# Examining the Impact of In-service Training Module in Inclusive Education on Developing Positive Attitude and Awareness of Vocational Education Teachers toward Inclusion

Ana LELASHVILI



Master's Thesis

Master of Philosophy in Special Needs Education

Department of Special Needs Education

Faculty of Educational Sciences

UNIVERSITY OF OSLO

Spring 2014

Examining the impact of in-service training module in inclusive education on developing positive attitude and awareness of vocational education teachers toward inclusion

# © Ana Lelashvili 2014 Examining the impact of in-service training module in inclusive education on developing positive attitude and awareness of vocational education teachers toward inclusion

Ana Lelashvili

IV

http://www.duo.uio.no/

Trykk: Reprosentralen, Universitetet i Oslo

# **Abstract**

The authors investigated and compared vocational education college teachers' attitudes to inclusion and students with special needs. Moreover study tested whether practical experience combined with training in awareness in inclusive education can result in more positive, long-lasting attitudes about educational and social inclusion of people with special needs in VET system.

This study used experimental sequential mix method design, as a relevant strategy to measure attitudes of large population. In mix method research both qualitative and quantitative research methods were used.

Apparently in this study we used exploratory mixed method approach that has two phases. The researcher used first phase by exploring qualitative data and analysis and then uses findings in a second quantitative phase. The intent of the approach is to develop better measurements with specific samples of population and see if data from a few individuals can be generalized to a larger sample of population. The researcher employs a three-phase procedure with first phase as exploratory, the second as instrument development and third administering instrument to a sample of a population. It has to be mentioned that in this strategy, the data collection is occurred in two phases: qualitative data collection followed by the second quantitative data collection. The qualitative data analysis is used to develop an instrument with good psychometric properties (validity and reliability).

According to research design on the first phase 14 teachers for focus group discussions were selected from two vocational education colleges of Tbilisi. After qualitative data collection and right after training course compilation 56 teachers were randomly assigned to participate in second quantitative data collection part. So that questionnaire was distributed to both control group and experimental group members. To analyze data from first phase qualitative content analysis (QCA) was used. While the data obtained by the questionnaire was analysed using the Statistical Package for Social Sciences (SPSS). The first major finding of this research was that experimental group of teachers had more positive attitudes then control group members. However aim of the study was not only to see the difference between the groups biased on TTS, but to see also difference in any according to three factors, (1) general attitudes towards inclusion, (2) attitudes towards different kinds of disabilities and (3) discomfort. Therefore participation in the training course had the greatest impact in two areas,

namely general attitudes and discomfort. Study also reviled that these two groups do not differ from each other in the terms of attitudes toward disability type (LD, BC, EB/D). The results also detected the differences in attitudes in relation to the age of the teachers. Older teachers were more negative towards inclusion than younger teachers.

According to the findings of the study the improvement of pre-service training and retraining of in-service Vocatopnal education college teachers is required. In a word results have clearly supported the prediction that more information about inclusion and exposure to SNE students is accompanied by more positive attitude.

# Acknowledgments

I would like to express my thanks to my Norwegian advisor Lage Jonsberg for his support in handing data and for the valuable comments to my work.

I wish to express my love and gratitude to my beloved friends and family members who gave me emotional support and care. To my dear brother professional and emotional support, encouragement and care through all my professional development and the study period.

# **Content table**

A	bstract	t	VI
X	III		XIII
1	Cha	apter One: Background of the study	1
	1.1	1	
	1.2	Research Aims and Research Questions	2
	1.2	Justification and significance of the study	4
	1.3 Tbilis	Educational Reforms and Current Situation in Vocational Education Colle 8i6	ges of
	1.3	Vocational Education and Training (VET) System in Georgia	7
	1.3	3.2 Structure of Vocational Education	7
	1.3	Recent reforms related to vocational education and training system in	Georgia. 8
	1.3	7.4 Training module for teachers of Vocational educational colleges	10
	1.4	Thesis outline	11
2	Cha	apter Two: Theoretical Background	13
2.1 Introduction		Introduction	13
	2.2	An overview of related studies	14
	2.2	General structure of teachers` attitudes	14
	2.2	2.2 Teachers Attitudes towards inclusion research review	16
	2.3	The concept of attitudes: Definition and nature	20
	2.4	Social influence: the role of social consensus in attitudes change	21
	2.5	The medical and social models of disability	24
3	Cha	apter three Methodology	26
	3.1	Introduction	26
	3.2	Research design/strategy	26
	3.3	Population, sample and sampling procedure	28
	3.3	Description of the study area	28
	3.3	3.3 Description of the sample	29
	3.3	2.2 Procedure of sampling	30
	3.3	Instrument	31
	3.3	Pilot-testing of the instrument	33
	2.1	Procedure of data collection	33

