

Master's Degree Studies in  
International and Comparative Education

Education for Sustainable Development  
(ESD)

A Study of Understanding and Expectations among Teacher Trainees  
at Tribhuvan University in Nepal

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*Let our offspring see this world.*

## Abstract

The purpose of the study was to investigate teacher trainees' understanding on Education for Sustainable Development (ESD) in Nepal. The focused group of the study was the students of Masters in Education (M.Ed.) in the Department of Education, Tribhuvan University, Nepal.

Data are collected using questionnaire to the teacher trainees. Specific questions on trainees' self-concept and perception to the Department of Education were developed for the data. The data was analyzed using Statistical Package for Social Sciences (SPSS). The result shows that the Department of Education was in the track of ESD, though vivid conceptual framework and action plans were not established. The teacher trainees were confident that they were qualified to teach in the practical field after the completion of the course from the department. The department had not any specific programs for community-based activities for the trainees. It showed that the teacher trainees would get difficulties during their practical life in the community and could not help the community as they were supposed to get. The teacher trainees suggested various community service activities that are very important to address the social and educational problems. They were mostly focusing on peace education and development education. Poor educational planning and political interference on education were considered as the top educational problems of Nepal. It clearly showed that the decision level in Nepal is not functioning well. All the findings showed that the teacher trainees had satisfactory knowledge on ESD. Little effort from policy level could make it very effective and clear to the teacher trainees and obviously, the benefit would be to the whole community and the nation.

From the findings of the study, it is clear that the government level must have clear vision on ESD matter and the Department of Education should establish separate ESD unit as soon as possible to address the problems. Peace education, environment education and development education should be included in teacher trainees' curriculum. Furthermore, the department should have active community based projects for the training period. The efforts from policy level to grass root level could make this worldwide issue possible.

**Keywords:** *teacher trainees, Education for Sustainable Development, understanding, policy, community based education.*

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To my family: waiting for me in Nepal

## **List of Abbreviations**

DESD	Decade of Education for Sustainable Development
EE	Environmental Education
EFA	Education for All
ESD	Education for Sustainable Development
ICT	Information and Communication Technology
IUCN	International Union for Conservation of Nature
M.Ed.	Masters of Education
NEC	Nature Conservation Education
QOL	Quality of Life
SD	Sustainable Development
SPSS	Statistical Package for Social Sciences
TCSF	Tahoe Center for a Sustainable Future
TU	Tribhuvan University
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDESD	United Nation's Decade of Education for Sustainable Development
UNEP	United Nations Environmental Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNGA	United Nations' General Assembly
US	United States
WCED	World Commission on Environment and Development
WCS	World Conservation Strategy

## **List of Tables and Figures**

<b>Table</b>	<b>Page</b>
2.1 Basic Information about Nepal	8
5.1 ESD based Subjects Taught in Department of Education	33
5.2 Selected ESD based Subjects Offered in the Department of Education	34
5.3 Coverage by the Course Taught in Department of Education	35
5.4 Use of Courses in Practical Life	36
5.5 Familiarity with ESD	37
5.6 Trainees' Knowledge on ESD	37
5.7 Trainees' Awareness on UNDESD Program	38
5.8 Community-based Activities, the Teacher Trainees Require to Involve	39
5.9 Key Educational Problems of Nepal	41
<b>Figure</b>	
2.1 Political Map of Nepal	7

## Contents

Abstract.....	3
Acknowledgements .....	4
List of Abbreviations .....	6
List of Tables and Figures .....	7
Contents .....	8
Chapter one .....	11
Introduction.....	11
1.1 Background.....	11
1.2 Statement of the Problem .....	<b>Error! Bookmark not defined.</b>
1.3 Research Questions.....	<b>Error! Bookmark not defined.</b>
1.4 Aims and Objectives.....	12
1.5 Significance of the Study .....	<b>Error! Bookmark not defined.</b>
1.6 Limitation of the Study .....	<b>Error! Bookmark not defined.</b>
Chapter Two.....	<b>Error! Bookmark not defined.</b>
Nepal in Context.....	<b>Error! Bookmark not defined.</b>
2.1 Overview .....	<b>Error! Bookmark not defined.</b>
2.2 History of Nepal .....	<b>Error! Bookmark not defined.</b>
2.3 Education in Nepal.....	<b>Error! Bookmark not defined.</b>
2.3.1 Education under Rana Rule .....	<b>Error! Bookmark not defined.</b>
2.3.2 Education After 1951 .....	<b>Error! Bookmark not defined.</b>

