: Recognition, Accreditation and Certification NFL and IL

The experts of education have different perspectives to see the phenomena related to recognition, accreditation and certification of non-formal and informal learning. Some of them took non-formal and informal learning as totally different things in terms of recognition, accreditation and certification. According to Dev formal education has worldwide recognition because it deserves credit and it is compatible and comparable. But the credit system of non-formal education is not so concretized and recognized. In different parts of the world the requirement of non-formal education is more different than formal education. He is positive that non-formal and informal learning can also be recognized and accreditation can be provided. He claimed that some initiations have been taken to recognize non-formal learning even in Nepal. For an instance non-formal participants have got chance to enter into formal education system. Attempts have been made to make non-formal and formal education comparable. But to do it in a full-fledged manner a number of things have to be considered.

(Dev) The credit system has to be concretized. The value of education that has been attached to formal education has also to be given to non-formal education. We have to go in a comparable credit system which is called accreditation. For accreditation we have to consider some of the important things for example content load, mode of delivery, authenticity of assessment, etc. For making non-formal education creditable like formal education it must adopt some of the vital

features of formal education such as examination, curriculum, etc. If they are not made so they can't be made comparable. Without making them comparable one can't replace another.

So far as the issue of certifying informal and non-formal learning is concerned, the research participants have mixed reactions. Some of them supported it whereas some of them stood against the certification system itself; no matter whether it is the case of formal, non-formal or informal learning. The opponents of this system claimed that the totality of one's knowledge and skills can't be represented in certificates. Moreover, some of the knowledge and skills are not certifiable and the strategy of converting them into certification system by hook or by crook would be a counterproductive endeavor. According to Dev if we use certificate to value knowledge, then the certificate can undermine knowledge itself. What is considered important is certificate, not the wisdom and skill one deserves. He asserted in the following ways:

> (Dev) What I have seen is that the most fundamental part is knowledge and experience of an individual. Just to make it representative it has been converted into certificate. Moreover, in order to recognize traditional value and norms we don't need to certify it. Certificate itself is a testimony; nonetheless, it can sometime give misrepresentation. It has many flaws. It can't represent the total knowledge of an individual.

However, he accepted the certification system at least for artificial arrangement. For him the absolute truth is knowledge itself. The certificates have been used because we don't have other alternative to see the absolute truth. Though it is not a reliable

representation of knowledge we are compelled to use it. However, he doesn't mean to destabilize the existing system of certification.

Shyam didn't oppose the certification system totally but he has a profound reservation on giving overemphasis on certification. Neither had he supported the view of equivalent certification to formal, non-formal and informal learning outcomes. He said;

> (Shyam) Certification is a process of grading the level of skill the person has but it is not to equalize as formal education degree. I mean, formal education degree and non-formal education or informal education certification cannot be same. In terms of value, it depends upon what specialized areas they have and can perform in their areas of skill.

Shyam supported that some sort of recognition and accreditation have been done in Nepal. He cited some of the examples such as the skill-test system carried out by CTEVT, voice-test system of Radio Nepal etc. With the realization of certificate as an inferior representation of knowledge and skill he said,

> (Shyam) Radio Nepal takes "voice test" to be a singer. CTEVT takes skill tests to certify the skills learned by an individual in an informal or non-formal ways. A cook gives cooking test in a hotel and can be a good chef (professional cook) without formal degree in cooking, a carpenter can appear in a test to certify his/her skill but more the employer will require is skill at last, not the certificate.

According to Nayan, a nation has to develop a mechanism in order to provide certificates to non-formal and informal learners. In order to do this appropriate testing system has to be developed. Observing some of the good international practices we have to develop a system to recognize and certify non-formal knowledge and skill. It would

have multiple advantages such as the increment in the rate of return of education, reduction in education cost and increase in employability. He also claimed that certificate equivalent to formal learning certificate can be provided to non-formal and informal learners but it should be done level-wise. He said;

> (Nayan) In order to develop a mechanism we need to do piloting from the parameter of equity-in-diversity. I think the result of piloting will be good. Observing the international practices I can claim that it is possible and will have multiple advantages. It will increase rate of return and employability. Furthermore it will reduce the cost drastically.

In his view while making the provision of allowing informal and non-formal learners to enter into formal education system we have to take some philosophical consideration into account. He referred to the philosophies of Piaget and Vygotsky where the former talks about individual constructivism and the later talks about social constructivism. On the basis of check and balance between cognitive development of an individual and acceptability of his/her society a non-formal or informal learner can be allowed to enter into formal education system directly. He verbalized his philosophical opinion on the matter as follows;

> (Nayan) You need to use the theory of Piaget's and Vygotsky to deal with this. Piaget talks about individual constructivism whereas Vygotsky talks about social constructivism. If one has constructed knowledge individually it's ok but society has to recognize it. Taking both of these philosophies into   account this issue has to be addressed. Social constructivism is also important.

For Lokendra certifying non-formal and informal learning is not a problem, rather it's a good attempt. He cited some of the examples such as Private Study mode of education of Tribhuvan University, the concept of Open University where non-formal and informal learning of such types are being tested and certified. But he avowed that certificates given to all types of non-formal and informal learners be made eligible everywhere. He said;

> (Lokendra) We can certify the ones who have come informally and non-formally as has been done by CTEVT. But certificate doesn't necessarily mean that he/she is eligible everywhere. But on the basis of knowledge and skills acquired s/he should be allowed to go for higher education.

Bhopal has a similar opinion in this regard. But he sees our culture as a big hurdle to recognize and certify all sorts of non-formal and informal learning. He also cautioned that it couldn't be done through a single standardized test because of wider scope and horizon of non-formal and informal education.

He also cited some examples where some informal learners have shown outstanding performance which the formal education degree holders are unable to do. So besides certification the people need environment to enhance their knowledge and skill. He verbalized his opinion in the following ways;

> (Bhopal) Certification is ok but main thing is enhancement of knowledge and skills. There are examples where people with higher qualification are unemployed or less employed or holding inferior position than the one who has relatively lower qualification. It is because they are more efficient than the so-called higher degree holders.

For Samira, recognition, accreditation and certification of non-formal and informal learning is very essential thing. She urged to see good international practices and localize them to yield better result in Nepal. She also highlighted the efforts of higher education institutions of other countries to give chances to non-formal and informal learners to enter into formal education system. She said;

(Samira) This is the very important question and most essential thing too. In Nepal that kind of provision is rare. The state has to think it seriously. To make it more relevant they have to find out the practices of other countries and make the policy. For example, in the US the community colleges provide that kind of knowledge and skills. Besides this the universities also conduct adult education.... and continuing education programs on regular basis....

In her opinion an individual who has come through non-formally and informally should be provided with an opportunity to be tested, certified and allowed to continue his/her education through formal means. Because of the lack of such system our society has been at loss. Citing some examples of informal learners with extraordinary performance she expressed her feelings;

(Samira) This is the most important and relevant issue. If a nation can do this it will be very good asset for its overall development. Because of the lack of such system a person who has skill and knowledge is deprived of opportunity because of the lack of certificate, as a consequence an individual, his/her society and as a whole nation is in loss… There should be a platform so as to provide opportunity for an individual to assess his/her knowledge and skill. A kind of placement test

can be administered and on the basis of his/her performance he/she should be given an equivalent certificate.

Pointing out the accountability of teachers in the case of enhancing informal and non-formal learning Badri said that the teachers shouldn't care where and how the students acquired knowledge but consider what and how much knowledge they have acquired. He thinks that informal and non-formal learners should be provided with certificates, however, they can't be equal but certainly they are equivalent because the products from these two modes can't be equal but they can be equivalent.

Theme 4: Recognition, Accreditation and Certification of Indigenous Knowledge
Obviously, Nepal is a garden adorned with varieties of castes, cultures and languages. This diversity has been further beautified by hundreds of precious indigenous wisdom and skills. They have been transferred from older generations to their siblings informally. The experts whom I put this issue highlighted the importance of such knowledge embedded in different types of cultural doctrines. Some of them didn't agree that such knowledge and skills to be certified. For Bhopal recognition of such knowledge and skill is inevitable, however, certification is an artificial thing. Neither all of such knowledge could be certified. He said;

> (Bhopal) I don't think all the knowledge of this type should be certified.
> Certification is an artificial thing. The main thing is recognition of such
> indigenous knowledge and skills. Government should bring some schemes for
> recognition and the local government should promote such knowledge and skills.
> And, I am not in the position to say that all types of informal learning can be
> formalized. All types of knowledge can't be assessed and certified. Through

informal learning we need to change the entire social system of our country. So, it is impossible to achieve this goal by forcefully certifying all types of informal knowledge and skills.

Some of the cultural knowledge and skills are typical to certain caste and the caste system has been deeply rooted in the mindsets of Nepali people. Providing recognition, accreditation and certification to indigenous knowledge and skill means categorizing them on the basis of their complexity to learn. This approach may face some social hurdles in our context. For example the skill of a Brahmin to perform a religious ritual and the skill of a cobbler to mend shoes may fall on the same level. When I raised this issue Lokendra addressed in the following ways;

> (Lokendra) I think if the skills of such types are made equal it will reduce social inequality and discrimination. All types of works/labor are equal so the workers/labors of all kinds should be treated equally. I don't think that literate people should instruct others and others should work. If he/she has skills   he/she can work independently and the society should create environment for this. I don't think such provision of leveling the skills of all types will create conflict. In a sense such era of discrimination has ended. The oppressed group will resist if the member of such group are discriminated.

Going through the version of Badri I found similar type of indications. According to him there is no harm in certifying the skills of a blacksmith and an angler. It will increase the value of such indigenous knowledge and skill. Comparing the angler of the US and of Nepal he said,

(Badri) in America, an angler acquires PhD in fishing, what I claim is that the anglers in Nepal are already PhD; only what they need is new technology and ability to write. There is no harm in accrediting his/her skill.

He thinks that our variety of indigenous knowledge and skill are not the problem, the hurdle is social stigma attached with these traditional skills. He said that our blacksmiths know in what temperature he should hammer on the anvil, what he needs is what degree of temperature is the hotness that makes him feel that that was the right temperature for pouring water on the sickle being prepared.

(Badri) If we can fit in his knowledge with the technology he can be better product than the university   graduate. If we have universities of this type he can be the expert in the Department of Ironware We have been shouting for that but the problem is social stigma that has attached with us. Knowledge is not a threat but the stigma.

Above all Badri is proud of having such diversity and cultural knowledge of our Eastern civilization which had already found that Mars is red and made the priest worship with red flower and red vermilion powder before NASA had discovered that. The only problem here is that our education system couldn't make the priest realize that his knowledge is superior to NASA.

(Badri) Our education system has not been able to make the priests believe that their knowledge is   superior to the knowledge discovered by NASA. We are wealthier that Europe, we have been lagging behind because we are trying to carry on the Western knowledge

Dev has entirely a different perspective on treating indigenous and traditional knowledge. He wants this diversity keep uninterrupted. Our traditional knowledge, wisdom and skill have to go on getting values as it has been getting since past. They have values without certificates. Supporting this statement he avowed;

> (Dev) Indigenous knowledge may be commercialized. It is potential rather than commercial. It is a non-commercial asset. I don't think it should be treated as a commodity. If we use it as a commodity it may lose its ground. If we start treating indigenous knowledge in such fashion it won't posses its wisdom and preciousness. Indigenous knowledge has been preserved in the form of religion, culture and the faith of an individual. If we start certifying them it may lose it value. If we give monetary value to indigenous knowledge it may develop a negative tradition.

According to him we have to preserve and promote indigenous knowledge and skill in terms of trust on the basis of faith system. Certification can't replace trust and faith. If we try to certify such knowledge and wisdom people may use some artificiality to get certificate neglecting the precious cultural wisdom. His version was like this;

> (Dev) If we respect indigenous knowledge in its own status it gets value but when we try to certify them some artificial knowledge may outwit such precious wisdom. I mean to say the artificial knowledge of an individual that s/he uses to get certificate may replace his/her real knowledge.

But Samira is positive towards providing recognition, accreditation and certification to indigenous knowledge and skill. She thinks our education policy has to be

changed to do so and government should make a long-term plan to achieve this goal. She

opined in this way;

> (Samira) I think the concept of recognizing indigenous knowledge and skills as
>
> formal learning will   be a new paradigm for the country like Nepal. If the
>
> government is preplanned and aware people in advance the problems can be
>
> solved. Change cannot happen at once, it may take time. Therefore,   the
>
> proposed plan for recognition and validation of indigenous knowledge and skill
>
> should work in such way that it will minimize the chances of social conflict by
>
> changing our educational policy.

According to Lokendra an umbrella body should be formed with many branches

in order to provide recognition, accreditation and certification to different types of non-

formal and informal learning including indigenous knowledge and skill. He hinted for the

National Qualifications Framework to encompass all sorts of knowledge and skill.

> (Lokendra) An umbrella body can be there according to disciplined and there can
>
> be many branches – one office only can't do it. For example, there may be many
>
> aspects that have to be inculcated   such as technical skill, vocational skill,
>
> general skill and other indigenous knowledge. So, separate branches have to be
>
> developed to include all types of knowledge and skill. The umbrella body can
>
> develop framework to identify national qualifications.

Theme 5: Assessing NFL and IL

In order to recognize, accredit, and certify informal knowledge and skill of non-formal

and informal learners a country must have to develop a mechanism to assess their

knowledge, skill and competence. The respondents were requested to give their opinion

on how the assessment should be done and what institutional arrangements have to be made for this. They have different opinions.

According to Shyam, testing is not an ultimate solution for enhancing non-formal and informal education. Testing and ranking people on the basis of scores are not good because labeling the people and their performance are different things. Everyone has the potentiality of getting good score; however, all of them do not get such opportunity to convert their potentiality to performance. He further said that testing is not the work of academic or training institutions; rather it's the work of employer. His original version was like this;

> (Shyam) I think the national education system should clearly define the skills not the tests scores. Tests, if need should be conducted as per need to evaluate performance but not to certify it but to guarantee that person has that skill. Testing should be a responsibility of an agency which needs it, not the educating agency. Educating agencies especially non-formal and informal are not for grading but motivating people to perform better.

Badri has the similar type of opinion. Certification is for one's self-satisfaction. The determiner of the performance of an individual is the market. Market makes them lifelong learners as it changes faster and an individual has to update his/her knowledge to fit with the market.

> (Badri) the market will assess them. The case of certification and taking it equivalent with formal learning certificate it is a psychological aspect. For self-satisfaction the certificate can be used, otherwise it's the market to decide whether

they are viable or not, useful or not for the market. Market makes them update

knowledge.

Lokendra suggested that there should be an umbrella body (a central institution)

and their branch offices to do the work of assessing non-formal and informal skills and

knowledge. Chandra has the similar opinion as Lokendra. He further said that the model

for assessment mechanism has to be implemented in phase wise in different districts of

the country.

According to Bhopal the process of assessment depends on the type of knowledge

and skill to be tested. He thinks CTEVT has to be made further effective for testing skills

of such type. He thinks that institutions in Nepal have potentiality but they have become

worthless due to the lack of culture of utilizing them. He feared that selfish politics has

contaminated the potentiality of such institutions.

(Bhopal) If it is skill then there is already an institution for skill-test that is

CTEVT. Our institutions have potentiality but the culture of using such

potentiality has not been developed. If such environment is created and the people

are committed the existing institutions can perform this task. The existing

institutions have to be promoted and kept beyond the influence of selfish politics.

But Chandra has slightly a different opinion on this regard. He acclaimed for an

institution and a uniform procedure for assessing the knowledge and competence of non-

formal and informal learners. He said;

(Chandra) Specifically we can set up an institution or modus operandi to

recognize, certify and provide accreditation the learners through informal and

non-formal modes. It would be better to provide options to the learners to take part in exam for their certification.

Theme 6: Adaptability and Employability of Non-formal and Informal Learners

It was realized by all the educational stakeholders that the nation has to ensure freedom for its citizens to acquire knowledge and skill either formally, non-formally or informally. Even if they are free to adopt their suitable and feasible mode of learning the problem remains the same if the learners from these three backgrounds have similar level of competence. An obvious fear would be that the ones who came from informal and non-formal background are unable to adjust or compete with the ones who came formally. When this issue was raised during the interview the research participants gave some optimistic opinions.

According to Shyam, if we take the three forms of learning as mutually exclusive phenomena i.e. taking them as non-complementary entities they will become self-autonomous. Hence competent products can be engendered through non-formal and informal modes too. Giving some examples of people who with the help of their informal knowledge and skill could even outwit the products of formal education he made the thing clear that people have become better adjusted in the society with the help of informal knowledge. He expressed his experience in the following ways:

(Shyam) It should be clear that formal, informal and non-formal are not complement to each other. The one who comes from non-formal and informal education can be equal or even better than the one who come from formal schooling.

Chandra opined that the people from non-formal and informal modes of learning can compete with the people from formal background in the job market as well. He also related his experience with the provision brought by National Education System Plan (1971). He also shed some lights on the importance of certification and accreditation of non-formal and informal learning in order to increase the adjustability of them. He opined in the following ways:

> (Chandra) I think they [non-formal and informal learners] can also compete with the people with formal background. Some people having educated in engineering and natural sciences have switched to other sectors. Some of the people having informal education have done well. Due to expansion of the formal education, people have been hopeless. If we start certification and accreditation process, we can enkindle their hope again. NESP had also started the process and some farmers, carpenters and mechanics have been professors.