3.6       Procedure of data analysis       36         3.7       Reliability and validity       38         3.8       Research ethics       42         4       Data presentation and analysis       44         4.1       Qualitative phase data presentation       44         4.1.1       Findings       45         4.2       Quantitative data presentation and analysis       49         4.2.1       Teacher and VET college-related demographic information       51         4.2.2       Teachers' attitudes       52         5       Chapter Five: Discussions, Conclusions and Recommendations       59         5.1       Introduction       59         5.2       Discussion and conclusion       59         5.3       The analysis of the teachers' comments       62         5.4       Limitations of the study       63         5.5       Recommendations       64         Table 3       45         4able 3       45         4able 4       51         Table 6       53         Table 6       53         Table 6       53         Table 7       54         Table 8       (All numbers are in percentages)       55<		3.5	Procedure of data collection	. 36					
3.8       Research ethics       .42         4       Data presentation and analysis       .44         4.1       Qualitative phase data presentation       .44         4.1.1       Findings       .45         4.2       Quantitative data presentation and analysis       .49         4.2.1       Teacher and VET college-related demographic information       .51         4.2.2       Teachers' attitudes       .52         5       Chapter Five: Discussions, Conclusions and Recommendations       .59         5.1       Introduction       .59         5.2       Discussion and conclusion       .59         5.3       The analysis of the teachers' comments       .62         5.4       Limitations of the study       .63         5.5       Recommendations       .64         Tables and figures         Table 1       .8         Table 2       .44         Table 3       .45         Table 4       .51         Table 6       .51         Table 6       .51         Table 7       .53         Table 8       .61         Table 9       .56         Table 10       .57		3.6	Procedure of data analysis	. 36					
4       Data presentation and analysis       .44         4.1       Qualitative phase data presentation       .44         4.1.1       Findings       .45         4.2       Quantitative data presentation and analysis       .49         4.2.1       Teacher and VET college-related demographic information       .51         4.2.2       Teachers' attitudes       .52         5       Chapter Five: Discussions, Conclusions and Recommendations       .59         5.1       Introduction       .59         5.2       Discussion and conclusion       .59         5.3       The analysis of the teachers' comments       .62         5.4       Limitations of the study       .63         5.5       Recommendations       .64         Tables and figures         Table 1       .8         Table 2       .44         Table 3       .45         Table 4       .51         Table 6       .51         Table 6       .53         Table 7       .54         Table 8       .61         Table 9       .55         Table 10       .57		3.7	Reliability and validity	. 38					
4.1       Qualitative phase data presentation       .44         4.1.1       Findings       .45         4.2       Quantitative data presentation and analysis       .49         4.2.1       Teacher and VET college-related demographic information       .51         4.2.2       Teachers' attitudes       .52         5       Chapter Five: Discussions, Conclusions and Recommendations       .59         5.1       Introduction       .59         5.2       Discussion and conclusion       .59         5.3       The analysis of the teachers' comments       .62         5.4       Limitations of the study       .63         5.5       Recommendations       .64         Tables and figures         Tbale 1       .8         Table 2       .44         Table 3       .45         Table 4       .51         Table 4       .51         Table 5       .51         Table 6       .53         Table 7       .54         Table 8       .(All numbers are in percentages)       .55         Table 9       .56         Table 10       .57		3.8	Research ethics	. 42					
4.1.1 Findings       .45         4.2 Quantitative data presentation and analysis       .49         4.2.1 Teacher and VET college-related demographic information       .51         4.2.2 Teachers` attitudes       .52         5 Chapter Five: Discussions, Conclusions and Recommendations       .59         5.1 Introduction       .59         5.2 Discussion and conclusion       .59         5.3 The analysis of the teachers' comments       .62         5.4 Limitations of the study       .63         5.5 Recommendations       .64         Tables and figures       .64         Table 1       .8         Table 2       .44         Table 3       .45         Table 4       .51         Table 5       .51         Table 6       .53         Table 7       .54         Table 8. (All numbers are in percentages)       .55         Table 9       .56         Table 10       .57	4	Data presentation and analysis							
4.2       Quantitative data presentation and analysis		4.1	Qualitative phase data presentation	. 44					
4.2       Quantitative data presentation and analysis		4.1	1 Findings	. 45					
4.2.1       Teacher and VET college-related demographic information       51         4.2.2       Teachers' attitudes       52         5       Chapter Five: Discussions, Conclusions and Recommendations       59         5.1       Introduction       59         5.2       Discussion and conclusion       59         5.3       The analysis of the teachers' comments       62         5.4       Limitations of the study       63         5.5       Recommendations       64         Tables and figures       8         Table 1       8         Table 2       44         Table 3       45         Table 4       51         Table 5       51         Table 6       53         Table 7       54         Table 8. (All numbers are in percentages)       55         Table 9       56         Table 10       57		4.2	-						
4.2.2 Teachers` attitudes		4.2							
5 Chapter Five: Discussions, Conclusions and Recommendations       59         5.1 Introduction       59         5.2 Discussion and conclusion       59         5.3 The analysis of the teachers' comments       62         5.4 Limitations of the study       63         5.5 Recommendations       64         Tables and figures       8         Table 1       8         Table 2       44         Table 3       45         Table 4       51         Table 5       51         Table 6       53         Table 7       54         Table 8. (All numbers are in percentages)       55         Table 9       56         Table 10       57		4.2							
5.1       Introduction       59         5.2       Discussion and conclusion       59         5.3       The analysis of the teachers' comments       62         5.4       Limitations of the study       63         5.5       Recommendations       64         Tables and figures       8         Table 2       44         Table 3       45         Table.4       51         Table.5       51         Table.6       53         Table.7       54         Table8. (All numbers are in percentages)       55         Table9       56         Table 10       57	5	Cha							
5.2       Discussion and conclusion									
5.3       The analysis of the teachers' comments       62         5.4       Limitations of the study       63         5.5       Recommendations       64         Tables and figures       8         Table 1       8         Table 2       44         Table 3       45         Table.4       51         Table.5       51         Table.6       53         Table.7       54         Table8. (All numbers are in percentages)       55         Table9       56         Table 10       57									
5.4 Limitations of the study       63         5.5 Recommendations       64         Tables and figures       8         Table 1       8         Table 2       44         Table 3       45         Table.4       51         Table.5       51         Table.6       53         Table.7       54         Table8. (All numbers are in percentages)       55         Table9       56         Table 10       57									
5.5 Recommendations       64         Tables and figures       8         Table 1       8         Table 2       44         Table 3       45         Table.4       51         Table.5       51         Table.6       53         Table.7       54         Table8. (All numbers are in percentages)       55         Table9       56         Table 10       57									
Tables and figures       8         Table 1       8         Table 2       44         Table 3       45         Table.4       51         Table.5       51         Table.6       53         Table.7       54         Table8. (All numbers are in percentages)       55         Table9       56         Table 10       57			•						
Table 2       44         Table 3       45         Table.4       51         Table.5       51         Table.6       53         Table.7       54         Table8. (All numbers are in percentages)       55         Table 9       56         Table 10       57	T	ables a	nd figures						
Table 2       44         Table 3       45         Table.4       51         Table.5       51         Table.6       53         Table.7       54         Table8. (All numbers are in percentages)       55         Table 9       56         Table 10       57	T	bale. 1		8					
Table.4       51         Table.5       51         Table.6       53         Table.7       54         Table8. (All numbers are in percentages)       55         Table9       56         Table 10       57	T	able 2.		. 44					
Table.4       51         Table.5       51         Table.6       53         Table.7       54         Table8. (All numbers are in percentages)       55         Table9       56         Table 10       57	T	able 3.		. 45					
Table.6									
Table 7	T	able.5.		. 51					
Table8. (All numbers are in percentages) 55 Table9 56 Table 10 57	T	able.6.		. 53					
Table9       56         Table 10       57	T	able.7.		. 54					
Table 10	T	Table8. (All numbers are in percentages)							
	T								
Table 11	T	able 10	)	. 57					
	T	able 11		. 58					