Chapter Three.....	<b>Error! Bookmark not defined.</b>
Review of Studies of Education for Sustainable Development.....	<b>Error! Bookmark not defined.</b>
3.1 Introduction .....	<b>Error! Bookmark not defined.</b>
3.2 Sustainable Development (SD) .....	<b>Error! Bookmark not defined.</b>
3.3 Education for Sustainable Development .....	<b>Error! Bookmark not defined.</b>
3.4 The United Nations’ Decade of Education for Sustainable Development (UNDESDE) .....	<b>Error! Bookmark not defined.</b>
3.5 Thrust of ESD.....	<b>Error! Bookmark not defined.</b>
3.6 Teachers in Teaching of Sustainable Development.....	<b>Error! Bookmark not defined.</b>
Chapter Four .....	12
Research Design and Methodology.....	12
4.1 Introduction .....	12
4.2 Research Design .....	13
4.3 Tool for Data collection .....	13
4.4 Selection of Participants.....	14
4.5 Procedure for Data Collection .....	15
4.6 Data Analysis Procedure .....	15
Chapter Five.....	15
Analysis and Interpretation .....	15
5.1 Introduction .....	15
5.1.1 Analysis Based on Objective Questions .....	<b>Error! Bookmark not defined.</b>
5.1.2 Analysis Based on Subjective Questions .....	<b>Error! Bookmark not defined.</b>

Chapter Six.....	<b>Error! Bookmark not defined.</b>
Findings of the Study.....	<b>Error! Bookmark not defined.</b>
Chapter Seven .....	<b>Error! Bookmark not defined.</b>
Concluding Remarks and Recommendations .....	<b>Error! Bookmark not defined.</b>
References .....	<b>Error! Bookmark not defined.</b>
Appendix.....	<b>Error! Bookmark not defined.</b>

# Chapter one

## Introduction

### 1.1 Background

Education normally denotes the formal education. The word “education” covers a range of experiences, from formal learning to the building of understanding and knowledge through day-to-day experiences. The word “education” was derived from the Latin word ‘educare’ meaning ‘to raise’, ‘to bring up’, ‘to train’, ‘to rear’.

The core purpose of education is to make informed, socially conscious citizens who possess a sense of responsibility to the Earth and their fellow citizens. The responsibility is not confined to a concern for the environment and responsible environmental decision-making but also lengthens to the issues of equity, citizenship, responsibility, social justice and compassion. Normally these ideals are part of the mission statements of most of the schools and educational institutions but how these values are taught and learned is a vague question. Education can transmit knowledge, skills, values and attitudes to assist an effective and efficient life in the society. It is a lifelong process, which takes place in formal, non-formal and informal settings. The utilization of the resources available for the advantage of the people today and preserving them for the future generation is a crucial concept of sustainability, which is possible through Education for Sustainable Development (ESD) (Lotz-Sisitka 2006:54). The concept of ESD is output of regular practices like; Nature Conservation Education (NCE) and Environmental Education (EE). After the establishment of United Nations’ Decade of Education for Sustainable Development 2005-2014 (UNDESD), this concept became popular and worldwide.

The vision of ESD is about; Learning to recognize, respect, value and preserve the past achievements; appreciate the diversity and uniqueness of the people of the earth; live in a world where resources are distributed in a way that no one is denied what they need to live happily for a healthy and productive life; assess, monitor, evaluate, care for, rehabilitate and restore the state of our planet; create and enjoy a better, safer, be caring citizens who exercise their rights and responsibilities locally, nationally and globally (UNESCO Nairobi cluster, 2006).