Samira too doesn't see any noticeable problem in making non-formal and informal learners adjustable with their formal compatriots. She focused on the equivalent certification system for making them equally adjustable with the formal certification holders to get job in the market. However, she acclaimed for the standardized testing system to make the three types of learners as competitive rivalries. She expressed her opinion with some reservations in the following ways:

> (Samira) I don't think it will be a problem. When one has an equivalent certificate s/he can easily compete with others. Equivalent certificate means equivalent knowledge, skill and competence. But effective criteria such as standardized tests have to be developed to assess such knowledge, skills and competence. If a valid

institution assess in a fair manner all types of learners who are certified equally well. If we develop such type of culture, I think this will not be a problem.

Nayan seemed to be a bit dissatisfied with the government for not making proper provisions for bolstering adjustability of non-formal and informal learners with the formal learners. He averred that the government has to ensure employability to non-formal and informal learners too. He also blamed to the political parties for their inability to forge consensus to make the three forms of learning equal. Recounting the government's incomplete and inadequate efforts to uplift the employability of non-formal and informal learners he said:

> (Nayan) In our Three-Year Interim Plan a little is talked on this regard. But it hasn't taken the three forms of learning in an equal footing as we have been taking it now. The state has given less emphasis to less formal learning. This year's government policy and budge didn't give required importance. It will certainly increase conflict. For solving this, employability has to be ensured for non-formal and informal learning. Political parties do not have consensus in the type of education system.

While raising the issue of employability of non-formal and informal learners Shyam deemphasized the inevitability of certification to their knowledge and skill. But he too advocated the importance of government's efforts to ensure employment opportunities to them as per their knowledge and skill they acquired through less formal means.

> (Shyam) If a person has skill in his area of work or profession, that should be valued, how he/she learnt is not important in a society that values knowledge. It is

a problem to the society where certificate is valued more than actual skill from very beginning. Formal degree is valued only when the job needs formal training or education, otherwise skill-based job don't need degrees. Informal and non-formal education should be valued based on skills the person has or learns or can perform and jobs should be emphasized in those areas. Limitations of each form of education should be understood and therefore, their areas of job market should be developed accordingly.

According to Lokendra non-formal and informal learners can compete with the products of formal education if the former are provided with certificates according to the desired ability and competence. He claimed there are many things besides the knowledge and skill acquired through formal schooling. He said;

(Lokendra) If he she has ability and the certification is given according to such ability then, I think   he or she is able to compete with the ones who come from formal schooling. I see no problem there. The people who have learned through their lives are able to get success. There are many things   beside qualifications that help them solve their life problems. Academic qualifications that we accumulate through formal schooling are not only the major things for getting success.

According to Badri, learners should be made capable to such an extent that they will be able to haunt the market, become able to create employment on their own, create their demand in the market; rather than making them fit with existing market. He further says that formal education even can't make its graduates fit for the market as market runs faster that education system can accommodate such changes.

(Badri) We can't accommodate changes in educational structure. It makes

curriculum, it can't be new. Formal school has such rigidity. I am at the side of

teaching learner to haunt the market not to fit in the market. What I believe is that

market runs faster than school. The idea of updating them by colleges and schools

is a traditional concept.

Theme 7: Developing a National Qualifications Framework

Similar to other themes generated during the analysis of qualitative data the theme of

developing a National Qualifications Framework too received both positive and negative

reactions. Shyam and Dev stood against this provision, whereas Samira and other experts

took this attempt positively.

According to Shyam an NQF is a tool to divide people on different classes based

on their skills. He strongly claimed that it can't gauge an individual's complete skill and

knowledge. He further claimed that it is a way to deprive of the people to develop their

originality. Advocating the situational ability of individuals to perform their skill and

competence he averred the following;

(Shyam) NQF is a way to deprive people to develop their originality and value

their ideas from each other. People will look at each other from the frame of level

of qualifications they have acquired and those who perform better in one situation

cannot perform better in other situation and how can we develop a single

framework to measure the skill of people.

Bhopal is positive on developing a National Qualifications Framework,

nevertheless, he casted several doubts on developing and implementing it effectively.

Though it is difficult to do it has to be done. He avowed in the following ways;

(Bhopal) Certainly, it will bring a lot of difficulties and problems. Different variable may emerge. There may be much variation. Some undefined skills may come. They need time to be defined. There may be many problems but what I believe is that we have to do it. It's possible. There are some hopes too because general people have been aware. Some of them are energetic and enthusiastic but we need to have commitment.

Samira has the opinion similar to Bhopal but her emphasis was on the courses of universities of Nepal to make them compatible with international universities. She seemed to be influenced with the European approach of developing the proposed European Qualifications Framework. She also asserted that NQF to be developed with appropriate and clear indicators.

(Samira) I think universities in Nepal have to design courses by analyzing the course of international universities so as to provide recognition and accreditation. Knowledge and skills should be made universally acceptable both inside and outside Nepal, otherwise it will bring problem. National Qualifications Framework should be developed with the help of proper indicators and it should also include the ways of assessing one's knowledge, skills and competence.

For Lokendra, encompassing the scattered indigenous knowledge and skill would be a challenge while developing an NQF. But he thinks it is possible by starting the process from local level. He suggested that all types of knowledge and skills shouldn't compulsorily be brought under the single framework; rather a national standard has to be set to inculcate them. His version was like this;

(Lokendra) So far as including the diversified indigenous skills and knowledge into a National Qualifications Framework is concerned I think the works has to done at local level first. I don't think all knowledge and skills should be brought at the same place. National standard has to be made and implemented in a local context. I don't think there will be unsolvable problems but enough endeavors have to be made. Different counties of the world have worked for this. I think we must do this ultimately.

According to Badri in order to bring standardization in our education system through development of an NQF, a culture of accountability has to be developed. While I raised the issue of EQF and the European inventory on validating non-formal and informal learning he said the following:

(Badri) Because of cultural difference I can't say that we can do as it is being done in Europe but what I hope is that if the people of our kind can make this voice heard it can be done. If teachers are made accountable for quality control we can certainly establish a standard as it has been done by the Europeans.

Theme 8: Enhancing Lifelong Learning and Continuing Education

This is one of the common themes appreciated by almost all of the research participants. Though all the prompts that I used in the interview were directly or indirectly related to the enhancement of lifelong learning and continuing education this issue in particular was raised to know what other things could be done besides validating non-formal and informal learning as per the opinions and experiences of educational stakeholders. Their opinions were different, nevertheless, the gist of their opinions were more or less the same. Only the difference was that they used different lens to see the phenomenon.

Dev opined that in order to enhance lifelong learning and continuing education the knowledge has to be made functional. There are many ways to make knowledge functional. Some of them are creating a system of knowledge sharing, updating knowledge to make it contemporaneous, etc. He said;

> (Dev) The main thing is how to make knowledge functional. If there is a positive relation between knowledge and its function it will enhance lifelong learning and continuing education but if it is not knowledge can deteriorate … we have to create a system of knowledge sharing and cross breading in order to make our knowledge and skill contemporaneous.

Samira thinks that the three forms of learning (formal, non-formal and informal) have to be promoted side-by-side to enhance lifelong learning and continuing education. She also highlighted the importance of developing a National Qualifications Framework for this.

> (Samira) I don't think formal learning alone can work. To enrich formal education both non-formal and informal learning have to be focused. All of these three forms have to be promoted simultaneously to enhance lifelong learning. Social organizations have to aware people of the importance of informal learning.

Lokendra, on the other hand, perceived that enhancement of lifelong learning and continuing education depends largely on the effort of government to provide opportunity for learning throughout the life of its citizens and public readiness to grab this opportunity.

> (Lokendra) The main thing for this is that the nation has to provide venue and opportunity for lifelong learning. Whoever can do should be provided with a

minimum condition to flourish it. Lifelong learning opportunities should be created at the local level. At the central level resource centers have to be established. Opportunities have to be grabbed by the people so that awareness has to be created.

According to Bhopal and Chandra commitment of all stakeholders concerned with this phenomenon is crucial for enhancing lifelong learning and continuing education. They said;

> (Bhopal) We have to realize that we need to update our knowledge and continue to throughout our lives. I don't think all of us are ready for this. Both government and public have some weaknesses. These weaknesses have to be overcome, especially by the political parties. Politicians have to realize it and fulfill their commitment.
>
> (Chandra) People think formal education is only education. When they pass certain degree, it will end. Majority of the people have no concept of lifelong education. First of all government and other stakeholders need to clear the confusion.

In the opinion of Nayan recognition of knowledge and skill is a fundamental thing to enhance lifelong learning and continuing education. He blamed the existing educational system for not providing proper environment for this. He also hinted that the Nepalese education system including bureaucracy is full of sycophancy, nepotism and favoritism that are working as hurdles for learning more and more throughout the life of an individual.

(Nayan) We have to recognize skills and knowledge at first. The state and the immediate colleague have to recognize it. The tendency of recognizing and putting right man in right place has not been established in Nepal so far. There is nepotism, favoritism and sycophancy in the country. People's   knowledge should be recognized and given them choice for proper job placement.

According to Badri learning becomes lifelong process when we let students think. We shouldn't give material; rather we should give questions to them. They need to have access with materials to find the answers of the questions. He claims to make them lifelong learner they should give an opportunity to learn and chance make their learning visible. One of the ways to do so is to publish what they have written after they have explored on the areas of their need and interests.

(Badri) If we say to the people that if you do some kind of research and write on that then I will publish your writing then they will be learning for that.

<center>Summary of Qualitative Data Analysis</center>

This study is based on Sequential MM research. On the basis of the findings obtained from the quantitative part of the research 8 participants for interview were selected purposively for the phenomenological inquiry. By striking necessary rapport and getting proper consent the semi-structured interviews were conducted with the help of an interview guide.

The participants were given pseudonyms for ethical considerations, however, a short description of each participants were given to claim the authenticity of the research throughout the dissertation. The data were analyzed using the qualitative data analysis tool 'thematic analyses'.

The interviews were transcribed and translated into English. After the rigorous study of the interview transcripts, 8 different but related themes were identified. They were (a) making people free to acquire knowledge, (b) making the three modes of learning equal, (c) recognizing, accrediting and certifying NFL and IL, (d) recognizing, accrediting and certifying indigenous knowledge, (e) assessing NFL and IL, (f) adaptability and employability of NF and IF learners, (g) developing an NQF, and (h) enhancing lifelong learning. The opinions of participants were analyzed under the themes identified. The analyses were supported with appropriate extracts of the interview transcripts.

From the analysis of qualitative data it was found that despite the need of validating non-formal and informal learning the education system of Nepal was not able to make adequate interventions. The system focused only on formal education; consequently, a large part of population was deprived of education. One of the best means to eliminate illiteracy would be providing people with opportunities to learn through non-formal and informal modes. Besides this, and the most importantly, their learning achievement in the form of local indigenous knowledge and skill should be recognized, accredited, and validated.

The nation has to develop a systematic mechanism to assess the knowledge and skill of non-formal and informal learners and the qualified candidates should be provided with opportunities to compete in the job market. For encompassing all types of learning and qualifications an NQF has to be developed as soon as possible.

CHAPTER VI

FINDINGS AND DISCUSSIONS

According to Creswell (2006), it is not enough to simply collect and analyze quantitative and qualitative data, "they need to be mixed in some ways so that together they form a more complete picture of the problem than they do when studying alone" (p. 7) to draw the finding in a mixed method research.

There are various ways of mixing quantitative and qualitative data set in MM research. One of the processes of mixing data is triangulation. It is "a step taken by researchers employing only the researcher's lens, and it is a systematic process of sorting through the data to find common themes or categories by eliminating overlapping areas" (Creswell & Miller, 2000, p. 127).

Greene (2007) has discussed more than ten types of data mixing strategies in her book entitled 'Mixed Method in Social Science'. Among them I found Data Importation strategy as a suitable strategy for this study. Simply, data importation strategy refers to "the importation of midstream results from the analysis of one data types into the analysis of different data types" (Greene, 2007, p. 148). She has called it a type of comparative analysis in which major parts of quantitative data analysis are compared with the major parts of qualitative data analysis or vice versa.

In this way, the findings of the research were drawn from the themes generated in qualitative part of the research with appropriate comparison, importation and triangulation of the quantitative results drawn in the quantitative part of the research.

After the presentations of findings I have made an extensive discussion on the basis of literature related to the findings. The findings are discussed immediately after each of the findings presented.

Finding 1: Making People Free to Acquire Knowledge

The educational experts who were consulted as the research participants of this study opined almost in the similar spirit that people should be provided with multiple options of learning. In the quantitative part of the research 67.5% (see Table A1) of the sample population strongly agreed that people should be made free to acquire knowledge through formal, non-formal and informal means. Moreover, in first theme of the quantitative part of this research i.e. 'providing options for learning' (OFL) they got 15.27 mean score out of 20 total score (see Table 4.8). Likewise, the option given in Multiple-choice question set under the question received 50% (see Table A37) of the total ticks.

During interview, in a more suggestive language, some of the participants told that formal, non-formal and informal learning options should be provided to the learners after indentifying their need and compulsion in order to provide Education for All. For this, the nation shouldn't depend on INGOs and NGOs and other types of international donor agencies as they couldn't cater the real need of the people.

Discussion on Finding 1

It can't be denied that the credit that the formal educaton system has got is, to a large extent, the outcome of people's motivation and compulsion to learning non-formally and informally. The literacy percentage of Nepal was found as 4.3% in the cessus of 2054. In 2001, it reached to 53.74 percentage. One of the reasons behind this progress was "an

increase in self-learning activities and opportunities for informal education" (UNESCO, 1981, p. 161); however, this percentage is too low in comparison to other developed countries.

One of the reasons behind such low literacy rate in Nepal is the inability of national education system to reach to the grass-root level to preserve and promote all types of informal learning such as indigenous knowledge and skill.

Some initiatives have been taken to provide non-formal mode of learning as an alternate of formal learning to the people who are deprived of formal education, nonetheless, the initiatives have been inadequate. Undoubtedly, large parts of Nepalese population who are deprived of formal education and are illiterate are willing to participate in learning processes but no adequate options have been provided to them. Furthermore, the formal degree holders are not made enthusiastic and encouraged to update their knowledge and skills through whatever non-formal and informal means possible because there is no appropriate provision for recognizing, accrediting and validating such knowledge and skills.

Some erudite scholars have talked on the issue of making people free to acquire knowledge through all three modes of learning: formal mode, non-formal mode and informal mode. For example, in De-schooling Society, Ivan Illich argued that a good education system should have the purpose to provide opportunities to all who want to learn with access to resources at any time in their lives (Illich, 1973a p. 78 as cited in Smith, 2004).

If our educational system has to engender lifelong opportunity to everyone, they should be made accessible to learn whatever means of learning is suitable for them. The

education system should garuntee that every citizen of a country are getting opportunities

for the furtherance of their knowledge and skill in the fields of their need and desires.

Furthermore, in order to provide options for learners they must be able to move more

freely between different education providers, formal or non-formal, self-study and

flexible learning modes (EAEA, n. d.).

<div align="center">Finding 2: Making FL, NFL and IL Equal</div>

In the quantitative phase of the research above 50% (see Table A15) of the total

respondents agreed that Nepal has to give equal emphasis to formal, non-formal and

informal education'. The second theme of this phase i.e. 'bringing parity of esteem

among formal, non-formal and informal learning' 14.9 total Mean Score out of 20 (see

Table 4.8).

During the interactions I made with the participants during the qualitative stage of

the research they stated that formal education is the state business as it fulfills the desires

of the state whereas informal education is the societal business because it fulfills the

learning needs of an individual. From the analysis of their overall message it was found

that they want to develop non-formal and informal learning in such a standard that these

modes also become equally accountable for the state and responsible for the individuals.

Some of them also showed their demands for the contextual interventions from the side

of the state.

Some the research participants argued that non-formal learning in nearer to formal

education than informal education. Thus non-formal education can be better validated

than informal ones as the former is more structured, compatible and comparable.

However, in totality it was found that in the context of enhancing lifelong learning they

denied that informal is inferior to non-formal learning for the purpose of recognition, accreditation and validation.

Discussion on Finding 2

Many scholars have argued that the distance among the three modes of learning are not the same. The distance between formal and informal modes is greater than the distance between formal and non-formal modes. So, NFE has got more support to be validated and made equivalent counterpart of formal learning than informal learning. NFE can be looked upon as an alternative or complement to formal education (Lamichhane & Wagley, 2006).

Carron and Carr-Hill (1991) distinguished four types of non-formal education in terms of their relationship with formal school or college education. They are (a) paranormal education, (b) popular education, (c) personal development activities, and (d) professional training.

The paranormal non-formal education consists of all kinds of educational programs that provide a substitute for regular fulltime schooling. It includes various types of evening classes, official literacy programs, distance education programs, etc. These types of non-formal programs deserve equivalencies with formal education degrees (Carron & Carr-Hill, 1991).

The second type of non-formal education i.e. popular education is explicitly directed towards the marginal groups of the population and includes adult literacy projects, co-operative training, political mobilization, and community development activities. These programs are least institutionalized so are less likely to deserve

equivalency like paranormal type with formal degrees, however they can be made equivalent by strengthening and systematizing the institutional arrangements.

The third type of non-formal education i.e. personal development activities covers the whole range of learning practices organized by cultural institutions such as museums, libraries, cultural centers, etc.; by associations promoting leisure time activities such as astronomy, observation of natural environment, playing music, etc.; and finally, by sports centers such as physical and mental health etc. (Carron & Carr-Hill, 1991).

The fourth types of non-formal education is professional training which comprises programs such as professional and vocational training organized by firms, trade unions, private agencies, etc. The learning outcomes that come from these programs deserve equivalent status with formal degrees.