# **Abbreviations**

IEP Individual Education Plan.

MoES Ministry of Education and Science of Georgia.

NGO Non-governmental Organization.

SNE Special Needs Education.

UNESCO United Nations Educational, Scientific and Cultural Organization.

UNICEF United Nations International Children's Emergency Fund.

VET Vocational education and training

# 1 Chapter One: Background of the study

# 1.1 Introduction

Education is a right, like the right to have proper food or a roof over your head. Article 26 of the 1948 Universal Declaration of Human Rights states that: "everyone has the right to education". Education opens doors and expands opportunities and freedoms. It contributes to fostering peace, democracy and economic growth as well as improving health and reducing poverty. The ultimate aim of Education for All (EFA) is sustainable development.

The inclusive education movement has been endorsed internationally by UNESCO's Salamanca Statement (UNESCO, 1994) and reflects the United Nation's global strategy of Education for All (Farrell and Ainscow, 2002). Inclusive education is now seen as central to human rights and equal opportunities and a priority policy objective of liberal democracies.

Inclusion challenges all those policies and practices that serve to exclude some children from their right to education. The underpinning idea is that all children have the right to be educated together regardless of any special need or disability.

Although individuals with disabilities have been a part of society for thousands of years, they still struggle for full integration. Individuals with disabilities are not only found in schools, but they are in the workforce and throughout society. However part of society still hold ambivalent attitudes towards people with special needs. It is true that, positive interaction requires positive attitudes towards students with special needs. From early age children interact in school environment were teacher is the key person that affects attitude formation of the whole class towards each other. Especially the teachers have a very large responsibility to provide a high quality education for all, therefore inclusive approach from teachers requires specialist professional knowledge and competences in order to effectively teach and respond to a diverse population of pupils in the classroom (UNESCO, 2005). In order to change teachers' attitudes towards inclusion and develop their knowledge in special needs, many school systems implemented programs and courses to increase teachers' awareness toward

inclusion and abilities to manage children with special needs in regular education classrooms. And Georgia is not an exception. Nowadays, teachers in Georgia increasingly need to manage and interact effectively with a broad range of students, including those with special needs.

The role of teachers is critical in any reforms of improving the quality of education.

## 1.2 Research Aims and Research Questions

Georgia has recognized and signed many of the international declarations and conventions concerning the rights of the people with disabilities. For example: Universal Declaration of Human Rights (ratified in 1991), Declaration on the Rights of Disabled Persons (1975), European Convention for the Protection of Human Rights and Fundamental Freedoms (1999), Standard Rules on the Equalization of Opportunities for Persons with Disabilities (1993) and Salamanca Declaration and framework action (UNESCO, 1994).

Nevertheless, Georgia still has long way to go to achieve the main goals addressed in these documents.

The concept of inclusion has become a subject of discussions in Georgia in recent years and the process of implementing inclusive education is in its early phase. Before that According to the research project that have been done by UNICEF and Georgian international Institute for Education Policy, Planning and Management between 1991 and 2006 showed that more than half of the children in Georgia experienced the severe hardships that was the result of the transitional period following the collapse of the Soviet Union (UNICEF 2006). Georgia attained independence from the Soviet Union in 1991. Since then, Georgia has been building a democratic state based on the premises of International Human Rights and started to restructure the Educational System as well. However many challenges were remained in health, education and child protection. Nearly 10,722 children with special needs in Georgia were kept at home or in specialized institutions, as well they were marginalized and stigmatized. These children lived in isolation and have been neglected because of the existing stigma and were often deprived of the right to education. There were no existing national standards for teaching and recreation in kindergartens. Georgian education system was based on the former Soviet system.