To meet the dreams of a dynamic society, education keeps on changing with time. There are concerns all over the globe on the education offered, the changes in the education, the curriculum and the content in relation to the challenges that our society faces. These issues brought the need of ESD. Education redefines, refocuses and re-orient people's capacities, activities and perspective to transform their visions to produce the society of their need. Hence, education is a basic tool for the transformation of society towards Sustainable Development (SD). The teacher therefore has a responsibility of instilling ESD to the learners for sustainable society.

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#### **1.4 Aims and Objectives**

This study focuses on the policies and programs on ESD matters for achieving the sustainable future. The overall aim of this study is to analyze the present ESD situation in Nepal. To realize this aim, following objectives are established.

- i. To explore, the efforts carried out by the Department of Education to promote ESD in Nepal.
- ii. To analyze, teacher trainees' understanding on ESD.
- iii. To suggest, some relevant activities to be conducted for teacher trainees to get better achievement in ESD.

## **Chapter Four**

### **Research Design and Methodology**

#### **4.1 Introduction**

The purpose of this chapter is to describe the research methodology used for collecting and analyzing data used to test the research model on the finding of understanding level of the teacher trainees' in Nepal. Both quantitative and qualitative research methods were applied for the research. The steps implied for the research were; conceptualization, instrumentation, information gathering and closure with findings.

The complete research methodology is described in the following subsections

- research design

- tool for data collection
- selection of participants
- procedure for data collection
- data analysis procedure

## **4.2 Research Design**

Research design provides a master plan denoting the methods and procedures for collecting and analyzing the needed information (Zikmund 1997). It is used as a plan of action in order to solve a particular problem for researchers, specifying the type of information to be collected, the sources of data and the data collection procedure. A good design ensures that the collected data is consistent with research objectives and uses accurate and economical procedures (Kinnear & Taylor 1996).

This study used descriptive survey design. Descriptive survey design, besides finding facts may also result in the formulation of important principles of knowledge and solution to significant problems. It is used to describe and measure phenomenon to allow greater understanding. Descriptive research is highly structured and rigid in its approach to data collection (Stevens et al. 2000). Using the survey design the researcher was able to establish understanding on the educational characteristics offered to teacher trainees in Tribhuvan University, Nepal. The survey was useful in getting responses to the same questions from a number of students at the Department of Education. These designs ensured collection of wide range of data ranging from opinions/views, habits and attitudes.

## **4.3 Tool for Data collection**

This study was based on primary data, i.e. the first hand information collected from the participants. In order to collect the data on understanding level of ESD, questionnaire was developed and administrated to the sample respondents. The criteria for choosing most appropriate data collection tool (Sekaran, 2000); degree of accuracy, availability of time, research cost, availability of facilities and expertise of the researcher were used to select questionnaire as the tool for the study.

First, questionnaire surveys are considered to have a high level of accuracy. Respondents completing the questionnaire can think about the questions in their own time to provide accurate research data. As, the questionnaires are perceived as highly

anonymous, it ensures a higher degree of honesty and cooperation from respondents (Cooper & Schindler 2001). Second, though the preparation and administration time for a mail survey need comparatively more time than other methods, the researcher had adequate time to conduct a questionnaire survey. Third, questionnaire surveys are cost-effective way to reach a large sample population. Fourthly, the research facilities available to researcher were adequate for conducting questionnaire survey in Nepal. The researcher got help of two research assistances who fully supported for conducting the survey. Finally, the researcher had experience in conducting questionnaire surveys in different opinion collecting campaigns.

Both open and close-ended types of questions were enclosed in the questionnaire. Close-ended type questions were Yes/No type and choosing the best one type whereas, open-ended questionnaire for getting personal view in short. The focus of the questionnaire was mostly on the department's involvement on ESD and understanding of the students on ESD. The practicality of focusing on department's involvement on ESD was that if the department focuses on ESD matters and teaches the respective subjects which would support ESD then the students could be aware on ESD matters.