Whatever may be the type of non-formal education, to bridge the gap between the formal and non-formal education the latter must be strengthened so it doesn't continue to be a weak partner of formal education but instead functions as its equal (Anonuevo, 2001).

As far as the issue of the validation of informal learning is concerned, though it has no structures, curriculums and delivery mechanisms nobody can deny its importance and obligation for the harmonious development of an individual's professional and social life. It is the one that covers the longest lifespan of an individual. Furthermore, the freedom it provides to learners is a boon that increases its significance for validation.

One of the initiatives to make the three forms of learning equal is to make substantial budgetary provision for them. Education sector in Nepal receive very less portion of national budget in each fiscal year, furthermore the budget for NFE and other

literacy programs is very less. According to Acharya and Koirala (2006) the budget for

NFE and literacy was 0.64%, 0.50% and 0.67% in the fiscal years 2059/60, 60/61 and

61/62 BS respectively. The trend has shown that there are very tiny amount of budget for

the programs such as FSP, SOP, Women Literacy, Income Generating Program, Out of

School Children Program, and Block grant for CLCs. These insufficient budgetary

provisions are major factors that impede the enhancement of Non-formal and informal

education in Nepal. If societies are to shift to a truly lifelong learning perspective in

education, there must be recognition that other sectors equally matter and therefore

should be allocated appropriate resources (Anonuevo, 2001).

As suggested by the report of UNESCO-Bangkok (2006) our overall strategies

should ensure synergies between formal and non-formal education and informal, rather

than foster competition for available human and material resources. It needs proper

policy support, delivery mechanism, etc.

The provision of making the three forms of learning equal would have multiple

advantages such as increase in literacy percentage, feeling of self-recognition,

preservation and promotion of all types of local and traditional knowledge. But for doing

so, political commitment is obligatory in the context of our nation.

From all these facts it seems that all three forms of learning need equitable

monetary, human capital, physical and intellectual investments besides making them

equally recognized, accredited and validated.

Finding 3: Recognition, Accreditation and Certification NFL and IL

In the Likert scale data analysis out of 40 people sampled 35% agreed strongly (see Table

A11) that non-formal and informal learning has to be given same degree of recognition,

accreditation and certification as formal learning. The mean score was calculated as 3.8 (see Table A12) which meant 'Agree' in the Scale value. Similarly, in the multiple-choice question set 65% (see Table A37) of the total population agreed that recognizing and validating self-learning, prior learning, work-based learning and experiential learning is an important and inevitable precondition for enhancing lifelong learning and no significant difference was found in the opinions of the four types of educational stakeholders.

In the qualitative part of the research, while analyzing the interview data I found similar types of perceptions. For example, Samira (one of the interviewees) suggested that individuals who have come through non-formally and informally should be provided with opportunities to be tested and certified.

But some of the interviewees seemed against the certification system. However, they were found positive on providing recognition to informal and non-formal learning as equally as formal learning. It was also found from the analysis that non-formal and informal learning can be provided with certification equivalent to formal education even if the provision of equal certification is not feasible. Some of them also hinted for the formalization of non-formal and informal education, however, in the context of lifelong learning they should be considered as equivalent counterpart.

Discussion on Finding 3

 If we see the history of education we can find a lot of evidences how the mode of knowledge delivery has been receiving significant metamorphosis time to time. Undoubtedly, the ancient mode of knowledge delivery was informal. According to Newman (1988), civilization cannot take place unless cross-generational learning is

present. The tendency of skill learning by children from their parents and other contacts is the basis of education. Civilization has progressed because of the learning process of the new generation from the old generation. The knowledge is then expounded upon, learned and added to by subsequent generations (Newman, 1998).

Burgeoned complexity of the human civilization needed more reforms in knowledge delivery system. The formal education and non-formal education system emerged to cater this need as inter and intra generational learning and all forms of informal learning such as group sharing, interaction in communities, etc became inadequate. The system of mass schooling came to complement it. From this diachronic point view we can say that the three forms of learning are not different completely distinct but differ in mode of delivery. Thus the issue of recognition, accreditation and validation of informal learning not so problematic neither it is a new thing but just a provision of legitimizing them.

Many countries in the world have been trying for the legislative provision in recognizing, providing accreditation and certification or validation for non-formal and informal learning as formal learning. Validation of non-formal and informal learning has been defined as "the process of identifying (making visible) and valuing (assessing and recognizing) the results and outcomes of learning taking place outside formal education and training institutions" (Leonardo da Vinchi Thematic Group, 2007, p. 13). In these changed contexts, it can be said confidently that the approach of recognizing, accrediting and certifying non-formal and informal learning is possible and obligatory too but needs a lot of mental, physical, economical and political exhaustion.

Observing some good international practices a mechanism for validation of NFL and IL has to be developed in our country. For this, along with our cultural aspects, some philosophical, methodological, and political considerations have to be taken into account.

Finding 4: Recognizing, Accrediting and Certifying Indigenous Knowledge

As stated in Chapter 5 this theme was not, particularly, the part of quantitative research. It emerged as an important theme of the research in the qualitative part as most of the research participants took it as crucial for the validation of non-formal and informal learning. However, there was question related to it in the Multiple-choice question set. From analysis it was found that 67.5% (see Table A28) respondents were positive towards providing recognition to the learners who have a great deal of knowledge and skills traditionally from their senior generations.

From the qualitative data related to this theme, it was found that all forms of indigenous knowledge and skill are not likely to get certification unless they need some sort of commercial value; nevertheless, it has been inevitable to recognize them so as to ensure their promotion and preservation. The recognition has to be made in terms of complexity to learn them. But the stigma attached to Nepali culture and tradition would be a hurdle to provide equitable recognition to the knowledge and skill irrespective of caste and culture of the people living in different spheres of Nepali society.

From the appreciation the respondents made to our indigenous and cultural knowledge it was deduced that our wisdom is more precious and superior than Western knowledge and skill but our education system has been unable to make our people realize so. These knowledge and skills are in extreme need of getting institutionalized.

Discussion on Finding 4

The knowledge and skills acquired at homes, communities, religious centers, cultural venues, etc. can be considered as indigenous knowledge and skills that are depicted in traditional occupations of the local people.

The importance of indigenous knowledge and skills was realized at the time when Nepalese education system was beginning to take place at international discussion during 1970s. UNESCO carried out a research in 1980 to find the educational status of some countries including Nepal, especially in the case of adult learning and continuing education. The contributor from Nepal N. Belbase reported on the basis of the research carried out by New Educational Reform Associates (New ERA) that in 1974, there were thirty programs of non-formal skill training, nine organizations involved in materials development, eleven in various extension activities and, additionally, four districts had adult literacy programs. It should also be realized that craft training, religious instruction and home-taught literacy were only a few instances of indigenous forms of non-formal education which existed for some time during the decades of 1970s and 1980s (UNESCO, 1981).

According to UNESCO (1981) the then Ministry of Education and Culture had implemented some programs that showed some crucial initiatives to enhance indigenous knowledge, technical knowledge, and other forms of traditional knowledge. Some of the major programs were Small Farmers Development Program (SFDP), Integrated Rural Development Program (IRDP), Radio Education, Functional Literacy Program (FLP), and Occupational Training Program (OTP) which included Technical Education Program and Skill-Training Program (UNESCO, 1981).

In 1981 the Ministry of Labor and Social Welfare was established. Under the ministry there was a Department of Labor that conducted various subprograms under Occupational Training Program. Actually that was an outstanding achievement. Labor Supply Centers were established in Hetauda, Nepalgunj and Butwal. These centers provided some short term and some long-term trainings on carpentry, masonry, soil cutting, earth leveling, Gabiyan knitting, typesetting, Bindi manufacturing, making bamboo goods, weaving etc. (UNESCO, 1981).

Nevertheless, in recent years, such programs have not been running. The initiatives made in the past atrophied because of the lack of the focus of the governments that were formed in the succeeding years. Another vital reason is that the people were less motivated to strengthen them because the knowledge gained and the skills strengthened from such programs were not supported with proper validation mechanism. That is to say, the education system couldn't support the graduates of such programs for recognition, accreditation and certification of their knowledge and skills. Now the time has come to reevaluate the past practices and move ahead with the changing global need for enhancing lifelong learning by the means of validation of non-formal and informal learning.

<div align="center">Finding 5: Assessing NFL and IL</div>

So far as the quantitative data analysis on this issue is concerned, out of the total options selected 74.4% (see Table A44) of the selection was on the option 'Ability to adjust oneself in the competitive modern world' while the respondents were asked to tick for the best criteria to assess the competence of non-formal and informal learners. The option 'Ability to perform in exams' received the least number of ticks i.e. 17.9% only (see

Table A44). Thus it was found that while assessing non-formal and informal learners to validate their learning achievements, the traditional exam system is less practical. The ANOVA result of the options showed that the four types of educational stakeholder had no significant differences in their opinion.

In the qualitative part of the research, the research participants' views on this regard can be interpreted as positive ones as they focused on the role of market to get the knowledge and skill of learners assessed because the better learners are those who can adjust with the changing need of the market.

Discussion on Finding 5

There are various methods and techniques used in different parts of the world to assess the knowledge and skill acquired through less formal means. As I have described in Chapter 2 of this dissertation Colardyn and Bjornavold (2005) have found five different types of methods for collecting learning outcomes for validation. They are (a) traditional tests and examination, (b) declarative method, (c) methods based on observation, (d) simulation methods, and (e) evidence by work practices.

No single method of assessment provides a complete overview of skills and competences held by an individual. It does not make sense to say that one assessment approach is 'better' than another. The question is rather when to refer to the one and when to refer to another (Colardyn & Bjornavold, 2005). Whatever may be the method used when an academic sits down to assess s/he will need to take into account a number of criteria. According to Evans (2006b, p.209) the major criteria are authenticity, directness, breadth, quality, relevance, and currency.

Though the participants were asked how to assess the non-formal and informal learning achievements, they were not particularly asked which methods to be used in the context of Nepal. In the qualitative part of the research too while raising the issue of assessment they focused for the standardization and fairness of judgment. So what I would like to say here is that to decide suitable methods for assessing the learning outcomes for validation, an extensive discussion is needed at national level and the methods decided has to be piloted and if found reliable and valid should be declared as the method for assessment.

Finding 6: Adaptability and Employability of Non-formal and Informal Learners

So far as the quantitative findings regarding this theme is concerned, out of total respondents 45% (see Table A23) did agreed that people from less formal means can achieve equivalent standard as the people who come from formal education. The statement got 2.57 (see Table A24) average Mean score which fall on the level 'Disagree' in the scale value of the 5 point Likert scale. From this it can be said that the educational stakeholders perceived that non-formal and informal learners can achieve equivalent degree of adaptability and employability as the people from formal education.

Similarly, 62.2% (see Table A34) of the total selection was made on the option 'Administering tests to ascertain equivalency of learning achievements obtained through NFE modality' while they were asked to select better option to determine one's competence while he/she is selected as an employee. The ANOVA result showed that there was no significant difference among the opinions of four types of educational stakeholders on the issue (see Table A35).

The quantitative findings were aptly substantiated by the analyzed results of qualitative data. The research participants supported that the less formal learners can be adjustable, adaptable and employable in the job market. Some of the participants claimed that if an environment conducive for fostering non-formal and informal learning is created, then the informal and non-formal learners can even haunt the job market or create their demand on their own rather than being fit in the existing market.

From the opinion accumulated from the research participants related to adaptability, adjustability and employability of informal and non-formal learners it can be concluded that recognition and validation of the learning outcomes gained through less formal means is obligatory. The research participants claimed that if their knowledge and skills are assessed in a fair and standard manner, there would be no problem for their adjustability with the formal education holders.

Discussion on Finding 6

 Validation of non-formal and informal learning can be seen as a benefit for both the employers (evaluation of the skills of their work force) and of the employees (improvement in employability and self-esteem through validation of knowledge). Many countries implementing the provision of validation have found it very important for increasing the adaptability and employability of their citizens. For example, Slovenia has recognized validation as a new important tool to manage human resources through increased employability, adaptability and flexibility of the work force (ECOTEC, n. d.).

The Leonardo da Vinchi program of European Commission has also identified that validation of non-formal and informal learning can "increase the employability and mobility" (Leonardo da Vinchi Thematic Group, 2007, p. 14) of the people who have

knowledge and skills acquired non-formally and informally. The employees who change their jobs have to be able to transform their knowledge and skills into new departments, companies or countries. In such cases the need for the "recognition of non-formal and informal education arises" (Omerzel & Širca, p. 106).

Validation of non-formal and informal learning can be viewed as an asset to increase social capital. Systems supporting the validation of learning, such as the collaborative use of portfolios, could facilitate the documentation of learning outcomes and "increase community confidence and employability" (Shrestha, Wilson, & Singh, 2008, p. 140). In this way it can rightly be said that non-formal and informal learners are capable of holding their respective positions, however, they need to have some pre-service training according to the need and demand of their jobs. They should be encouraged to apply for the job and necessary provision has to be made to retain them in the job. The employers should be motivated to recruit more and more people from non-formal and informal background.

<div align="center">Finding 7: Developing a National Qualifications Framework</div>

This theme directly relates with the third theme of the quantitative phase of this research. From the analysis of the total Likert scale data it was found that developing a National Qualifications Framework was an important precondition validating non-formal and informal learning as the respondents secured 14.60 total Mean score in the total score of 20 (see Table 4.8). Similarly, from the statement-wise analysis it was found that 40% (see Table A17) if the total respondents were in favor to the development of an NQF with the Mean score 3.67 (see A18) which means "Agree" in the Scale value.

In the same way, 68.4% (see Table A49) of the selections were made for the option 'developing a national qualifications framework' to maintain supplementary and complementary relationship among FL, NFL and IL. The ANOVA result showed (see Table A50) that there were no significant differences in the opinions of the four types of educational stakeholders on this issue.

The analysis of qualitative data regarding this theme has given a mixed interpretation. Some of the participants claimed that NQF couldn't gauge an individual's complete skills and knowledge. Some casted doubts on its effective development and implementation; and some feared that all types of our indigenous knowledge and skills can't be incorporated in an NQF. However, it can't said that the qualitative findings are not totally substantiated by the quantitative ones as all of the research participants either directly or indirectly opined that all the types of qualifications including informal and non-formal learning should be brought in a standard forms so as to ensure accreditation from one mode to another mode of learning.

In this way the findings on this theme can be concluded as development of a framework of qualification of this type is very crucial in order to recognize, accredit and validate all types of non-formal and informal learning and making the provision of lifelong learning possible.

Discussion on Finding 7

National Qualifications Framework has been regarded as a tool for enhancing lifelong learning within a nation as it "yields a pattern of learning that is not bounded by time or location but which can better support learning across different learning pathways" (ILO, 2004). It is a framework that makes a classification of qualifications according to a set of

criteria for levels of learning achieved. There can be different types of qualifications such as higher education qualifications, school qualifications, work-based qualifications, etc. An NQF shows how qualifications of various types relate to one another.

According to Bjornavold and Coles (2007) an NQF has various forms and functions and the aims of it can be summarized into four: (a) establishing national standards for learning outcomes, (b) promoting through regulation the quality of education and training provision, (c) acting as a way of relating qualifications to one another, and (d) promoting access to learning and transfer of learning (Bjornavold & Coles, 2007).

The research of Bjornavold and Coles (2007) found that 31 European Countries including Denmark, France, Germany, Ireland, The Netherlands, Norway, Sweden, The UK etc. have NQF of some sort. Among them Ireland, France, Malta and the UK have actually adopted and or implemented NQFs; however, "the number of European Countries having implemented national qualifications framework is still very low" (Bjornavold & Coles, 2007, p. 8).

There are some countries that have got some bitter experiences during developing and implementing National Qualifications Framework. For example, South Africa introduced National Qualifications Framework in 1995 "as a key mechanism for overhauling the racially divided and unequal apartheid education system" (Allais, 2007, p. 523). The apartheid education system was characterized by extreme inequality, astonishing inefficiency, a lack of legitimacy in the eyes of both communities and industry, and highly authoritarian and ideologically loaded syllabuses (Allais, 2007). The state was in need of state reform through quality and inclusive education. The miracle

transition needed a miracle education policy and "the NQF seemed to be that policy" (Allais, 2007, p. 528). Unfortunately, "the framework is deadlocked in unresolved policy reviews, and educational inequalities in South Africa remain stark" (Chisholm, 2004 as cited in Allais, 2007, p. 232). "The Mandela government faced the daunting problem of enfranchising huge numbers of Africans who had been denied adequate education" (Evans, 2006).

From the experience of South Asian Nepal should also learn something. In a sense Nepal is also in a transitional phase after the introduction of Republican System in 2006. So there are many similarities between South Africa and Nepal. It has a great challenge in identifying the type of non-formal and informal learning to be incorporated in the proposed NQF and leveling the knowledge and skills to provide certification and accreditation.

Unlike the case of South Africa there are some good news regarding the development and implementation of NQF. For example, in European Union NQFs are being developed in each country of the EU to make them compatible with EQF. And for the higher education there is a initiative in the name of Bologna Process. It was initiated in 1999, which aims for restructuring of higher education programs and changes to the qualifications among the 46 countries that are involved in the Process. The ministers of all countries in the Bologna process have committed to having national frameworks in place by 2010. The common and compatible framework has been called as Bologna Framework. The rationale for the Bologna Framework is to provide a mechanism to relate national frameworks to each other so as to enable international transparency,

international recognition of qualifications and international mobility of learners and graduates (Bologna Working Group, 2005).