One of the dominant influences that have shaped professional definitions and practices in special education around the world and in Georgia has been the medical model. This model has emphasized inability and contributed to dependency model of disability Labels such as "invalid," "handicapped" and "slow learner" have sanctioned organizations today, these continues to be a tendency to reinforce an individual deficit view of special educational needs and disability. The medical model has led to the focusing of attention on diagnosis with emphasizing problems and weaknesses in the individual, rather than the possibilities of teaching and learning opportunities for them (Befring, 2001). The Georgian teachers` teaching strategies and attitudes towards student with special educational needs are influenced by medical model, their past experiences and by how they perceive and define deference and disability in society. There have been conducted few studies that reviled negative attitudes of teachers toward students with special need in Georgian context (Gergauli. 2011). Personal definitions and beliefs are crucial because they may legitimate certain assumptions about disability and associated discrimination practices. Therefore identifying the factors that influence teacher` beliefs about teaching students with learning difficulties are important for the success of inclusive education.

According to what has been said above this study will try to explore factors that change teacher` attitudes. More specifically it will depict relationship between teachers: gender, age, teaching experience and training on teachers' attitudes formation towards students with special needs and inclusion.

Over the last several years many projects on introducing inclusive education have been carried out in Georgia by local and international Non- governmental organizations. The first pilot project on the national level on Introducing Inclusive Education for General Educational Institutions for ten schools in Tbilisi was launched by The Ministry of Education and Science of Georgia and the Ministry of Education and Research of Norway. After, successful implementation, the project served as a basis for the development of national policy for inclusive education and introduced similar activities throughout the country (Project, Tbilisi 2005). One of the main priorities of this project was train the teachers in respective schools.

Despite the visible success of children with special education needs and their increased number in public schools of Georgia, it should be stressed that inclusive education can't be considered of full value, unless it is introduced in Vocational Education and Training system

As a fact here we can say that research on Vocational Educational College teachers` perspectives and attitudes towards inclusion in Georgian context is almost non-existent. According to that, this work describes a study that aimed to explore:" The impact of a professional development program on teachers' attitudes towards inclusion". Mainly in what extent training course makes difference between experimental and control group teachers` attitudes.

Following questions will be addressed in this study:

- 1. What are the vocational education teachers 'attitudes towards inclusion and students with special needs in Tbilisi?
- 2. In what extent training course makes difference between experimental and control group teachers` attitudes toward inclusion.
- 3. Which variables have an influence on teachers' attitudes?

Also practical implications for providers of the training course will be provided. More specifically, in order to gather reliable data and generalizations, mixed method research was designed for present study.

# 1.2 Justification and significance of the study

Teachers play vital roles in the lives of the students in their classrooms. Teachers are best known for the role of educating the students that are placed in their care. Beyond that, teachers serve many other roles in the classroom. Teachers set the tone of their classrooms, build a warm environment, mentor and nurture students, become role models, and listen and look for signs of trouble. Moreover teachers play a cardinal role in implementing quality education and consequently, teachers' positive attitudes are crucial for successful implementation of inclusive education. Georgia is gradually taking steps to move towards a more inclusive society. The project of Introduction of Inclusive Education in General Educational Institutions for ten Schools in Tbilisi (2005), was initiated by the Ministry of Education and Science of Georgia in 2005 was a serious approach to the issue by the Georgian education stakeholders. The significance of this study rests upon the fact that Despite the visible success of children with special education needs and their increased

number in public schools of Georgia, it should be stressed that inclusive education can't be considered of full value, unless it is introduced in Vocational Education and Training system.

Vocational education has special importance and meaning for adequate development and social integration of young people with special educational needs. Every person, despite their different abilities has the right to obtain profession, be active member of the society and contribute to economic development of the country (MoES. 2012).

In order to identify recent conditions and the major challenges towards inclusive education in VET system within this reform Georgian ministry of education and science ordered a special survey that was performed by international Institute of education, Planning and Management in 2012. According this survey one of the most challenging fields within the VET system is: lack of qualified human recourses in vocational institutions: teachers and teacher assistants. The need of training in inclusive education is important cause, the teachers set the tone in classrooms and as such, the success of inclusion may well depend upon the attitudes of teachers as they interact with students with special needs in their groups. Therefore Ministry of Education and Science organized and introduced Training module in inclusive education for teachers, of 3 selected Vocational education colleges in October 2013 (MoES. 2012).

We can see that Georgia is gradually taking steps to move towards a more inclusive society. However, as a fact here we can say that research on Vocational Educational College teachers` perspectives and attitudes towards inclusion in Georgian context are almost non-existent.

Preparing teachers to teach children with disabilities is essential. These specially trained teachers also have a crucial role to play in supporting inclusion in VET colleges. However, multiple Studies, Jahnukainen and Korhnen (2003), Shade and Stewart (2001), Laroy and Simpson (1996), Bandy & Boyer (1999), Cook et al. (2000) and others indicate that there are various reasons for positive and negative teacher attitudes toward inclusion. This depends on education and retraining of teachers, level of their experience with students with special needs, also how the specific school functions and practices inclusion. The purpose of this survey study is to find out the factors that influence attitude formation and change within VET College teachers. Moreover this study will document whether different

attitudes exist between control group and the experimental group of vocational education college teachers as a result of training course.