#### **4.4 Selection of Participants**

The focus group of this research was the students of M.Ed. program at the Department of Education in Tribhuvan University, Kathmandu, Nepal. The decision of taking this population to be sampled was based on the realization that the students in the Department of Education are the future teachers. They are getting training as teacher trainees in the department. Until and unless the teacher trainees get better understanding on ESD matters, it is not possible to deliver to the next generation. The researcher chose Tribhuvan University because it is responsible to train the teachers in Nepal in most cases. The other universities also run programs on teacher training but the coverage is very narrow.

This study targeted the 422 students in the regular Masters Degree program in the Department of Education, Tribhuvan University, Nepal. The researcher used simple random sampling method for selecting the respondents and chose 50 participants out of them. For the random sampling, the researcher with the help of the research assistance wrote the individual name of all the students in separate pieces of paper and put in a bucket. The sample students were chosen by picking up one paper at a time, mixed the papers, and repeated the same process until the required number was selected.

## **4.5 Procedure for Data Collection**

After getting the permission to research from the Department of Education, Tribhuvan University, the respondents were selected with the help of two research assistants. The questionnaires were distributed to the respective students. They were provided sufficient time to fill the questionnaire so that the research could get proper information. All together 50 questionnaire were distributed but only 40 respondents returned their filled up questionnaire back.

## **4.6 Data Analysis Procedure**

In the analysis, the 40 respondents who returned the response back to the researcher were assumed as 100 percent respondent. To analyze the quantitative data statistical procedures were implied. The questionnaire contains both subjective and objective type questions. The researcher coded the objective answers to use in Statistical Package for Social Sciences (SPSS). The researcher produced different statistical data with the help of SPSS and described accordingly. Both SPSS and Microsoft Excel were used for analysis. On the other hand, the subjective type questions were analyzed descriptively. For the description of the data, the researcher used tables and frequency charts.

# **Chapter Five**

## **Analysis and Interpretation**

### **5.1 Introduction**

In this chapter, the researcher presents the analysis from the data collected with the teacher trainees (M.Ed. students) of TU. This study seeks to find out the awareness level on ESD of the teacher trainees, who are the future teachers of Nepal. The data analysis procedure will be in two ways; quantitative method and qualitative method. The data from the questionnaire will be analyzed using the information from Statistical Program for Social Sciences (SPSS) and interpreted with the help of frequency tables using Microsoft Excel.

The interpretation will be presented in two main sections; analysis based on objective questions and analysis based on subjective questions. The analysis based on objective questions, will be discussed in the following sub-sections.

- i. Core ESD issues taught in the Department of Education.
- ii. Coverage of the Department of Education
- iii. Use of the courses in practical life
- iv. Teacher trainees' familiarity with ESD
- v. Teacher trainees' knowledge on ESD
- vi. Teacher trainees' awareness on UNDESD program

The analysis on subjective based questions will be discussed in the following sub- sections.

- i. Proposed community based activities
- ii. Key educational problems of Nepal
- iii. Social role of the teacher
- iv. Suggested research areas for the Department of Education
- v. Individual teacher trainee's view on ESD
- vi. Case 2**
- vii. Smirti, a female trainee from the first year of study responded for the first question, as "*The department has not launched an effective course covering all the above mentioned important issues*". For the question of relation between education and development, she placed education as the source for growth and said "*Development is the result of education*". In this response, the respondent focused to education for proper development unless the proper education could not be conducted development of the society could not be possible. She suggested following areas for the research to the Department of Education for the researches; influence of politics on education, educational planning and supervision to address the key educational problems of Nepal. Her point clearly stated that lack in the planning in education and huge political influence on educational activity is hindering for the development of education. Her answer for meaning of ESD was, "*It refers to the all-round and long-lasting development of our society through education.*" It was a good example that the trainees were aware about the different aspects of ESD but not aware on ESD directly; this terminology was quite new for her.