Going through the international literature on NQF and analyzing the responses of research participants it can be said that developing an NQF in Nepal is both an opportunity and a challenge. One the one hand it difficult to gauge all the indigenous knowledge and skills of Nepal in NQF and on the other hand there would be a great challenge in implementing it effectively.

Finding 8: Enhancing Lifelong Learning and Continuing Education

The central theme of this research was enhancing lifelong learning by recognizing, accrediting and validating non-formal and informal learning. Therefore, this theme remained the most significant one. Fortunately, the theme also generated out of the qualitative data. There are many quantitative results that could be triangulated with the qualitative findings.

From the analysis of qualitative data it was found that the three forms of learning should be taken side-by-side, recognition of knowledge and skills learnt informally and non-formally, creating environment for learning, making the learning functional, etc. for the enhancement of lifelong learning. These themes are well substantiated with quantitative findings.

The quantitative phase of the research as a whole was carried out to explore the perceptions of educational stakeholders on the three sub-themes based on the main research question. Analysis of the total score value of the Likert scale data gave a very

positive result. The maximum, minimum and average scores were calculated as 58, 36

and 44 respectively in the full marks of 60 (see Table 4.7).

According to Best and Kahn (2002), in the 5 point Likert scale questionnaire set

with 12 statements, 60 is the most favorable, 36 is neutral and 12 is the most unfavorable

attitude (see Table 4.6). From the calculation using Excel it was found that only 2.5% of

the total respondents were of neutral attitude. There were no respondents with

unfavorable attitude towards validating NFL and IL.

Similarly, from the analysis of Multiple-choice responses, it was found that

recognizing and validating non-formal and informal learning is the best means of

enhancing lifelong learning which was supported by 65% (see Table A37) of the total

selection. There was no significant difference found between the opinions of four types of

educational stakeholders on the issue (see Table A38). Similarly, in another question,

majority of the selections (66.7%) were made for the option 'The three forms of learning

are the constituents of LLL' while they were asked to give their opinion on the issue

'what is true about LLL?' (See Table A46)'.

Discussion on Finding 8

Validation of non-formal and informal learning has direct benefit for enhancing lifelong

learning and continuing education as it provides a vantage ground for combining learning

outcomes from different settings and contexts (Leonardo da Vinchi Thematic Group,

2007).

Richard Edwards and Robin Usher (2001) argued that "lifelong learning as a

postmodern condition of education" (p. 277). The epistemology of education has crossed

boundaries and has become a limitless phenomenon because of the development in the

field science and technology, especially in the field of ICTs. As a consequence "lifelong learning has emerged as a potent way of framing policy and practice in many countries around the globe" (Edwards & Usher, 2001, p. 275).

UNESCO, Asia and Pacific Regional Bureau for Education and Japan International Cooperation Agency jointly organized a UNESCO-JICA International Symposium (13 - 14 October 2004) on non-formal education to promote EFA and lifelong learning. After some elaborated discussions they published a report highlighting the importance of non-formal learning to enhance lifelong learning in the region.

From the review of these literatures and the analysis of the opinions of the educational experts of Nepal it can be said that for the overall success of an individual he/she should keep on learning throughout his/her life. To make people a lifelong learner recognition, accreditation and validation of their knowledge should be ensured irrespective of time, place and process. The research participants suggested for making the learning functional by providing them with opportunities to learn and creating challenges for updating their knowledge. For this, in the context of Nepal all educational stakeholders including political institutions should be committed.

<div align="center">Chapter Summary</div>

Actually, this Chapter was the combination of Chapter 4 and Chapter 5. The analysis and findings of qualitative data obtained in Chapter 5 were triangulated with appropriate numerical findings that came from the analysis of quantitative data analysis in Chapter 4.

The themes generated out of qualitative interview transcripts were kept intact as the focus of the research was on qualitative (QUAL) findings rather than on quantitative

findings. These 8 themes were discussed by the triangulation and substantiation from three sources: qualitative findings, quantitative findings and review of literatures related to the respective themes. The literature to substantiate the QUAL- quan findings included the efforts so far made to recognize, accredit, and validate non-formal and informal learning in Nepal and the literature related to some of the international practices for enhancing lifelong learning through validation. The opportunities, risks and challenges experienced by other nations on this regard were contextualized in the case of Nepal.

CHAPTER VII

SUMMARY, CONCLUSIONS AND IMPLICATIONS

Summary

The main research question of this study was 'How do educational stakeholders perceive the possibility of identifying, recognizing, and validating non-formal and informal learning to open up avenues for lifelong learning and continuing education in Nepal?'

The main research question was divided into three sub-questions so as to make this study clear and to the point. The premise of the first research sub-question was to explore the perceptions of educational stakeholders on the relevance and necessity of providing multiple options for learning through formal, non-formal and informal means.

Similarly, the premise of the second research sub-question was to explore the perceptions of educational stakeholders on bringing parity among the three modes of learning by providing some equivalency measures.

Finally, the crux of the third research sub-question was to explore the perceptions of educational stakeholders on developing a National Qualifications Framework by incorporating all types of qualifications and all forms of learning so as to make them visible and compatible.

On the process of reviewing the literature related to the research question, I realized that the perceptions of educational stakeholders alone would be incomplete to find the answers of these research questions. One of the reasons behind this was that validation of non-formal and informal learning by developing an NQF was a new concept

for Nepal. Thus, I thought that the international experiences and practices on this regard would be an inevitable organ of my research to draw the findings.

Going through the literatures of research methodologies, I came to know that there are no methods so far developed without weaknesses. The two approaches of research methodology - quantitative and qualitative – are criticized much due to their inherent weaknesses. The rivalry paradigms through which they are guided have made them weaker on their ontological, epistemological, axiological, and methodological grounds. But fortunately, it is agreed by almost all social science research scholars that when both of them are applied in a research their weaknesses can be eliminated, if not at least reduced to a required level. Thus I had decided to use both of the methodologies in my research, which is now popularly known as mixed methodology.

As delineated heretofore in this dissertation, this study was a two-phased Sequential MM research. Out of two models of this research method as described by Creswell (2006) I followed the Explanatory Participant Selection Model.

In the first part of this research a survey was conducted and the quantitative data obtained from the survey were analyzed using some statistical tools. The analysis of the first part created the foundation for carrying out the second part of the research. The cases that were found unique and crucial for further exploration were picked up and included in the interview guide.

The second part of the research was phenomenology for which data were collected by conducting semi-structured interviews with the selected experts. From the transcribed verbatim data eight themes were identified. The three themes of the quantitative part generated out of research sub-questions were submerged, embedded and

more often branched into these eight themes of the qualitative part. As described in the Research Design of this dissertation it was a quan-QUAL research in which the findings were drawn largely from qualitative data with proper triangulation of quantitative findings.

Summary of Key Findings

Nepalese educational stakeholders are positive towards making people free to acquire knowledge through formal, non-formal and informal means (Strongly Agree – 67.5%). They favored to ensure freedom for learning through any of the means by validating the knowledge and skills acquired through non-formal and informal means. They opined that in order to provide feasible and accessible options for learning people should be made able to move freely between formal, non-formal and informal mode of learning.

The educational stakeholders suggested that Nepal has to give equal emphasis to formal, non-formal and informal education (50% Strongly Agree) in terms of the investment of money, time and human power. They also opined that the best means for enhancing lifelong learning is by establishing parity among formal, non-formal and informal modes of learning (55% Total ticks). Non-formal and informal modes of learning should also be made equally standard so as to increase its accountability to the society and the nation.

The educational stakeholders suggested that non-formal learning and informal learning should be provided with equitable degree of recognition, accreditation, and certification as formal learning (65% of Total ticks). There were no significant differences in the opinions of Development Activists, Educational Administrators, Policy

Actors and University Professors on this regard. Some of the research participants passively agreed the idea of certification for non-formal and informal learning lest it will devalue the preciousness of indigenous knowledge and skills. They all agreed to develop a mechanism for validating non-formal and informal learning.

The educational stakeholders perceived that the best criterion to assess the competence of non-formal and informal learners is judging the ability to adjust them in the competitive modern world (74.4%). They claimed that while assessing non-formal and an informal learner to validate their learning achievements, the traditional exam system is less practical. The knowledge, competence and skills should be compatible with the job market.

The educational stakeholders perceived that non-formal and informal learners can achieve equivalent degree of adaptability and employability as the people from formal education (55% Agree). While selecting people as employees proper affirmative action should be taken to ensure equitable chances for non-formal and informal learners to be selected. No significant differences were found on the opinions of four types of educational stakeholders on this regard. Some of the research interviewees claimed that if an environment conducive for fostering non-formal and informal learning is created, then non-formal and informal learners can even haunt the job market or create their demand on their own rather than being fit in the existing market.

Majority of the respondents agreed for the development of a National Qualifications Framework (68.4% of Total ticks) to maintain supplementary and complementary relationship among formal, non-formal and informal modes of learning.

Some of the interviewees claimed that an NQF couldn't gauge an individual's entire competence and skills; neither could it incorporate all forms of indigenous knowledge and skills. However, all of the opined that all types of qualifications including informal and non-formal learning should be brought in a standard forms so as to ensure accreditation to each other.

The research participants opined that the three forms of learning should be taken side-by-side by the state. Recognition, accreditation and validation to non-formal and informal learning should be provided and a sound learning environment should be provided for the enhancement of lifelong learning. Out of 60 total score the respondents secured 44 average score that means they were found much more positive towards validating non-formal and informal learning to open up avenues for lifelong learning and continuing education. They perceived that the three modes of learning are the constituents of lifelong learning (66.7%).

<div align="center">Conclusions</div>

From the findings drawn from the qualitative data analysis and quantitative data analysis the followings conclusions were made. The conclusions are associated with the research question, research sub-questions and the themes generated during the qualitative data analysis of this research.

a. To open up avenues for lifelong learning and continuing education we need to identify, recognize and validate non-formal and informal learning.

b. In order to make people lifelong learners they need to be made free to acquire knowledge through formal, non-formal and informal modes of learning.

c. The three modes of learning are equal in terms of recognition, accreditation and validation so a mechanism for identifying, recognizing, certifying, and accrediting the non-formal and informal knowledge and skill is necessary.

d. All types of indigenous, traditional and occupational knowledge and skills are the various forms of non-formal and informal learning. These knowledge and skills deserve equal degree of recognition, accreditation and validation.

e. The non-formal and informal learners are equally adjustable, adaptable and employable as formal degree holders so they will have no problems to compete in the job market on condition that their knowledge and skills are assessed in fair and standard manner.

f. Development of a National Qualifications Framework is an inevitable tool for enhancing lifelong learning by bringing parity among three forms of learning. A properly developed National Qualifications Framework includes all types of non-formal and informal learning and gives way forward for level-wise ventilation among three modes of learning.

Learning occurs in diverse educational settings which can be classified into three: formal, non-formal and informal settings. It is a universal trend that the learning achievement acquired in the formal setting are taken as valid and awarded with certificates and employment opportunities are provided. But it has been realized that humans learn in non-formal and informal setting more than they do in the formal because the latter occupies relatively short time in one's life. Thus the importance of non-formal and informal learning is burgeoning to make people lifelong learners. In the context of

lifelong learning, many provisions related to educational system of a country have changed.

The role of a state is not to establish schools only and compel its citizen to enroll and make them pursue education by hook or crook whatever is included in the curriculum with a given period of time, rather the role of state is to provide each individual with opportunities to learn by whatever means is feasible, accessible and suitable for its citizens irrespective of curriculum, methods of acquiring knowledge, and the boundary of school buildings. The quality education is the one that is depicted in the score obtained from the paper-pencil test; rather it is the ability to solve life problems that an individual faces and get success in the global competition.

The knowledge, skills and competencies that are acquired by self-reflection, interactions in pair/group, in the work places, religious/cultural centers, etc. are equally important as the learning that takes place in the classroom. These knowledge and skills should be identified, listed out and kept in a National Qualifications Framework so as to make them visible for providing recognition, accreditation and validation. Hence they can be compatible to each other and people become eligible to move from one mode to the other.

An authority for validation of non-formal and informal learning can be established like controller of examinations for the formal educations. A mechanism has to be made to provide people with equal degree of recognition and accreditation after proper assessment. There are many ways of assessing the competence of an individual. It depends on the type of knowledge and skill (as delineated in NQF) and the type of award

an individual wants to get. The nation has to provide opportunities for learning informally and non-formally as much as possible.

Above all, precisely there are three preconditions for the enhancement of lifelong learning. The first is providing multiple options for learning through formal, non-formal and informal modes of learning. The second is that these three forms of learning should be treated equally. That is to say, there should be parity among the three modes of learning and finally, development of National Qualifications Framework incorporating all types of formal, non-formal and informal learning. The three preconditions along with some necessary measures to be taken for bringing the dream of validating non-formal and informal learning to enhance lifelong learning has been presented in the Theoretical Mechanism for Validation below. This framework was drawn on the basis of conclusions described above.

Theoretical Mechanism for Validation

Figure 7.1   Theoretical Mechanism for Validation

Recognition, accreditation and validation of Non-formal and Informal Learning to open up avenues for lifelong learning in Nepal

Provide multiple options for learning
-by ensuring equal investment,
 -by allowing learners to move from one mode to the other,
-by establishing different learning venues and ICT centers,
-by promoting indigenous and occupational skills

Provisions for ensuring equality

Bring parity among three modes of learning
-by providing equitable degree of recognition, accreditation and validation,
-by ensuring employment opportunities for non-formal and informal learners
-by ensuring fundamental equivalency measures

On the basis of

Develop an NQF
-by identifying all types of knowledge and skills
-by leveling them in terms of complexity
-by keeping them in the framework to ensure parallel compatibility and validity

On the basis of

Develop proper system for assessing Non-formal and Informal Learning

Procedural Provisions

Decide appropriate procedure and authority for the validation of NFL and IL

Recognition, accreditation and validation of non-formal and informal learning are inevitable preconditions to open up avenues for lifelong learning and continuing education. The Theoretical Mechanism for Validation given above was drawn from the findings and conclusions of the research. According to the chart there are two provisions for ensuring equality among formal, non-formal and informal learning. They are providing multiple options for learning and bringing parity of esteem among the three modes of learning.

The two provisions for validating non-formal and informal learning have to be made on the basis of a National Qualifications Framework (NQF). The NQF has to be developed by identifying all types of knowledge and skills and leveling them in terms of complexity to learn. The NQF ensures compatibility among three modes of learning and opens up ways for providing recognition, accreditation and validation to non-formal and informal learning.

For validating non-formal and informal learning by providing multiple options for learning, brining parity of esteem and developing an NQF two procedural provisions have to be made. They are developing proper system for assessing non-formal and informal learning and deciding appropriate procedure and authority for validation of non-formal and informal learning.

Implications

The importance of non-formal and informal learning is increasing because the school systems are unable to cope with the current political, economic, and social realities of a

nation as they have become unable to meet the basic learning needs of children, youth and adults. Moreover, the complexity in people's life due to the development in the field of science and technology, explosion of new knowledge, market competitiveness, etc. have compelled children, youths and adults to learn new things everyday and update their existing knowledge repertoire. The formal education system that assumes learning as a homogenous phenomenon could not provide education for all the disadvantaged, underprivileged and marginalized people; neither could it take noteworthy initiatives for the integration of these people of the country. Its blanket approach became unable to preserve and promote indigenous knowledge and skills. Hence, the time for a paradigm shift in education system has come.

The new paradigm is not for dismantling existing structure of formal education because it can't be denied that the autonomy of formal education in today's knowledge world has put it in such a height that undermining it would lead towards systemic chaos in society as a whole. The possible solution is uplifting the status of non-formal learning and informal learning so as to make them equally responsible and accountable for individual, society and the nation.

The indigenous, Janajati and Dalit people are deprived not only of formal education but also of preserving and promoting their traditional knowledge and skills. Indigenous societies of our nation bear precious ancient epistemology, wisdom, technologies, cosmological beliefs, folklores, customs and traditions associated with their nature, earth, biodiversity, and natural resources. Unfortunately, due to the influence of Western education, norms and values these precious knowledge and skills are on the

verge of extinction. Now the time has come to dig out them, recognize them and promote them for global benefit. For this too, formal education alone can do nothing. We need to have a significant metamorphosis in our thinking and practice.

The ultimate goal of education is to give each individual the motivation, the financial means and the physical access to learning at any time in his/her life, so that he/she can develop skills, upgrade or learn new skills for work or for his/her own satisfaction and personal development. Formal education has a very limited period of time to serve an individual. It starts from Grade 1 and end with university degree. It is limited within a fixed curriculum. But people need to learn and update their knowledge and skill of various fields from cradle to the grave. It is certain that people who have just formal education are at the side of losers because they lack the most important part of learning useful for their day-to-day lives.

The solution of all these problems can be the enhancement of lifelong learning. It encompasses all learning activities undertaken throughout life with the aim of improving knowledge, skills and competencies within a personal, civic, social, and employment related perspectives. This new paradigm in the field of human learning intends no disorganization or dismantling of formal education system as in its broad framework formal education, non-formal education and informal learning appear interweaved in the learning itineraries of individuals, groups and societies.

It seems that the responsibility of providing education to people is only of formal education as it has been a state-business since past. If the state wants to make its citizens lifelong learners it should develop non-formal and informal learning modes in such a

standard that they also become equally accountable for its citizens. The state has to invest equitable amount of budget, time and human resources to all three forms of education, especially investment for informal learning should be increased drastically. People need to be provided with informal learning opportunities by making some institutional arrangements such as libraries, museums, science and technology centers, community learning centers, agricultural offices, health offices, cultural learning centers, etc.