VET college teachers` positive attitude will contribute a better implementation of inclusion in Georgia.

The above stated thoughts and concerns prompted this research.

According to what has been said above present study is important for several reasons. Generally this research will produce knowledge that is applicable outside of the research setting with implications that go beyond the group that has participated in the research. Furthermore, the results of this study may have implications for policy and project implementation. Moreover this study will contribute to the program that is implementing in VET colleges by reviling VET college teachers` attitudes after the training program and comparing it to control group members. Therefore present study will give more information to program developers to make revision to training programs and how to plan future in-service courses in VET system. Also it will be important because research will provide new ideas how teachers perceive inclusion, policy makers will see the problems and will solve them based on the knowledge that will be provided by this study. Therefore the study will give policy makers informed knowledge how to develop policy which will contribute implementation of the inclusion.

# 1.3 Educational Reforms and Current Situation in Vocational Education Colleges of Tbilisi

In many countries of the world children with special needs are involved in the process of the education in mainstream schools, from this point of view Georgia should not be an exception. With this intention in 2004 two projects: "Introduction of inclusive education in 10 schools of Tbilisi" and "Introduction of inclusive education in nine regions of Georgia", were implemented by the Ministry of Education and Science of Georgia in partnership with Norwegian Ministry of Education and Research. Within this project inclusive education was introduced and popularized in public schools, also it created principals and strategies of inclusive education and positive attitude in the society. Projects resulted in creation of the educational environment accessible for all. At present moment, principles of inclusive education are important part of the state policy, of general education and are mandatory for all

public schools. Today majority of teachers are retrained in modern teaching strategies, they know how to use individual education plan and how to work in multidisciplinary teams. We have 10 years of experience in inclusive education in our country, Georgian state is trying to create better environment for people with special needs. Despite the visible success of children with special education needs and their increased number in public schools, it should be stressed that inclusive education can't be considered of full value, unless it is introduced in Vocational Education and Training system

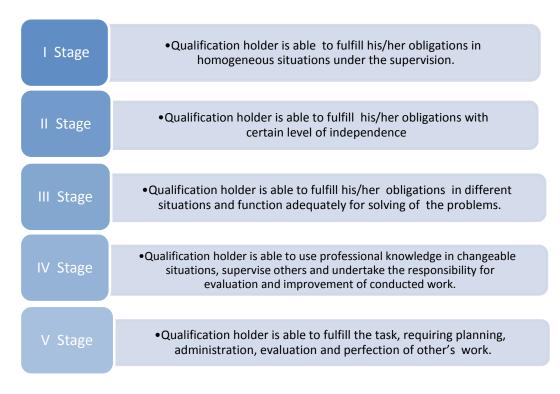
#### 1.3.1 Vocational Education and Training (VET) System in Georgia

Vocational education has special importance and meaning for adequate development and social integration of young people with special educational needs. Every person, despite their different abilities has the right to obtain a profession, be active member of the society and contribute to economic development of the country. (Strategy and action plan on VET for Persons with Special Educational Needs for 2012-2015). Provision of Vocation Education and Training (VET) in educational system of Georgia is regulated by the "The Georgian Law on Vocational Education" and "Strategy of Vocational Education Reform" (VET Mid-Term Strategy for 2009-2012). The "Law on Vocational Education" considers equal treatment of all the students, despite their gender, ethnical, social origin, religious and political views, physical abilities, etc. On the other hand The "Strategy of Vocational Education Reform" stresses every person's right on personal development through the education and considers additional measures for involvement to the vocational education of the groups like persons with disabilities, prisoners, ethnical minorities, socially unprotected and other risk-groups (among them street children) (MoES. 2012).

## 1.3.2 Structure of Vocational Education

Vocational education curriculum contains theoretical education and practical training. At the end of the course, diploma verifying the relevant stage qualification is awarded. According to "The Georgian Law on Vocational Education" Vocational education comprises 5 stages that are defined by the educational results:

Tbale. 1



(MoES. 2012)

Number of needed stages and duration of each stage is defined for full mastering of each particular profession. Students have the right to break the course at any stage or to get the diploma on successful completion of the course in case of successful graduation. The average duration of the education at Vocational institutions is one and half year. The basis for entering each stage of vocational education is mastering of prior stage curriculum or recognition of the prior professional competence. Enrollment (passing) to the IV- V stages of Vocational education is possible only in case of successful passing of the general upper secondary education level skills, test at the unified national exams (MoES. 2012)

# 1.3.3 Recent reforms related to vocational education and training system in Georgia

Nowadays Georgian Ministry of Education and Science is planning reform in Vocational Education system. The main goals of this reform are to (1) Creation of a new, labor market