As non-formal and informal learning serve for a longer lifespan of an individual they are the heart of lifelong learning. In a sense, in this era of lifelong learning, informal learning has become more evident and valued than ever. Now the time has come for a historic amendment in educational polices to use the three modes of education to make one's learning, a lifelong endeavor. The agenda of lifelong learning has taken some spaces in the recent policy documents of even Nepal, however, it has not been enough and the most crucial task of implementation has remained uncertain. But from this research what I have found is that educational stakeholders, especially the policy actors of educational system of Nepal are positive, their perceptions and understandings are positive but they have not been in common forum to concretize their ideologies and make Nepal a place suitable for lifelong learning.

The initiatives taken by some of the institutions such as CTEVT, NFEC, etc. are appreciative but they need to do much more at national, local and individual level to turn the dream of lifelong learning into reality. The non-formal education policies so far formulated need to be implemented. The concept of Open University needs to be

materialized and The Certification and Accreditation Division of the Distance Education and Open Learning Council (DEOLC) have to be made more functional.

Above all, all policies and their implementation become worthless when the learning outcomes of informal and non-formal learners are not made equivalent with formal learning outcomes. In the past, during the decade of 1970s and 1980s, attempts were made to provide knowledge and skills trainings in traditional occupations but they couldn't become effective because the products from such programs were not given proper recognition, accreditation and validation. From such retrospective analysis the approach of providing learners with multiple options for learning should be implemented.

The purpose of recognition and validation, as far as it relates to non-formal and informal learning, is to make visible the entire scope of knowledge and experience held by an individual. When informal and non-formal learning outcomes are validated, it opens up the ways forward for encouraging people to be involved in making learning a lifelong process. Moreover, validation may have multilayer advantages: for employers it helps for human resource management, for individuals it helps for having the full range of skills and competences valued and for society it helps for making full use of existing knowledge and experiences. Furthermore, validation of NFL and IL may have some institutional advantages such as entrance into formal systems for further education, improving learners' employability in the labor market, and enhancement of universal basic education with the achievement of EFA and MDG goals.

For effective recognition, accreditation and validation of non-formal and informal learning there must be a mechanism that decides what kind of skills, knowledge and

experiences to be validated. An approach practiced internationally is the development of National Qualifications Framework. Many countries in the world have developed their NQFs and implemented them effectively that has enhanced lifelong learning by providing validation to non-formal and informal learning.

Though it is inevitable, developing an NQF encompassing all types of qualifications, non-formal and informal learning including indigenous and knowledge and skills will face a number of challenges as our country developed in the culture of different types of discriminations such as caste, gender, religion, etc. The knowledge and skills that are tacit and cover are really difficult to make visible in NQF. But as it has become an obligatory tool for validation so as to enhance lifelong learning and continuing education must be ready to face all these challenges and take all possible risks.

Beside the development of NQF, there is another crucial part behind the validation of NFL and IL. We must develop of validating system by selecting or setting up an authority for validation. Even in international level there is debate on which organization or institution should have the authority to provide validation. In some countries the Ministry of Education works as central authority for validation but in some countries some private organizations and Labor Office do this task. Further discussion at national level needs to be done on which authority can be suitable for providing validation in Nepal. The authority needs to decide which methods for validation to be applied and what type of certification system to be developed.

There will be many things to be done after the implementation of validation mechanism, if our country has to be developed into a country with knowledge-based economy through the enhancement of lifelong learning. First of all, the products whose knowledge and skills are validated and certified should be provided with employment opportunities and favorable environment for self-employment. If an environment conducive for acquiring knowledge and skills is created and the platform is given to get them recognized and validated, people from less formal backgrounds can become equally, even more efficient, adaptable, adjustable and employable than formal degree holders in the modern societies.

Similarly, children, youths, and adults should be permitted to enter into formal education system at any level they are found fit after their knowledge and skills learnt informally and non-formally recognized, validated and certified. Furthermore, the learning outcomes acquired through formal, non-formal and informal means are equal so equivalent degree of recognition, validation and certification should be provided on condition that the validation method is standard and fair.

Nepal needs to learn from the practices of other countries, especially international organizations such as CEDEFOP, EC, OECD, UNESCO, UIL, ILO, Bologna Process, ECOTEC, etc. and take maximum advantage for enhancing lifelong learning by providing recognition, accreditation and validation to non-formal and informal learning. As UIL has been a most accessible international organization, Nepal has to go with an appropriate proposal and give it a place to work in order to achieve MDG and EFA goals.

Recommendations for Future Research and Reflections

Certainly, it was the first attempt that I made in my life to carry out a research of this type

which in my experience is exhaustive not only because of mixed methodology that I

applied but also the reviews of national and international literatures related to

recognition, accreditation and validation of non-formal and informal learning; developing

an NQF; and various aspects of lifelong learning and continuing education.

I have accumulated a lot of experiences and understandings in this field. I

underwent through lots of ups and downs, saddened many times and adorned with

happiness many times. I would like to share such feelings and experiences with the

readers of this dissertation thinking that my experiences would be useful for the

researchers who would explore in this field.

The first and the most important experience was that non-formal and informal

learning are different in terms of their upbringings and orientations. These two modes of

learning should have been treated differently from the very beginning of the research. I

came to this conclusion when I started interacting with my research participants. Some of

them viewed that non-formal education would be better validated and accredited like

formal learning rather than informal learning. Had I divided them in the quantitative part

of the research and treated them as separate variables I would have gotten a clear

understanding on the compatibility of the three modes of learning.

Secondly, I went on reading the vast treasure of downloaded international

literatures indiscriminately that took a lot of time and made me tired too. When I wanted

to systematize them there was a great difficulty that which part of the review to be made

fit for which part of the report. So, I would like to suggest future researchers to have clear understanding of what to seek in the literature; devise themes of the research; and look for the literatures related to the themes. Though it is a tiresome job as there are thousands of research reports and journal articles from many countries in the world, it is so adventurous and heart touching that you will feel never bored perusing and noting them down.

There are some crucial researchable areas in this field such as explorations of the types of indigenous and traditional occupational knowledge and skills and their possibility of recognizing, and validating; opportunities and challenges in developing an NQF in Nepal; progresses Nepal has made so far towards validation of non-formal and informal learning; status of non-formal participants in terms of their employment and enrollment in formal education system; challenges in validating caste-based occupational skills and providing them equal degree of accreditation, etc. I think these areas need further researches so as to create the foundation for enhancing lifelong learning through validation.

And finally, I had experienced that mixed methodology itself is in its infancy. In Nepal, it is praised much but practiced less. Thus, MM researchers have to face many challenges in sequencing them, triangulating one data set with another and striking a proper balance between the two to draw the findings and implications. Matching the findings drawn from quantitative paradigm and qualitative paradigm had become a real Herculean task for me. However, at the end I was dancing in the auspicious marriage of positivism and constructivism.

Chapter Summary

In this Chapter the research question and sub-questions were presented along with the summary of literature review, a short synopsis of research methodology and a brief account of data analysis procedures to draw the findings. Then some of the key findings of the study were presented.

On the basis of findings described in Chapter 6 some conclusions were made followed by a short discussion on the conclusions. On the basis of the key findings and conclusions a Theoretical Mechanism for Validation of non-formal and informal learning to open up avenues for lifelong learning has been sketched. After this some of the implications of the research were stated. I wrapped up this Chapter and the entire dissertation with recommendations for future researchers and my own reflection to this long journey of nearly two years to bring this dissertation into this shape.

REFERENCES

Abukari, A. (2005). Conceptualizing lifelong learning: a reflection on lifelong learning at Lund University (Sweden) and Middlesex University (UK). *European Journal of Education , 40* (2), 143-154.

Acharya, S., & Koirala, B. N. (2006). *A comprehensive review of the practices of literacy and non-formla education in Nepal.* Kathmandu: UNESCO Kathmandu.

Adam, S. (2007). New challenges in recognition: the recognition of prior learning. *Official Bologna Process Seminar* (pp. 1-17). Riga, Latvia: University of Westminister.

ADEA. (2008). *Creating Flexible and Inclusive Learning Paths in Post-Primary Education and Training in Africa:NQFs and Recognition of non-formal and informal learning The Key to Lifelong Learning.* Paris: Association for the Development of Education in Africa (ADEA).

Advies, R., Hagens, K., Hout, T. v., & Kraaijvanger, H. (2007). *Recognition of non-formal and informal learning: Background report for the Netherlands.* Netherlands: Ministery of Education .

Allais, S. M. (2007). Why the South African NQF Failed: lessons for countries wanting to introduce national qualifications frameworks. *European Journal of Education , 42* (4), 523-547.

Anonuevo, C. M. (2001). *Practicing lifelong learning in Asia in the 21st century.* Germany: UNESCO Institute of Education.

Apple, M. W., & Teitelbaum. (2004). John Dewey. In J. A. Palmer (Ed.), *Fifty great thinkers on education: from Confucious to Dewey* (pp. 177-182). London: Routledge.

Archambault, S. (2000, July 30). *Paired Sample T Test*. Retrieved May 30, 2009, from Psychology Department, Wellesley College: http://www.wellesley.edu/Psychology/Psych205/pairttest.html

Bazeley, P. (2002). Issues in mixing qualitative and quantitative approaches to research. In J. G. R. Buber, *Applying qualitative methods to marketing management research.* (pp. 141-156). UK: Palgrave Macmillan.

Best, J. W., & Kahn, J. V. (2002). *Research in education* (7th Edition ed.). New Delhi: Prentice-Hall of India.

Bjornavold, J. (1997). *Identification and validation of prior and informal learning. Experiences, innovations and dilemmas. Discussion Paper.* Greece: European center for the development of vocational training.

Bjornavold, J., & Coles, M. (2007). Governing education and training: the case of qualifications frameworks. *European Journal of Vocational Training* , 203-235.

Bologna Working Group. (2005). *A Framework for Qualifications of the European Higher Education Area.* Bredgade, Copenhagen: Ministry of Science, Technology and Innovation.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology 2006* , 77-101.

Carron, G., & Carr-Hill, R. A. (1991). *Non-formal education: Information and planning issues.* Paris: International Institute of Educational Planning.

CEDEFOP. (2007). *Recognition and validation of non-formal and informal learning for VET teachers and trainers in the EU Member States.* Belgium: European Centre for the Development of Vocational Training (CEDEFOP).

CEDEFOP. (2008). *Validation of non-formal and informal learning in Europe: A snapshot 2007.* Luxembourg: Office for Official Publications of the European Communities.

Child Welfare Scheme. (2005). *Education For All: Non-formal education among street children in Nepal.* Kathmandu: Child Welfare Scheme and UNESCO.

Colardyn, D., & Bjornavold, J. (2005). The learning continuity: European inventory on validating non-formal and informal learning - National polices and practices in validating non-formal and informal learning. (M. Beyer, & J. Bjornavold, Eds.)

Colardyn, D., & Bjornavold, J. (2004). Validation of formal, non-formal, and informal learning: policy and practices in EU member states. *European Journal of Education , 39* (1), 70-89.

Corbetta, P. (2003). *Social research.* London: SAGE.

Creswell, J. W. (2006). Choosing a mixed methods design. In J. W. Creswell, *Designing and conducting mixed method research* (pp. 58-88). Sage Publications.

Creswell, J. W. (2003). *Research design: qualitative, quantitative, and mixed methods approaches* (2nd ed.). New Delhi: SAGE.

Creswell, J. W., & Miller, D. L. (2000). Determining Validity in Qualitative Inquiry. *Theory into Practice* , 124-130.

Dismone, L. M. (2006). Consider the source: response differences among teachers, principals, and districts on survey questions about their education policy environment. *Education Policy , 20* (4), 640-676.

Dreyfus, H. L. (2006). Phenomenology. *Student Encarta* . Redmond, WA: Microsoft Corporation.

EAEA. (n. d.). *Assessment and accreditation of informal and non-formal learning in adult education: a summary of key issues.* Retrieved September 9, 2009, from Transfine: www.eucen.org/conferences/BRNO_CZECH/EAEATransfine.pdf

ECOTEC. (n. d.). *A European inventory on validation of non-formal and informal learning.* Retrieved September 9, 2009, from ECOTEC Research and Consulting Limited: http://www.ecotec.com/europeaninventory/publications/inventory/chapters/euro_inv_slovenia.pdf

ECOTEC. (2005). *European inventory on validation of non-formal and informal learning: a final report to DG Education and Culture of the European Commission.* Birmingham: ECOTEC Research and Consulting Ltd.

Edwards, R., & Usher, R. (2001). Lifelong Learning: A Postmodern Condition of Education. *Adult Education Quarterly* , 273-287.

Encarta Dictionary. (2006). Microsoft Corporation. *Student Encarta* . Redmond, WA: Microsoft Corporation.

European Commission. (2009, July 1). *Ireland links its national qualifications framework to the European Qualifications Framework for Lifelong Learning.* Retrieved September 7, 2009, from European Commission: Education and Training: http://ec.europa.eu/education/news/news1508_en.htm

European Communities. (2008). *European Qualifications Framework.* Retrieved August 24, 2009, from European Qulifications Framework for Lifelong Learning: http://ec.europa.eu/education/policies/educ/eqf/eqf08_en.pdf

European University Association. (2008). *European Universities' Charter on Lifelong Learning.* Belgium: European University Association.

Evans, N. (2006b). Criteria and approaches to assessment of experiential learning. In C. Corradi, N. Evans, & A. Valk, *Recognition, assessment and accreditation of prior experiential learning: background and constituencies* (pp. 209-219). Lithuania: Tartur University Press.

Evans, N. (2006). Recognition, assessment and accredition of prior experiential learning: background and constituencies. In C. Corradi, N. Evans, & A. Valk, *Recognising experiential learning: Practices in European Universities* (pp. 17-36). Estonia, Lithuania: Tartu University Press.

Fereday, J., & Cochrane, E. M. (2006). Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development. *International Journal of Qualitative Methods , 1* (5).

Field, A. P. (2006). *Analysis of Variance (ANOVA).* Retrieved March 4, 2009, from Encyclopedia of Measurement and Statistics: http://sage-ereference.com/statistics/Article_n19.htm

Flick, U. (2006). *An introduction to qualitative research.* New Delhi: SAGE.

Fowler, F. J. (1993). *Survey Research Methods* (2nd ed.). New Delhi: SAGE.

Gajardo, M. (2000). *Ivan Illich.* Retrieved July 10, 2008, from http://www.ibe.unesco.org/fileadmin/user_upload/archive/publications/ThinkersPdf/illiche.PDF

GON-MOES. (2006a, October 18). *Concept paper on school sector approach.* Retrieved May 24, 2008, from www.moes.org

GON-MOES. (2007b). *Non-formal education policy.* Bhaktapur, Nepal: Government of Nepal- Ministery of Education and Sports: Non-formal Education Center.

GON-MOES. (2006b, July). *Open and distance learning policy framework.* Retrieved May 6, 2008, from Government of Nepal, Ministry of Education and Sports: http://www.moe.gov.np/admin/upload_pdf_digital_form/Open%20Learning%20Policyframework.pdf

GON-MOES. (September, 2007). *School sector reform; Core document: policies and strategies.* Kathmandu: Government of Nepal - Ministry of Education and Sports.

GON-MOES. (2007a, February 15). *Three year interim education plan.* Retrieved May 6, 2008, from Government of Nepal, Ministry of Education and Sports: http://www.moe.gov.np/digital_form.php

Greene, J. C. (2007). *Mixed Methods in Social Inquiry.* San Francisco: John Wiley and Sons.

Groenewald, T. (2004). A phenomenological research design illustrated. *International Journal of Qualitative Research* , 1-26.

Groenewald, T. (2004). A Phenomenological Research Design Illustrated. *International Journal of Qualitative Methods , 3* (1), 1-26.

Gutek, G. L. (2006, Redmond, WA). History of education. *Encarta Encyclopaedia* . Microsoft Corporation.

Haeringer, A. (2006). The French APEL: Ambitious procedures. In C. Corradi, N. Evans, & A. Valk, *Recognising experiential learning: Practices in European Universities* (pp. 83-93). Lithuania: Tartu University Press.

Hancock, B. (2002). *Trent Focus for Research and Development in Primary Health Care: An Introduction to Qualitative Research.* Trent Focus.

Haralombos, M., & Holborn, M. (1995). *Sociology: themes and perspectives* (4th Edition ed.). London: Collins Educational.

ILO. (2004). *Lifelong learning in Asia and the Pacific.* Bangkok: International Labor Orgination.

ILO. (2004). *Lifelong learning in Asia and the Pacific.* Bangkok: International Labor Office.

Jalil, N. (2007, March 4). *Social research: paradigms, its componentsand implications for education research* . Paper presented in M. Phil Class of Kathmandu University. Kathmandu.

Kamp, M. v. (2006). The contribution of APEL to lifelong . In C. Corradi, N. Evans, & A. Valk, *Recognising Experiential Learning: Practices in European Universities* (pp. 220-233). Lithuania: Tartu University Press.

Kokosalakis, N. (2000). Editoral. *European Journal of Education* , *35* (3), 253-256.

Kothari, C. R. (2004). *Research methodology: methods and techniques* (2nd Edition ed.). New Delhi: New Age Intrnational (P) Limited.

Kumar, R. (1996). *Research methodology: a step-by-step guide for beginners.* New Delhi: SAGE.

Kvale, S. (1996). *An introction to qualitative research interviewing.* Thousands Oaks, California : SAGE.

Lamichhane, S., & Wagley, M. P. (2006). *Consolidating national policies on equivalency towards accomplishing Univrsal Primary Education.* Kathmandu: UNESCO Kathmandu.

Lengrand, P. (1975). *An introduction to lifelong education.* London: UNESCO.

Leonardo da Vinchi Thematic Group. (2007, January). *Lifelong Learning Program (2007-2013).* Retrieved March 3, 2008, from Leonardo da Vinchi Program: http://www.tg4transparency.cpm

Literary Watch Bulletin. (2001, January). Innovation in non-formal education. *Literary Watch Bulletin* .

Lopez, K. A., & Willis, D. G. (2004). Descriptive versus interpretive phenomenology: their contributions to nursing knowledge. *Quality Health Research , 14* (726), 726-735.

Lyons, J. (2008). *Language and linguistics.* Cambridge: Cambridge University Press.

Mangal, S. K. (2007). *Essentials of educational psychology.* New Delhi: Printice-Hall of India Private Ltd.

Mazur, J. E. (2006). Learning. *Encarta Encyclopaedia* . Redmond, WA: Microsoft Corporation.

McCaslin, M. L., & Scott, K. W. (2003). *The five question method for framing a qualitative research study.* Retrieved August 3, 2009, from The Qualitative Report: http://www.nova.edu/ssss/QR/QR8-3/mccaslin.pdf

Ministery of Health and Population Nepal. (2007). *Nepal Demographich and Helath Survey 2006.* Kathmandu: Ministry of Health and Population, New ERA, and Macro International Inc.

MOE, Nepal. (2003). *Education for all: Nepal National Plan of Action (2001-2015).* Kathmandu: Ministery of Education, Nepal.

National Framework of Qualifications. (2009). *The Natioanl Framework of Qualifications*. Retrieved September 7, 2009, from National Qualifications Authority of Ireland: http://www.nfq.ie/nfq/en/

Newman, R. M. (1998, March). *Henderson.* Retrieved December 24, 2008, from A History of Formal Education: http://www.shianet.org/~reneenew/HUM501.html

Niglas, K. (2004). *The combined use of qulitative and quantitative methods in educational research.* Unpublished doctoral dissertation, Tallinn Pedagogical University, Estonia.

Noymer, A. (2008). *SAGE Publications*. Retrieved March 4, 2009, from Encyclopedia of Survey Research Methods: http://sage-ereference.com/survey/Article_n13.html

NRC-NFE. (n. d.). *A case study on community learning center for development.* Retrieved May 6, 2008, from http:www.accu.or.jp/litbase/break/pdf/NPLf903A.pdf

Omerzel, D. G., & Širca, N. T. (n.d.). *The motivation of educational institutions for validation of non-formal and informal learning.* Retrieved August 19, 2009, from Fakulteta za management Koper: http://www.fm-kp.si/zalozba/ISBN/978-961-6573-65-8/105-116.pdf

Panta, Y. R. (2006). *Historical foundation of education.* Kathmandu: Author.

Park, M. K. (2006). *The lived experience of Asian international students in online learning environments in higher education.* University of Missouri-Columbia: An Unpublished PhD Dissertation.

Qualifications and Curriculum Development Agency. (2009). *European Qualifications Framework*. Retrieved August 20, 2009, from Qualifications and Curriculum Development Agency: http://www.qcda.gov.uk/19302.aspx

Sandelowski, M. (2000). Focus on research methods: combining qualitative and quantitative sampling, data collection, and analysis techniques in mixed-method studies. *Research on Nurshing and Health , 23*, 246-255.

Schofield, W. (2006). Survey sampling. In R. Sapsford, V. Jupp, R. Sapsford, & V. Jupp (Eds.), *Data collection and sampling* (2nd ed., pp. 26-55). New Delhi: SAGE.

SEEQUEL. (2004). *Quality guide to the non-formal and informal learning processes.* Sustainable Environment for the Evaluation of Quality in E-Learning [SEEQUEL]. MENON Network EEIG.

Shapiro, J. K. (2008). *Correlation.* Retrieved March 4, 2009, from Encyclopaedia of Survey Research Method: http://sage-ereference.com/survey/Article_n110.html

Sherpa, N. S. (2005). *Indigenous peoples of Nepal and traditional knowledge.* Nepal Indigeneous Nationalities Preservation Association [NINPA], Department of Economics and Social Affairs, Pnama City.

Shrestha, M., Wilson, S., & Singh, M. (2008). Knowledge Networking: a Dilemma in Building Social Capital Through Nonformal Education. *Adult Education Quarterly* , 129-150.

Smith, M. K. (2004). *Ivan Illich: deschooling, conviviality and the possibilities for informal education and lifelong learning.* Retrieved August 19, 2009, from the encyclopedia of informal education: http://www.infed.org/thinkers/et-illic.htm

Smith, M. K. (1996, 2001). *Lifelong learning.* Retrieved August 19, 2009, from The encyclopedia of informal education: http://www.infed.org/lifelonglearning/b-life.htm

Stockburger, D. W. (2009). *Introductory Statistics: Concepts, Models, and Applications*. Retrieved July 31, 2009, from Psychological Statistics at Missouri State: http://www.psychstat.missouristate.edu/introbook/SBK27.htm

Sukarso, E. D. (2001). Equivalency and accreditation programme in Indonesia. *Lifelong Learning in Asia and the Pacific Region* (pp. 115-116). Bangkok: Asia-Pacific Regional Forum for Lifelong Learning.

Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: combining qualitative and quantitative approaches.* New Delhi: SAGE.

Teddlie, C., & Tashakkori, A. (2009). *Foundations of Mixed Method Research.* London: SAGE.

Teddlie, C., & Yu, F. (2007). Mixed method sampling: a typology with examples. *Journal of Mixed Methods Research , 1* (1), 77-100.

Tererseviciene, M., & Zuzeviciute, V. (2007). The need of validation and recognition of learning outcomes acquired non-formally and informally. *Baltic Journal of Management , 1* (3), 334-350.

The Library. (2007, November). *Normality of Distribution*, 2. Retrieved June 15, 2009, from SPSS 14: Quick Guide.

The Ministry of Education -Denmark. (2008). *The development and state of the art of adult learning and education (ALE).* Denmark: The Ministry of Education.

Torres, R. M. (2001). *Amplifying and diversifying learning: formal, non-formal and informal education revisited.* Fronesis.

Tuschling, A., & Engemann, C. (2006). From education to lifelong learning: the emerging regime of learning in the European Union. *Educational Philosophy and Theory , 38* (4), 451-469.

UIL. (2007). *Annual Report 2007.* UNESCO Institute for Lifelong Learning.

UIL. (2009). *Recognition, Validation and Accreditation of Non-formal and Informal Learning (RVA).* Retrieved 8 16, 2009, from UNESCO Institute for Lifelong Learning: www.unesco.org/uil

UIS. (2008). *UIS statistics in brief: Education in Nepal.* UNESCO Institute of Statistics.

UNESCO Bangkok. (2006). *Equivalency Programmes (EPs) for Promoting Lifelong Learning.* Bangkok: UNESCO Asia and Pacific Regional Bureau for Education.

UNESCO Kathmandu. (2006a). *A 10-year literacy/NFE policy program framework.* Kathmandu: UNESCO Kathmandu.

UNESCO. (1981). *Learning strategies for post-literacy and continuing education in China, India, Indonesia, Nepal Thailand and Vietnam.* Hamburg, Germany: UNESCO Institute of Education.

UNESCO. (2005). *Recognition, validation and certification of informal and non-formal learning.* Hamburg, Germany: UNESCO Institute for Education.

UNESCO-JICA. (2004). UNESCO-JICA symposium on non-formal education to promote EFA and lifelong learning. *UNESCO Asia and Pacific Regional Bureau for Education and Japan International Cooperation Agency* (pp. 1-84). Bangkok: UNESCO Bangkok.

Wengraf, T. (2001). *Qualitative research interviewing.* New Delhi: SAGE.

Werquin, P. (2007). Moving mountains: will qualifications systems promote lifelong learning? *European Journal of Education , 42* (4), 459-484.

Wiersma, W., & Jurs, S. G. (2005). *Research methods in education.* New York: Pearson.

Willing, C., & Rogers, W. S. (2007). *The SAGE handbook of qualitative research in psychology.* London: SAGE.

Wilson, M., & Sapsford, R. (2006). Asking questions. In R. Sapford, & V. Jupp (Eds.), *Data collection and analysis* (2nd ed., pp. 91-123). New Delhi: SAGE.

Wojnar, D. M., & Swanson, K. M. (2007). Phenomenology: an exploration. *Journal of Holistic Nursing , 25* (172), 172-180.

APPENDIXES

Appendix A: Tables

Table A1: Providing Freedom to Learn: Cross Tabulation

People should be made free to acquire knowledge through formal, non-formal and informal means. * Type of respondents Crosstabulation

			Type of respondents				
			Development Activist	Educational Administrator	Policy Actor	University Professor	Total
People should be made free to acquire knowledge through formal, non-formal and informal means.	Disagree	Count	0	0	0	1	1
		% within Type of respondents	.0%	.0%	.0%	10.0%	2.5%
	Uncertain	Count	0	1	0	0	1
		% within Type of respondents	.0%	10.0%	.0%	.0%	2.5%
	Agree	Count	3	3	3	2	11
		% within Type of respondents	30.0%	30.0%	30.0%	20.0%	27.5%
	Strongly Agree	Count	7	6	7	7	27
		% within Type of respondents	70.0%	60.0%	70.0%	70.0%	67.5%
Total		Count	10	10	10	10	40
		% within Type of respondents	100.0%	100.0%	100.0%	100.0%	100.0%

Table A2: Providing Freedom to Learn: Compare Means

Report

People should be made free to acquire knowledge through formal, non-formal and informal means.

Type of respondents	Mean	Minimum	Maximum
Development Activist	4.7000	Agree	Strongly Agree
Educational Administrator	4.5000	Uncertain	Strongly Agree
Policy Actor	4.7000	Agree	Strongly Agree
University Professor	4.5000	Disagree	Strongly Agree
Total	4.6000	Disagree	Strongly Agree

Table A3: Ability of Less Formal Learners: Cross Tabulation

People from less formal background are unable to adjust with the formal education system. * Type of respondents Crosstabulation

			Type of respondents				Total
			Development Activist	Educational Administrator	Policy Actor	University Professor	
People from less formal background are unable to adjust with the formal education system.	Strongly Disagree	Count	0	1	2	2	5
		% within Type of respondents	.0%	10.0%	20.0%	20.0%	12.5%
	Disagree	Count	6	6	5	3	20
		% within Type of respondents	60.0%	60.0%	50.0%	30.0%	50.0%
	Uncertain	Count	2	1	0	2	5
		% within Type of respondents	20.0%	10.0%	.0%	20.0%	12.5%
	Agree	Count	2	2	3	2	9
		% within Type of respondents	20.0%	20.0%	30.0%	20.0%	22.5%
	Strongly Agree	Count	0	0	0	1	1
		% within Type of respondents	.0%	.0%	.0%	10.0%	2.5%
Total		Count	10	10	10	10	40
		% within Type of respondents	100.0%	100.0%	100.0%	100.0%	100.0%

Table A4: Ability of Less Formal Learners: Compare Means

Report

People from less formal background are unable to adjust with the formal education system.

Type of respondents	Mean	Minimum	Maximum
Development Activist	2.6000	Disagree	Agree
Educational Administrator	2.4000	Strongly Disagree	Agree
Policy Actor	2.4000	Strongly Disagree	Agree
University Professor	2.7000	Strongly Disagree	Strongly Agree
Total	2.5250	Strongly Disagree	Strongly Agree

Table A5: Entrance of Less Formal Learners to Formal Education: Cross Tabulation

Students from non-formal and informal background should be allowed to enter into formal schooling after an equivalency test. * Type of respondents Crosstabulation

			Type of respondents				Total
			Development Activist	Educational Administrator	Policy Actor	University Professor	
Students from non-formal and informal background should be allowed to enter into formal schooling after an equivalency test.	Uncertain	Count	1	1	0	0	2
		% within Type of respondents	10.0%	10.0%	.0%	.0%	5.0%
	Agree	Count	1	4	6	8	19
		% within Type of respondents	10.0%	40.0%	60.0%	80.0%	47.5%
	Strongly Agree	Count	8	5	4	2	19
		% within Type of respondents	80.0%	50.0%	40.0%	20.0%	47.5%
Total		Count	10	10	10	10	40
		% within Type of respondents	100.0%	100.0%	100.0%	100.0%	100.0%

Table A6: Entrance of Less Formal Learners to Formal Education: Compare Means

Report

Students from non-formal and informal background should be
allowed to enter into formal schooling after an equivalency test.

Type of respondents	Mean	Minimum	Maximum
Development Activist	4.7000	Uncertain	Strongly Agree
Educational Administrator	4.4000	Uncertain	Strongly Agree
Policy Actor	4.4000	Agree	Strongly Agree
University Professor	4.2000	Agree	Strongly Agree
Total	4.4250	Uncertain	Strongly Agree

Table A7: Equality in Learning Outcomes: Cross Tabulation

Learning outcomes from formal, non-formal and informal means cannot be equated * Type of respondents Crosstabulation

			Type of respondents				
			Development Activist	Educational Administrator	Policy Actor	University Professor	Total
Learning outcomes from formal, non-formal and informal means cannot be equated	Strongly Disagree	Count	2	0	2	2	6
		% within Type of respondents	20.0%	.0%	20.0%	20.0%	15.0%
	Disagree	Count	5	3	0	4	12
		% within Type of respondents	50.0%	30.0%	.0%	40.0%	30.0%
	Uncertain	Count	2	1	2	1	6
		% within Type of respondents	20.0%	10.0%	20.0%	10.0%	15.0%
	Agree	Count	1	5	3	2	11
		% within Type of respondents	10.0%	50.0%	30.0%	20.0%	27.5%
	Strongly Agree	Count	0	1	3	1	5
		% within Type of respondents	.0%	10.0%	30.0%	10.0%	12.5%
Total		Count	10	10	10	10	40
		% within Type of respondents	100.0%	100.0%	100.0%	100.0%	100.0%

Table A8: Equality in Learning Outcomes: Compare Means

Report

Learning outcomes from formal, non-formal and informal means
cannot be equated

Type of respondents	Mean	Minimum	Maximum
Development Activist	2.2000	Strongly Disagree	Agree
Educational Administrator	3.4000	Disagree	Strongly Agree
Policy Actor	3.5000	Strongly Disagree	Strongly Agree
University Professor	2.6000	Strongly Disagree	Strongly Agree
Total	2.9250	Strongly Disagree	Strongly Agree

Table A9: Work Based and Experiential Learning: Cross Tabulation

d learning, experiential learning, and accidental learning cannot be equated with formal learning. * Type of res
Crosstabulation

			Type of respondents				Total
			Development Activist	Educational Administrator	Policy Actor	University Professor	
Work based learning experiential learning, and accidental learni cannot be equated w formal learning.	Stronly Disagre	Count	2	0	3	1	6
		% within Type respondents	20.0%	.0%	30.0%	10.0%	15.0%
	Disagree	Count	4	7	4	3	18
		% within Type respondents	40.0%	70.0%	40.0%	30.0%	45.0%
	Uncertain	Count	0	1	0	1	2
		% within Type respondents	.0%	10.0%	.0%	10.0%	5.0%
	Agree	Count	4	1	2	4	11
		% within Type respondents	40.0%	10.0%	20.0%	40.0%	27.5%
	Strongly Agree	Count	0	1	1	1	3
		% within Type respondents	.0%	10.0%	10.0%	10.0%	7.5%
Total		Count	10	10	10	10	40
		% within Type respondents	100.0%	100.0%	100.0%	100.0%	100.0%

Table A10: Work Based and Experiential Learning: Compare Means

Report

Work based learning, experiential learning, and accidental
learning cannot be equated with formal learning.

Type of respondents	Mean	Minimum	Maximum
Development Activist	2.6000	Stronly Disagree	Agree
Educational Administrator	2.6000	Disagree	Strongly Agree
Policy Actor	2.4000	Stronly Disagree	Strongly Agree
University Professor	3.1000	Stronly Disagree	Strongly Agree
Total	2.6750	Stronly Disagree	Strongly Agree

Table A11: Validation of Less Formal Learning: Cross Tabulation

**ormal and informal learning has to be given same degree of recognition, validation, and certification as formal lear
Crosstabulation**

			Type of respondents				
			Development Activist	Educational Administrator	Policy Actor	University Professor	Total
Non-formal and informa learning has to be giver same degree of recognition, validation, and certification as formal learning.	Disagree	Count	1	1	2	4	8
		% within Type o respondents	10.0%	10.0%	20.0%	40.0%	20.0%
	Uncertain	Count	0	1	2	1	4
		% within Type o respondents	.0%	10.0%	20.0%	10.0%	10.0%
	Agree	Count	4	6	3	1	14
		% within Type o respondents	40.0%	60.0%	30.0%	10.0%	35.0%
	Strongly Agree	Count	5	2	3	4	14
		% within Type o respondents	50.0%	20.0%	30.0%	40.0%	35.0%
Total		Count	10	10	10	10	40
		% within Type o respondents	100.0%	100.0%	100.0%	100.0%	100.0%

Table A12: Validation of Less Formal Learning: Compare Means

Report

Non-formal and informal learning has to be given same degree of
recognition, validation, and certification as formal learning.