oriented VET system, complying with European and (2) international educational environment, (3) contributing to economic development and self-realization of students were defined as important parts of vocational education reform by the Georgian government. According to the VET reform strategy Georgia is ready to work for step-by-step creation of VET system, that stands on: (1) flexible and easily comparable system of qualifications, system for the recognition of prior learning and foreign qualifications, different VET student, (2) strong focus on social partnership in VET that implies a close partnership and social dialogue between state, employers and trade unions, (3) Participatory approach and transparency - decision making based on the consultations from social partners, providers, students, trainers and other stakeholders. (4) Regional approach – when VET is oriented to the local (regional) demands. (5) Diversified program options – an opportunity for students to choose the most suited educational program to them. (6) Quality – system equips workforce with knowledge and abilities that are demanded on the internal and international markets and relevant to personal educational interests. (7) Inclusion – the strategy underlines the importance of professional development of each person and provides an inclusive education system for all learners. It should be said, that systemic changes in VET system generally, provide opportunity for piloting of inclusive education principles in VET institutions. "VET Reform Strategy is one of the most important challenges in the system. The strategy clearly states about negligence of the persons with special needs, as professional institutions do not have facilities for them. Consequently VET institutions enroll only a small number of students of this category, despite the obvious fact that the demand on vocation education is high. (VET mid-Term Strategy 2009-2012) today: Internally Displaced People (IDPs), people with disabilities, prisoners, ethnic minorities and other at risk categories, socially vulnerable people (including street children), do not have access to more than basic education. The involvement of such groups in future education will ensure their social welfare and inclusion (VET Mid-Term Strategy 2009-2012).

In order to identify recent conditions and the major challenges towards inclusive education in VET system within this reform Georgian ministry of education and science ordered a special survey that was performed by international Institute of education, Planning and Management in 2012. According this survey one of the most challenging fields within the VET system is: lack of qualified human recourses in vocational institutions: teachers and teacher assistants. The need of training in inclusive education is important cause, the teachers

set the tone in classrooms and as such, the success of inclusion may well depend upon the attitudes of teachers as they interact with students with special needs in their groups. Therefore Ministry of Education and Science organize and introduce Training module in inclusive education for teachers, of 3 selected Vocational education colleges in October 2013 (MoES. 2012)

# 1.3.4 Training module for teachers of Vocational educational colleges

According to empirical findings human resource mainly teachers should be retrained on issues of modern teaching approaches and entrepreneurship that will help them to develop teaching programs in inclusive classrooms, focusing mainly on practical activities. For this purpose first training module organized by Ministry of Education and Science will be introducing in 3 selected Vocational education colleges in October 2013. The main priorities of the training will be: training of the teachers of VET colleges and enabling them to teach students with special needs, developing individual educational plans (IEP) together with inclusive education supportive specialist. In training module that is organized by the Ministry of Education and Science of Georgia teachers participated in intensive 3-stage preparatory course, conducted by the team of Georgian trainers: first reparatory stage: General module on inclusion and its implementation in colleges. Second stage: development of individual educational plans. Taking into consideration needs of concrete person. Third stage: On-site supervision by trainer, regarding the students with special educational needs. After that from September 2013 it is planned recruitment of potential students with special educational needs. More than 100 students with special educational needs for inclusion to the vocational institutions will be identified and enrolled in VET colleges. Local government, resource centers and multidisciplinary teams will be involved in the process.

#### **Definition of terms:**

Inclusion: when students with disability are integrated into the general education population where they actively participate with their peers and their teachers. This includes participating in class activities and lessons that are adapted for individual needs if necessary. This also may include the student with disabilities spending a portion of their day in a special education classroom or resource room if it can better meet their academic, social or other learning goals.

Emotional and/or Behavioral disability (EB/D): A condition exhibition One or more of the following characteristics over a long period of time and to a marked degree that adversely affects a student's educational performance:

- (a)An inability to learn that cannot be explained by intellectual, sensory, or health factors:
- (b)An inability to build or maintain satisfactory interpersonal relationships with peers and teachers:
- (c) Inappropriate types of behavior or feelings under normal circumstances:
- (d)A general pervasive mood of unhappiness or depression;

Cognitive disability (CD): According to Berndt and Burmaister(2002) a cognitive disability is defined as "Significant sub-average intellectual functioning that exists concurrently with deficits in adaptive behavior and that adversely affects educational performance"

Learning Disability (LD): including disorders involved in understanding or in using spoken or written language that result in substantial difficulties in listening, speaking, reading, written expression, or mathematics.

# 1.4 Thesis outline

The thesis is organized in five chapters.

**Chapter 1** represents the background information of the education in Georgia. It outlines the significance of study, research aims, and research questions and clarifies the terms as they are used in this study.

**Chapter 2** describes theoretical perspectives together with different programs and documents that emphasizes of preschool teachers' roles and responsibilities in the child development and involvement in education setting.

**Chapter 3** is devoted to the methodological part. It focuses on design. Describes approach of data analyze and shows the ethical considerations, reliability and validity threats of the research.

**Chapter 4** underlines findings emerged from the data. It implies the analysis and discussion of the data and aims to give a systematic and clear representation of results.

**Chapter 5** is the final part of the thesis the results are discussed in relation to theoretical and empirical knowledge. It represents conclusions, limitations of the study and suggestions for future research projects.

# 2 Chapter Two: Theoretical Background

## 2.1 Introduction

This study aimed to investigate the attitudes of vocational education college teachers toward the inclusion of students with special needs in Tbilisi. Furthermore, the study examined factors that contribute the formation and change of these attitudes, mainly in what extent training course and face-to-face contact makes difference between experimental and control group teachers` attitudes.