Type of respondents	Mean	Minimum	Maximum
Development Activist	4.3000	Disagree	Strongly Agree
Educational Administrator	3.9000	Disagree	Strongly Agree
Policy Actor	3.7000	Disagree	Strongly Agree
University Professor	3.5000	Disagree	Strongly Agree
Total	3.8500	Disagree	Strongly Agree

Table A13: Focus on Formal Education: Cross Tabulation

Nepalese education system should focus more on formal learning than on non-formal and informal learning. * Type of respondents Crosstabulation

			Type of respondents				Total
			Development Activist	Educational Administrator	Policy Actor	University Professor	
Nepalese education system should focus more on formal learning than on non-formal and informal learning.	Strongly Disagree	Count	2	2	2	1	7
		% within Type of respondents	20.0%	20.0%	20.0%	10.0%	17.5%
	Disagree	Count	5	2	6	6	19
		% within Type of respondents	50.0%	20.0%	60.0%	60.0%	47.5%
	Uncertain	Count	2	1	0	2	5
		% within Type of respondents	20.0%	10.0%	.0%	20.0%	12.5%
	Agree	Count	1	3	2	0	6
		% within Type of respondents	10.0%	30.0%	20.0%	.0%	15.0%
	Strongly Agree	Count	0	2	0	1	3
		% within Type of respondents	.0%	20.0%	.0%	10.0%	7.5%
Total		Count	10	10	10	10	40
		% within Type of respondents	100.0%	100.0%	100.0%	100.0%	100.0%

Table A14: Focus on Formal Education: Compare Means

Report

Nepalese education system should focus more on formal
learning than on non-formal and informal learning.

Type of respondents	Mean	Minimum	Maximum
Development Activist	2.2000	Strongly Disagree	Agree
Educational Administrator	3.1000	Strongly Disagree	Strongly Agree
Policy Actor	2.2000	Strongly Disagree	Agree
University Professor	2.4000	Strongly Disagree	Strongly Agree
Total	2.4750	Strongly Disagree	Strongly Agree

Table A15: Equal Focus on FE, NFE and IE: Cross Tabulation

to give equal emphasis to formal, non-formal and informal education. * Type of respondents Cr

			Type of respondents				Total
			Development Activist	Educational Administrator	Policy Actor	University Professor	
A country has to g equal emphasis to formal, non-formal informal education	Strongly Disag	Count	3	0	0	0	3
		% within Typ respondents	30.0%	.0%	.0%	.0%	7.5%
	Disagree	Count	0	0	1	2	3
		% within Typ respondents	.0%	.0%	10.0%	20.0%	7.5%
	Agree	Count	2	6	2	2	12
		% within Typ respondents	20.0%	60.0%	20.0%	20.0%	30.0%
	Strongly Agree	Count	5	4	7	6	22
		% within Typ respondents	50.0%	40.0%	70.0%	60.0%	55.0%
Total		Count	10	10	10	10	40
		% within Typ respondents	100.0%	100.0%	100.0%	100.0%	100.0%

Table A16: Equal Focus on FE, NFE and IE: Compare Means

Report

A country has to give equal emphasis to formal, non-formal and informal education.

Type of respondents	Mean	Minimum	Maximum
Development Activist	3.6000	Strongly Disagree	Strongly Agree
Educational Administrator	4.4000	Agree	Strongly Agree
Policy Actor	4.5000	Disagree	Strongly Agree
University Professor	4.2000	Disagree	Strongly Agree
Total	4.1750	Strongly Disagree	Strongly Agree

Table A17: Keeping FE, NFE and IE in an NQF: Cross Tabulation

l education, non-formal education and informal education should be kept under a single national qualifications frame

			Type of respondents				Total
			Development Activist	Educational Administrator	Policy Actor	University Professor	
Formal education, non-formal education ar informal education shou be kept under a single national qualifications framework.	Strongly Disagree	Count	0	0	0	1	1
		% within Type (respondents	.0%	.0%	.0%	10.0%	2.5%
	Disagree	Count	1	1	3	2	7
		% within Type (respondents	10.0%	10.0%	30.0%	20.0%	17.5%
	Uncertain	Count	3	1	2	0	6
		% within Type (respondents	30.0%	10.0%	20.0%	.0%	15.0%
	Agree	Count	5	6	3	2	16
		% within Type (respondents	50.0%	60.0%	30.0%	20.0%	40.0%
	Strongly Agree	Count	1	2	2	5	10
		% within Type (respondents	10.0%	20.0%	20.0%	50.0%	25.0%
Total		Count	10	10	10	10	40
		% within Type (respondents	100.0%	100.0%	100.0%	100.0%	100.0%

Table A18: Keeping FE, NFE and IE in an NQF: Compare Means

Report

Formal education, non-formal education and informal education should be kept under a single national qualifications framework.

Type of respondents	Mean	Minimum	Maximum
Development Activist	3.6000	Disagree	Strongly Agree
Educational Administrator	3.9000	Disagree	Strongly Agree
Policy Actor	3.4000	Disagree	Strongly Agree
University Professor	3.8000	Strongly Disagree	Strongly Agree
Total	3.6750	Strongly Disagree	Strongly Agree

Table A19: Not Keeping FE, NFE and IE in an NQF: Cross Tabulation

less formal means should be made eligible for entering into formal education system for further learni respondents Crosstabulation

			Type of respondents				Total
			Development Activist	Educational Administrator	Policy Actor	University Professor	
People from less forr means should be ma eligible for entering ir formal education sys for further learning.	Uncertain	Count	1	2	1	1	5
		% within Type respondents	10.0%	20.0%	10.0%	10.0%	12.5%
	Agree	Count	5	7	5	8	25
		% within Type respondents	50.0%	70.0%	50.0%	80.0%	62.5%
	Strongly Agr	Count	4	1	4	1	10
		% within Type respondents	40.0%	10.0%	40.0%	10.0%	25.0%
Total		Count	10	10	10	10	40
		% within Type respondents	100.0%	100.0%	100.0%	100.0%	100.0%

Table A20: Not Keeping FE, NFE and IE in an NQF: Compare Means

Report

Non-formal and informal learning outcomes can't be brought
under a single national qualifications framework.

Type of respondents	Mean	Minimum	Maximum
Development Activist	2.5000	Strongly Agree	Disagree
Educational Administrator	3.1000	Agree	Strongly Agree
Policy Actor	3.2000	Strongly Agree	Strongly Agree
University Professor	2.3000	Strongly Agree	Disagree
Total	2.7750	Strongly Agree	Strongly Agree

Table A21: Eligibility for Less Formal Learners: Cross Tabulation

**⊃m less formal means should be made eligible for entering into formal education system for further learning.
respondents Crosstabulation**

			Type of respondents				
			Development Activist	Educational Administrator	Policy Actor	University Professor	Total
People from less form means should be mad eligible for entering int formal education syste for further learning.	Uncertain	Count	1	2	1	1	5
		% within Type respondents	10.0%	20.0%	10.0%	10.0%	12.5%
	Agree	Count	5	7	5	8	25
		% within Type respondents	50.0%	70.0%	50.0%	80.0%	62.5%
	Strongly Agre	Count	4	1	4	1	10
		% within Type respondents	40.0%	10.0%	40.0%	10.0%	25.0%
Total		Count	10	10	10	10	40
		% within Type respondents	100.0%	100.0%	100.0%	100.0%	100.0%

Table A22: Eligibility for Less Formal Learners: Compare Means

Report

People from less formal means should be made eligible for
entering into formal education system for further learning.

Type of respondents	Mean	Minimum	Maximum
Development Activist	4.3000	Uncertain	Strongly Agree
Educational Administrator	3.9000	Uncertain	Strongly Agree
Policy Actor	4.3000	Uncertain	Strongly Agree
University Professor	4.0000	Uncertain	Strongly Agree
Total	4.1250	Uncertain	Strongly Agree

Table A23: Equivalent Standards of FL, NFL and IL: Cross Tabulation

ple from less formal means can't achieve equivalent standard with the people who come from formal education. * Typ
respondents Crosstabulation

			Type of respondents				Total
			Development Activist	Educational Administrator	Policy Actor	University Professor	
People from less forma means can't achieve equivalent standard with the people who come from formal education.	Strongly Disagree	Count	2	1	2	2	7
		% within Type respondents	20.0%	10.0%	20.0%	20.0%	17.5%
	Disagree	Count	7	3	3	5	18
		% within Type respondents	70.0%	30.0%	30.0%	50.0%	45.0%
	Uncertain	Count	0	2	0	0	2
		% within Type respondents	.0%	20.0%	.0%	.0%	5.0%
	Agree	Count	1	4	3	3	11
		% within Type respondents	10.0%	40.0%	30.0%	30.0%	27.5%
	Strongly Disagree	Count	0	0	2	0	2
		% within Type respondents	.0%	.0%	20.0%	.0%	5.0%
Total		Count	10	10	10	10	40
		% within Type respondents	100.0%	100.0%	100.0%	100.0%	100.0%

Table A24: Equivalent Standards of FL, NFL and IL: Compare Means

Report

People from less formal means can't achieve equivalent standard
with the people who come from formal education.

Type of respondents	Mean	Minimum	Maximum
Development Activist	2.0000	Strongly Disagree	Agree
Educational Administrator	2.9000	Strongly Disagree	Agree
Policy Actor	3.0000	Strongly Disagree	Strongly Disagree
University Professor	2.4000	Strongly Disagree	Agree
Total	2.5750	Strongly Disagree	Strongly Disagree

Table A25: Approaches to Learning: Frequencies

$atl Frequencies

		Responses		Percent of Cases
		N	Percent	
Important approach to learning [a]	Formal Schooling	33	35.9%	82.5%
	Self Learning	17	18.5%	42.5%
	Non-Formal Education Modality	18	19.6%	45.0%
	Work-based learning	24	26.1%	60.0%
Total		92	100.0%	230.0%

a. Dichotomy group tabulated at value 1.

Table A26: Approaches to Learning: ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Formal Schooling	Between Groups	.275	3	.092	.600	.619
	Within Groups	5.500	36	.153		
	Total	5.775	39			
Self Learning	Between Groups	1.275	3	.425	1.800	.165
	Within Groups	8.500	36	.236		
	Total	9.775	39			
Non-Formal Education Modality	Between Groups	.500	3	.167	.638	.595
	Within Groups	9.400	36	.261		
	Total	9.900	39			
Work-based learning	Between Groups	2.200	3	.733	3.568	.023
	Within Groups	7.400	36	.206		
	Total	9.600	39			

Table A27: Approaches to Learning: Correlations

Correlations

		Formal Schooling	Self Learning	Non-Formal Education Modality	Work-based learning
Formal Schooling	Pearson Correlation	1	.263	.152	-.107
	Sig. (1-tailed)		.051	.174	.255
	N	40	40	40	40
Self Learning	Pearson Correlation	.263	1	.442**	.599**
	Sig. (1-tailed)	.051		.002	.000
	N	40	40	40	40
Non-Formal Education Modality	Pearson Correlation	.152	.442**	1	.226
	Sig. (1-tailed)	.174	.002		.081
	N	40	40	40	40
Work-based learning	Pearson Correlation	-.107	.599**	.226	1
	Sig. (1-tailed)	.255	.000	.081	
	N	40	40	40	40

**. Correlation is significant at the 0.01 level (1-tailed).

Table A28: Ways for Acquiring Knowledge: Frequency

$aok Frequencies

		Responses		Percent of Cases
		N	Percent	
Best way of acquiring knowledge [a]	1. Attending good schools and colleges, and securing good score in exams.	23	23.2%	57.5%
	2. Involving oneself in learning activities at home, community, religious venues, etc.	29	29.3%	72.5%
	3. Getting involved in learning through occupational experiences and reflecting real life situations.	27	27.3%	67.5%
	4. Acquiring knowledge and skills relevant for his/her life with the help of ICTs.	20	20.2%	50.0%
Total		99	100.0%	247.5%

a. Dichotomy group tabulated at value 1.

Table A29: Ways for Acquiring Knowledge: ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Attending good schools and colleges, and securing good scores in the exams	Between Groups	.475	3	.158	.613	.611
	Within Groups	9.300	36	.258		
	Total	9.775	39			
Involving oneself in learning activities at home, community, with peers, religious venues, workplaces, media, libraries, education and cultural centers	Between Groups	.075	3	.025	.114	.951
	Within Groups	7.900	36	.219		
	Total	7.975	39			
Getting involved in learning through occupational experiences and reflecting real life situations	Between Groups	.275	3	.092	.388	.762
	Within Groups	8.500	36	.236		
	Total	8.775	39			
Acquiring knowledge and skills relevant for his her life with the help of ICTs	Between Groups	.200	3	.067	.245	.864
	Within Groups	9.800	36	.272		
	Total	10.000	39			

Table A30: Ways for Acquiring Knowledge: Correlations

Correlations

		Attending good schools and colleges, and securing good scores in the exams	Involving oneself in learning activities at home, community, with peers, religious venues, workplaces, media, libraries, education and cultural centers	Getting involved in learning through occupational experiences and reflecting real life situations	Acquiring knowledge and skills relevant for his her life with the help of ICTs
Attending good schools and colleges, and securing good scores in the exams	Pearson Correlation	1	.037	-.057	.152
	Sig. (1-tailed)		.411	.364	.175
	N	40	40	40	40
Involving oneself in learning activities at home, community, with peers, religious venues, workplaces, media, libraries, education and cultural centers	Pearson Correlation	.037	1	.051	.280*
	Sig. (1-tailed)	.411		.378	.040
	N	40	40	40	40
Getting involved in learning through occupational experiences and reflecting real life situations	Pearson Correlation	-.057	.051	1	.160
	Sig. (1-tailed)	.364	.378		.162
	N	40	40	40	40
Acquiring knowledge and skills relevant for his her life with the help of ICTs	Pearson Correlation	.152	.280*	.160	1
	Sig. (1-tailed)	.175	.040	.162	
	N	40	40	40	40

*. Correlation is significant at the 0.05 level (1-tailed).

Table A31: Judging Quality of Learning: Frequencies

$qol Frequencies

		Responses		Percent of Cases
		N	Percent	
Judging quality of learning [a]	By focusing on contents offered in the curriculum	10	21.3%	27.0%
	By providing freedom for learners to learn as per their capacity and interests	18	38.3%	48.6%
	By placing more emphasis on formal education	1	2.1%	2.7%
	By validating learning outcomes acquired through non-formal and informal means	18	38.3%	48.6%
Total		47	100.0%	127.0%

a. Dichotomy group tabulated at value 1.

Table A32: Judging Quality of Learning: ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
By focusing on contents offered in the curriculum	Between Groups	.500	3	.167	.857	.472
	Within Groups	7.000	36	.194		
	Total	7.500	39			
By providing freedom for learners to learn as per their capacity and interests	Between Groups	.500	3	.167	.638	.595
	Within Groups	9.400	36	.261		
	Total	9.900	39			
By placing more emphasis on formal education	Between Groups	.075	3	.025	1.000	.404
	Within Groups	.900	36	.025		
	Total	.975	39			
By validating learning outcomes acquired through non-formal and informal means	Between Groups	1.700	3	.567	2.488	.076
	Within Groups	8.200	36	.228		
	Total	9.900	39			

Table A33: Judging Quality of Learning: Correlations

Correlations

		By focusing on contents offered in the curriculum	By providing freedom for learners to learn as per their capacity and interests	By placing more emphasis on formal education	By validating learning outcomes acquired through non-formal and informal means
By focusing on contents offered in the curriculum	Pearson Correlation	1	-.522**	.277*	-.406**
	Sig. (1-tailed)		.000	.042	.005
	N	40	40	40	40
By providing freedom for learners to learn as per their capacity and interests	Pearson Correlation	-.522**	1	-.145	-.010
	Sig. (1-tailed)	.000		.186	.475
	N	40	40	40	40
By placing more emphasis on formal education	Pearson Correlation	.277*	-.145	1	-.145
	Sig. (1-tailed)	.042	.186		.186
	N	40	40	40	40
By validating learning outcomes acquired through non-formal and informal means	Pearson Correlation	-.406**	-.010	-.145	1
	Sig. (1-tailed)	.005	.475	.186	
	N	40	40	40	40

**. Correlation is significant at the 0.01 level (1-tailed).

*. Correlation is significant at the 0.05 level (1-tailed).

Table A34: Selecting as Employee: Frequencies

$sae Frequencies

		Responses		Percent of Cases
		N	Percent	
Selecting as employee [a]	Evaluating learning achievements secured in the formal education structures: school, college, training institutions etc.	23	33.8%	62.2%
	Administering tests to ascertain equivalency of learning achievements obtained through NFE Modality (for example CLC)	23	33.8%	62.2%
	Administering tests to establish equivalency of learning achievements obtained through self-learning initiatives.	22	32.4%	59.5%
Total		68	100.0%	183.8%

a. Dichotomy group tabulated at value 1.

Table A35: Selecting as Employee: ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Evaluating learning achievements secured in the formal education structures: school, college, training institutions etc.	Between Groups	.475	3	.158	.613	.611
	Within Groups	9.300	36	.258		
	Total	9.775	39			
Administering tests to ascertain equivalency of learning achievements obtained through NFE Modality (for example CLC)	Between Groups	.675	3	.225	.890	.456
	Within Groups	9.100	36	.253		
	Total	9.775	39			
Administering tests to establish equivalency of learning achievements obtained through self-learning initiatives.	Between Groups	.500	3	.167	.638	.595
	Within Groups	9.400	36	.261		
	Total	9.900	39			

Table A36: Selecting as Employee: Correlations

Correlations

		Evaluating learning achievements secured in the formal education structures: school, college, training institutions etc.	Administering tests to ascertain equivalency of learning achievements obtained through NFE Modality (for example CLC)	Administering tests to establish equivalency of learning achievements obtained through self-learning initiatives.
Evaluating learning achievements secured in the formal education structures: school, college, training institutions etc.	Pearson Correlation	1	.182	.137
	Sig. (1-tailed)		.131	.199
	N	40	40	40
Administering tests to ascertain equivalency of learning achievements obtained through NFE Modality (for example CLC)	Pearson Correlation	.182	1	.036
	Sig. (1-tailed)	.131		.414
	N	40	40	40
Administering tests to establish equivalency of learning achievements obtained through self-learning initiatives.	Pearson Correlation	.137	.036	1
	Sig. (1-tailed)	.199	.414	
	N	40	40	40

Table A37: Enhancing Lifelong Learning: Frequencies

$ell Frequencies

		Responses		Percent of Cases
		N	Percent	
Enhancing lifelong learning [a]	Recognizing and validating self-learning, prior learning, work-based learning and experiential learning	26	31.3%	65.0%
	Establishing parity among formal, non -formal and informal learning	22	26.5%	55.0%
	Providing learning options such as through formal, non-formal and informal means	20	24.1%	50.0%
	Developing a National Qualification Framework (NQF)	15	18.1%	37.5%
Total		83	100.0%	207.5%

a. Dichotomy group tabulated at value 1.

Table A38: Enhancing Lifelong Learning: ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Recognizing and validating self-learning, prior learning, work-based learning and experiential learning	Between Groups	.500	3	.167	.698	.560
	Within Groups	8.600	36	.239		
	Total	9.100	39			
Establishing parity among formal, non -formal and informal learning	Between Groups	1.300	3	.433	1.814	.162
	Within Groups	8.600	36	.239		
	Total	9.900	39			
Providing learning options such as through formal, non-formal and informal means	Between Groups	.600	3	.200	.766	.521
	Within Groups	9.400	36	.261		
	Total	10.000	39			
Developing a National Qualification Framework (NQF)	Between Groups	.875	3	.292	1.235	.311
	Within Groups	8.500	36	.236		
	Total	9.375	39			

Table A39: Enhancing Lifelong Learning: Correlations

Correlations

		Recognizing and validating self-learning, prior learning, work-based learning and experiential learning	Establishing parity among formal, non -formal and informal learning	Providing learning options such as through formal, non-formal and informal means	Developing a National Qualification Framework (NQF)
Recognizing and validating self-learning, prior learning, work-based learning and experiential learning	Pearson Correlation	1	-.242	.210	.135
	Sig. (1-tailed)		.066	.097	.203
	N	40	40	40	40
Establishing parity among formal, non -formal and informal learning	Pearson Correlation	-.242	1	.201	.182
	Sig. (1-tailed)	.066		.107	.131
	N	40	40	40	40
Providing learning options such as through formal, non-formal and informal means	Pearson Correlation	.210	.201	1	.465**
	Sig. (1-tailed)	.097	.107		.001
	N	40	40	40	40
Developing a National Qualification Framework (NQF)	Pearson Correlation	.135	.182	.465**	1
	Sig. (1-tailed)	.203	.131	.001	
	N	40	40	40	40

**. Correlation is significant at the 0.01 level (1-tailed).

Table A40: Ways of Learning: Frequencies

$wol Frequencies

		Responses		Percent of Cases
		N	Percent	
Ways of learning [a]	Through individual initiative and group sharing	28	33.3%	70.0%
	Through interactive process among teachers and students	27	32.1%	67.5%
	Through one's reflection of his/her day-to-day activities	29	34.5%	72.5%
Total		84	100.0%	210.0%

a. Dichotomy group tabulated at value 1.

Table A41: Ways of Learning: ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Through individual initiative and group sharing	Between Groups	1.400	3	.467	2.400	.084
	Within Groups	7.000	36	.194		
	Total	8.400	39			
Through interactive process among teachers and students at school and colleges	Between Groups	.275	3	.092	.388	.762
	Within Groups	8.500	36	.236		
	Total	8.775	39			
Through one's reflection of his/her day to day activities	Between Groups	.275	3	.092	.429	.734
	Within Groups	7.700	36	.214		
	Total	7.975	39			

Table A42: Ways of Learning: Correlations

Correlations

		Through individual initiative and group sharing	Through interactive process among teachers and students at school and colleges	Through one's reflection of his/her day to day activities
Through individual initiative and group sharing	Pearson Correlation	1	.012	.208
	Sig. (1-tailed)		.472	.099
	N	40	40	40
Through interactive process among teachers and students at school and colleges	Pearson Correlation	.012	1	.290*
	Sig. (1-tailed)	.472		.035
	N	40	40	40
Through one's reflection of his/her day to day activities	Pearson Correlation	.208	.290*	1
	Sig. (1-tailed)	.099	.035	
	N	40	40	40

*. Correlation is significant at the 0.05 level (1-tailed).

Table A43: Assessment of Competence: Frequencies

$aoc Frequencies

		Responses		Percent of Cases
		N	Percent	
Assessment of competence [a]	Ability to perform in exams	7	9.1%	17.9%
	Ability to solve life problems	27	35.1%	69.2%
	Ability to get job in the market	14	18.2%	35.9%
	Ability to adjust oneself in the competitive modern world	29	37.7%	74.4%
Total		77	100.0%	197.4%

a. Dichotomy group tabulated at value 1.

Table A44: Assessment of Competence: ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Ability to perform in exams	Between Groups	.875	3	.292	2.143	.112
	Within Groups	4.900	36	.136		
	Total	5.775	39			
Ability to solve life problems	Between Groups	.475	3	.158	.687	.566
	Within Groups	8.300	36	.231		
	Total	8.775	39			
Ability to get job in the market	Between Groups	.500	3	.167	.698	.560
	Within Groups	8.600	36	.239		
	Total	9.100	39			
Ability to adjust oneself in the competitive modern world	Between Groups	.075	3	.025	.114	.951
	Within Groups	7.900	36	.219		
	Total	7.975	39			

Table A45: Assessment of Competence: Correlations

Correlations

		Ability to perform in exams	Ability to solve life problems	Ability to get job in the market	Ability to adjust oneself in the competitive modern world
Ability to perform in exams	Pearson Correlation	1	.320*	.490**	.136
	Sig. (1-tailed)		.022	.001	.201
	N	40	40	40	40
Ability to solve life problems	Pearson Correlation	.320*	1	.285*	-.069
	Sig. (1-tailed)	.022		.037	.337
	N	40	40	40	40
Ability to get job in the market	Pearson Correlation	.490**	.285*	1	-.135
	Sig. (1-tailed)	.001	.037		.203
	N	40	40	40	40
Ability to adjust oneself in the competitive modern world	Pearson Correlation	.136	-.069	-.135	1
	Sig. (1-tailed)	.201	.337	.203	
	N	40	40	40	40

*. Correlation is significant at the 0.05 level (1-tailed).

**. Correlation is significant at the 0.01 level (1-tailed).

Table A46: Truth about Lifelong Learning: Frequencies

$tll Frequencies

		Responses		Percent of Cases
		N	Percent	
Truth about lifelong learning [a]	Formal, non-formal and informal learning provide equal credible for lifelong learning	12	22.6%	30.8%
	Non-formal and informal learning are more important than formal learning for enhancing lifelong learning and continuing education	15	28.3%	38.5%
	The three forms of learning (formal, non-formal, and informal) are constituents of lifelong learning and continuing education	26	49.1%	66.7%
Total		53	100.0%	135.9%

a. Dichotomy group tabulated at value 1.

Table A47: Truth about Lifelong Learning: ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Formal, non-formal and informal learning provide equal credible for lifelong learning	Between Groups	.400	3	.133	.600	.619
	Within Groups	8.000	36	.222		
	Total	8.400	39			
Non-formal and informal learning are more important than formal learning for enhancing lifelong learning and continuing education	Between Groups	.475	3	.158	.640	.594
	Within Groups	8.900	36	.247		
	Total	9.375	39			
The three forms of learning (formal, non-formal, and informal) are constituents of lifelong learning and continuing education	Between Groups	.500	3	.167	.698	.560
	Within Groups	8.600	36	.239		
	Total	9.100	39			

Table A48: Truth about Lifelong Learning: Correlations

Correlations

		Formal, non-formal and informal learning provide equal credible for lifelong learning	NFE and IL are more important than formal learning for enhancing LLL and continuing education	The three forms of learning are constituents of lifelong learning and continuing education
Formal, non-formal and informal learning provide equal credible for lifelong learning	Pearson Correlation	1	.169	-.320*
	Sig. (1-tailed)		.149	.022
	N	40	40	40
Non-formal and informal learning are more important than formal learning for enhancing lifelong learning and continuing education	Pearson Correlation	.169	1	-.189
	Sig. (1-tailed)	.149		.121
	N	40	40	40
The three forms of learning (formal, non-formal, and informal) are constituents of lifelong learning and continuing education	Pearson Correlation	-.320*	-.189	1
	Sig. (1-tailed)	.022	.121	
	N	40	40	40

*. Correlation is significant at the 0.05 level (1-tailed).

Table A49: Complementary and Supplementary Relationship: Frequencies

$csr Frequencies

		Responses		Percent of Cases
		N	Percent	
Maintaining Complementary and Supplementary Relationship^a	There should be a single board at national level for accreditation and certification of all three forms of learning	16	30.2%	42.1%
	There should be a separate authority for providing validation for non-formal and informal learning	11	20.8%	28.9%
	National Qualifications Framework should be developed	26	49.1%	68.4%
Total		53	100.0%	139.5%

a. Dichotomy group tabulated at value 1.

Table A50: Complementary and Supplementary Relationship: ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
There should be a single board at national level for accreditation and certification of all three forms of learning	Between Groups	.000	3	.000	.000	1.000
	Within Groups	9.600	36	.267		
	Total	9.600	39			
There should be a separate authority for providing validation for non-formal and informa learning	Between Groups	.075	3	.025	.114	.951
	Within Groups	7.900	36	.219		
	Total	7.975	39			
National Qualifications Framework should be developed	Between Groups	.900	3	.300	1.317	.284
	Within Groups	8.200	36	.228		
	Total	9.100	39			

Table A51: Complementary and Supplementary Relationship: Correlations

Correlations

		There should be a single board at national level for accreditation and certification of all three forms of learning	There should be a separate authority for providing validation for non-formal and informal learning	National Qualifications Framework should be developed
There should be a single board at national level for accreditation and certification of all three forms of learning	Pearson Correlation	1	-.160	-.150
	Sig. (1-tailed)		.162	.178
	N	40	40	40
There should be a separate authority for providing validation for non-formal and informal learning	Pearson Correlation	-.160	1	-.370**
	Sig. (1-tailed)	.162		.009
	N	40	40	40
National Qualifications Framework should be developed	Pearson Correlation	-.150	-.370**	1
	Sig. (1-tailed)	.178	.009	
	N	40	40	40

**. Correlation is significant at the 0.01 level (1-tailed).

Appendix B: Questionnaire

Dear Sir/Madam,

I am collecting data for the completion of my M. Phil thesis entitled 'Validating Non-formal and Informal Learning: Prospects for Lifelong Learning and Continuing Education in Nepal'. Your experiences and perceptions are valuable data for my research. I would like to ensure that the information you provide will be kept confidential and will not be used for another purpose. Please tick in the box (SA – Strongly Agree; A – Agree; U – Uncertain; D – Disagree; and SD – Strongly Disagree) against each of the following statements that you think as an appropriate option.

Kapil Dev Regmi, KU

Your Name (optional): ……………………… Institution: …………………………..

Indicate (tick one of the boxes) which option describes you best:

Development Activist   [   ]   Educational Administrator   [   ]

Policy Actor [   ]   University professor [   ]

S.N.	Statement	SA	A	U	D	SD
1.	People should be made free to acquire knowledge through formal, non-formal and informal means.					
2.	Work based learning, experiential learning, and accidental learning cannot be equated with formal learning.					
3	Formal education, non-formal education and informal education should be kept under a single national qualifications framework.					
4.	People from less formal background are unable to adjust with the formal education system.					
5.	Non-formal and informal learning has to be given same degree of recognition, validation, and certification as formal learning.					
6.	Non-formal and informal learning outcomes can't be brought under a single national qualifications framework.					

7.	Students from non-formal and informal background should be allowed to enter into formal schooling after an equivalency test.					
8.	Nepalese education system should focus more on formal learning than on non-formal and informal learning.					
9.	People from less formal means should be made eligible for entering into formal education system for further learning.					
10.	Learning outcomes from formal, non-formal and informal means cannot be equated					
11.	A country has to give equal emphasis to formal, non-formal and informal education.					
12.	People from less formal means can't achieve equivalent standard with the people who come from formal education.					

Please tick one or **more options** of the following questions/statements. Write any other options in the blank spaces.

1. The most important approach/approaches to learning is/are ….

   (   ) Formal Schooling   (   ) Self-learning

   (   ) Non-Formal Education Modality   (   ) Work-based learning

   Any other ………………………………………………………………………….

2. Knowledge and skills relevant to one's life can best be acquired by…

   (   ) Attending good schools and colleges, and securing good scores in the exams

   (   ) Involving oneself in learning activities at home, community, with peers, religious venues, workplaces, media, libraries, education and cultural centers

   (   ) Getting involved in learning through occupational experiences and reflecting real life situations

   (   ) Acquiring knowledge and skills relevant for his/her life with the help of Information Communication Technologies (ICTs)

   Any other ………………………………………………………………………….

3. How should one's competence be determined for selecting him/her as an employee?

    (　) Evaluating learning achievements secured in the formal education structures: school, college, training institutions etc.

    (　) Administering tests to ascertain equivalency of learning achievements obtained through NFE Modality (for example CLC)

    (　) Administering tests to establish equivalency of learning achievements obtained through self-learning initiatives.

Any other ………………………………………………………………………….

4. In which of the following age bracket/brackets should one take the learning initiative?

    (　) The first quarter of life (0-20 years)

    (　) The second quarter of life (20-40 years)

    (　) The third quarter of life (40-60 years)

    (　) The fourth quarter of life (60+ years)

5. The best means for enhancing lifelong learning and continuing education is/are…

    (　) Recognizing and validating self-learning, prior learning, work-based learning and experiential learning

    (　) Establishing parity among formal, non –formal and informal learning

    (　) Providing learning options such as through formal, non-formal and informal means

    (　) Developing a National Qualification Framework (NQF)

Any other ………………………………………………………………………….

6. How can we judge the quality of learning outcomes?

    (　) By focusing on contents offered in the curriculum

    (　) By providing freedom for learners to learn as per their capacity and interests

    (　) By placing more emphasis on formal education

    (　) By validating learning outcomes acquired through non-formal and informal means

Any other ………………………………………………………………………….

7. How does/do learning take place?

( ) Through individual initiative and group sharing

( ) Through interactive process among teachers and students at school and colleges

( ) Through one's reflection of his/her day to day activities

Any other ………………………………………………………………………….

8. What is/are important while one's competence is assessed?

( ) Ability to perform in exams

( ) Ability to solve life problems

( ) Ability to get job in the market

( ) Ability to adjust oneself in the competitive modern world

Any other ………………………………………………………………………….

9. What is true about lifelong learning?

( ) Formal, non-formal and informal learning provide equal credible for lifelong learning

( ) Non-formal and informal learning are more important than formal learning for enhancing lifelong learning and continuing education

( ) The three forms of learning (formal, non-formal, and informal) are constituents of lifelong learning and continuing education

Any other ………………………………………………………………………….

10. To maintain complementary and supplementary relationships between formal, non-formal and informal learning, which of the followings should be done?

( ) There should be a single board at national level for accreditation and certification of all three forms of learning

( ) There should be a separate authority for providing validation for non-formal and informal learning

( ) National Qualifications Framework should be developed

If you opt for this option state what type of NQF would be feasible in Nepal?

Any other ……………………………………………………………………….

Appendix C: Interview Guide

a. How can we make people free to acquire knowledge through formal, non-formal and informal means?

b. What should be done to emphasize non-formal and informal learning as equally as formal learning in Nepal?

c. How can we make non-formal and informal learners able to adjust with the people who are from formal education system?

d. How can we assess one's competence while he/she is selected as an employee? How can we provide same degree of employment opportunity to non-formal and informal learners as formal learners?

e. What should be done to make non-formal and informal learners eligible for entering into formal education system? Can a National Qualifications Framework be a viable solution?

f. How can we give same degree of recognition, validation and certification to non-formal and informal learning as we have been giving to formal learning? How can we make these three forms of learning equally important for enhancing lifelong learning and continuing education?

g. How can we equate the learning outcomes that come from formal, non-formal and informal means? How can we equate informal learning such as the learning that comes from work experience with formal learning?

h. Among the formal, non-formal, and informal learning which one is important to enhance lifelong learning and continuing education? Do we need to make them equally important? If yes, what should we do?

i. How can people acquire skills, knowledge and competences relevant to their lives? If they are through non-formal and informal means, can they be recognized or certified as equivalently as formal learning?

j. What should be done to enhance lifelong learning and continuing education in Nepal? How can we develop a National Qualifications Framework to enhance lifelong learning and continuing education?

k. How can we bring formal, non-formal and informal education under a single National Qualifications Framework?

l. How can the skills, knowledge and competences that come from formal, non-formal and informal means listed in a National Qualifications Framework?

m. Which authority or organization should be given the responsibility for providing recognition, accreditation and validation to the non-formal and informal learning outcomes in Nepal?