The purpose of this chapter is to review the literature regarding teachers' attitudes toward the inclusion of students with special needs. This review highlights research that addresses the following questions: (a) what are the attitudes of teachers toward inclusion, (b) what variables are associated with these attitudes, and (c) what issues do teachers believe need to be addressed so that they can be effective teachers in inclusive settings? It is generally accepted that teacher attitudes and expectations impact significantly upon pupils' educational outcomes. That is why lots of studies all over the world were addressing this issue: teacher's attitudes. However, the results of the studies are not quite similar. More specifically people tend to have not only positive or negative attitudes towards individuals with disability but they tend to evaluate an attitude object both favorable and unfavorable at the same time. This coexistence of favorable and unfavorable beliefs is called attitudinal ambivalence. (M.Hewstone. W. stroebe. 2001. P.245) This fact about attitudes from social psychology is very interesting for my topic because there is much said about attitude ambivalence when it comes about teachers' attitudes towards inclusion and pupils with special needs. In the book of Harold E. Yuker "Attitudes towards persons with disability" we can read that many studies were designed to test a theory concerning the majority's reactions to a range of groups with marginal status for example: people with disabilities, racial minorities, elderly persons and so on. We make the assumption that members of such group tend to be perceived by others as deviant and disadvantages-either by the attribute itself (for example: blindness, illiteracy). This dual perception should tend to generate the majority

group observer contradictory feelings of aversion on the one hand and of sympathy and compassion on the other. This is attitudes towards people with special needs are often ambivalent rather than simply positive, negative or neutral. (H. E. Yuker 1988) We can see that attitudes towards disability are more or less ambivalent but the most interesting question is what kind of behavior do these attitude determine? Again according to Yuker clinical observation suggests that ambivalence creates a tendency toward behavioral instability, in which extremely positive or negative responses may occur toward the object of ambivalence, depending upon how the specific situation is structured. So the behavior is governed by situation and not the person because he/she do not hold strongly expressed attitudes. Among many variables that can effect attitude direction there are two factors that Yuker stress out in his book these are mindfulness and mindlessness. To be mindful is to actively, consciously construct categories and mindfulness is essentially positive.

In contrast mindlessness is a state of reduced cognitive activity in which an individual is in a state of reduced cognitive activity in which an individual processes cues from the environment in a relatively automatic manner without reference to the other aspects of the those cues. Contact with disabled persons typically provokes mindfulness and therefore changes in attitudes.

This chapter includes an overview of related literature on attitudes of teachers towards inclusive education, to accomplish literature review section two different strategies traditional and systematic literature review were utilized. While analyzing resent researches on teacher's attitudes towards inclusion, also here we represent the definition of attitudes and the theories of attitude change, Associative theories of attitude organization and Social influence. Furthermore, it includes the discussion concerning medical and social aspects of disability.

# 2.2 An overview of related studies

#### 2.2.1 General structure of teachers' attitudes

There are lots of factors that affect teachers` attitudes towards disability: years of experience, efficiency and knowledge about disabilities and inclusion. However the teachers` attitudes have a tendency to be different according the special needs of the student. Research with teachers has often focused on the attributes and characteristics that teachers associate with a particular disability condition, according to research learning disabilities and emotional

disturbance are most frequently investigated conditions. Teachers are given a list of characteristics and asked to check those that apply to a child with a particular disability. Using this method, teachers have expressed the belief that children with development, intellectual disabilities are low in academic performance, unable to work with abstraction or remember and are trusting and dependent (Keogh, Tchir & Windeguth-Behn, 1974; Moove & Fine, 1978) (Yuker 1988. p.56). Also teachers appear to view children who are emotionally disturbed as unmotivated to learn, unfriendly, impolite, dishonest, unhappy, aggressive, and unable to relate to others, in great need to professional help and as manifesting hallucinations and compulsions (Boucher & Dino, 1979; Carroll & Repucci, 1978; Casey, 1978). Also such descriptions as aggressive, disruptive, angry, hostile, socially distant, frustrated and low in academic performance are frequently attributed by teachers to children with learning disabilities (Boucher & Dino 1979; Bryan & McGrady, 1972; Moore & Fine, 1978). Children with physical disabilities are perceived to require considerable teacher time, to generate anxiety in the teacher (Frith & Edward, 1981. Nader, 1984). For the most part, these conceptions have negative connotation. Since there is research (Palardy, 1969; Rist, 1970; Rosenthal & Jacobson, 1966) indicating that expectations may have an effect on student learning and behavior, the negative conceptions that teachers have of children with disabilities may well have a detrimental effect on their functioning. Also there has been done research about affective component of attitudes. The affective component involves feelings of liking or disliking and is typically assessed through questionnaires. Hughes, Kaufman and Wallace (1973) asked teachers to rate six labels commonly applied to children with disabilities in schools. Teachers reacted most favorably to the labels like learning disability and most negatively to the labels emotionally disturbed and behaviorally disturbed. In a comprehensive study using the evaluative dimension Panda and Bartel (1972) found that the terms like blindness and deafness were reacted to more positively than other disabling terms. Further intellectual disability and speech impaired evoked more positive feelings than the terms emotionally disabled or delinquent. Overall children with emotional disturbance or intellectual disabilities elicit negative affect and children who are gifted, consistently positive affect.

Congruence between the cognitive and affective components of teachers` attitudes toward the pupils with special needs is difficult to evaluate. Because different methods and measurement were used in studies, however, it appears that there may not be much congruence among these components. For example emotionally disturbed children elicit negative feelings and have

negative adjectives attached to them (Hannah & Dohrety, 1982) but they are ranked relatively high in terms of teaching preferences. As you can see all the research projects resented here are not so new but one can see that answer on question what are the attitudes of teachers` towards disabilities is not one that can be answered easily. In next section it will be presented systematic literature review of recent studies done in this field under the same title "teachers' attitudes towards inclusion and pupils with special needs".

#### 2.2.2 Teachers Attitudes towards inclusion research review

In previous section mostly old researches were overviewed from 1970 till 1988. In this section I will try to describe and analyze studies that are more recent and their scope is about teachers` attitudes towards disability and inclusion. For this purpose Systematic literature (S.R) review will be used. Systematic reviews explicitly aims to monitor and capture new research evidence as it emerges continuously.

"Systematic review- a review of clearly formulated question that uses systematic and explicit methods to identify, select and critically appraise relevant research and to collect and analyze data from studies that are included in the review".(A. Booth, D. Papaionnou, A. Sutton, 2012, p. 271).

Here I will use this method for secondary data analysis. In a situation where large volume of data is involved S.R. helps to present the data in a logical way and make use of all the relevant information that is needed. In most cases S.R. is recommended before designing a new study because they can identify weaknesses in the methodology of existing studies and may prevent unnecessary replication. This method has following features: a clearly defined research question, clear criteria for including and excluding studies; exhaustive searches for published and unpublished studies; abstract and synthesize information from individual studies and clear presentation of studies that has been found and are relevant.

The articles reviewed above were published within 2000 to 2012. Five manuscripts originated from the United States; three from Australia; two from Turkey; two from United Kingdom and one each from Scotland, Egypt, Georgia and Brunei. The reviewed manuscripts utilized different methodological designs: Eight articles from systematic review utilized quantitative approach involving one group of teachers at one point in time. More precisely five of the

studies used pre- and post-test single group design to examine how in-service or introductory course in special education affects the teachers` attitudes towards inclusion. Only one manuscript used mixed method, utilizing reports form for teachers to reflect their thoughts after five-week interaction project and questionnaire about course evaluation. Also there was one article that used qualitative research approach utilizing in-depth interviewing in order to investigate future teachers attitudes to disability by providing them with direct contact with a teaching assistant who had a severe physical disability (cerebral palsy).

The studies examined in this review focused on how different factors as: direct contact, inservice training and teachers` efficacy has an effect on teachers` attitudes towards disability and inclusion. Also I will try to organize these factors and studies that correspond with them side by side.

The direct contact with pupils with special needs-perhaps one of the most successful techniques in changing attitudes is direct contact with minority groups. However, many studies dealing with the relationship between contact and attitudes toward disabled persons yielded discrepant results. Some yielded positive correlations, a few yielded negative correlations and some have shown no relationship at all. According to this in systematic literature review one study (T. Tabakhmelashvili; 2008) "Regular teachers' attitudes towards inclusion of students with special needs into ordinary schools in Tbilisi" had aim to compare attitudes of "experienced" teachers, with ones who had no experience of inclusive practice in their schools. Results show no significant difference between two groups of teachers. Another comparison was made in the study of J. Merie Olson (2003) were she was comparing the general teachers and special teachers attitudes towards disability. The results indicated that there were some significant differences between special education and general education teachers' attitudes. This may be attributable to the fact that they (special teachers) have more factual information about inclusion (H. E. Yuker 1988. P: 269). Both studies (T. Tabakmelashsili. 2008; J. Merie Olson 2003) in their recommendation part were highlighting need of in-service training and strengthening the collaboration between special and regular teacher in order to increase competence of staff and implementation of inclusion.

**In-service training and experience**- Researches, in this field has long established that changing attitudes towards people with disabilities requires, both, information about these disabilities and experience with people with special needs for example Cente and Ward (1987) proposed early that teachers` resistance reflected a lack of confidence in their own

instructional methodologies. According to this research, for teachers one semester training in inclusive education can certainly raise awareness and introduce teachers to strategies that expand a teachers' repertoire, but they rarely result in high level of teacher confidence and expertise. Another factor that causes resistance of teachers towards inclusion is reduced teachers efficiency. According to H. E. Yuker (1988) in service training is designed to improve the competence and knowledge of teachers. Therefor many school systems implemented programs and courses to increase teachers' abilities to manage children with special needs in regular education classrooms. Especially training that emphasizes competence of the disabled person as well as dialog and teamwork leads to positive attitudes. In our systematic literature review there are five articles trying to see the effect of disability awareness training course on teachers' attitude change.(K.D. Swain, P.D. Mordness, E. M. Leader Janssen 2012; Elizabeth. W. Hall, 2007; Zarife Secer, 2010; K. Tait & N. Purdie 2000; J. Campbell, L. Gilmore, 2003). These articles used pre- and post-test one group design to see the result of training courses. In all research studies a repeated measures with t-test from preand post survey showed a statistically significant difference. In a word training positively affect attitudes and teachers' competence. Laroy and Simpson (1996) also found that overwhelmingly teachers who had received training in the area had significantly more positive attitudes then did teachers who had received no training. Thus it would appear that appropriate training and professional development may hold a significant key to success of inclusion.

Results suggested that special education course paired with an experience work with students with special needs can significantly influence in positive way teachers attitudes towards inclusion.

Characteristics of children with special needs- Through a review of research articles, both positive and negative teacher attitudes toward inclusion of students with disabilities are typically found. For instance It is generally accepted that teacher attitudes and expectation impact significantly upon students' education outcomes and mostly teacher's attitudes are influenced by student-related variables included the nature and severity of the special educational need: This notion of the impact of the nature and severity of difficulty influencing teachers' attitudes towards inclusion is supported by Finnish study (Jahnukainen and Korhnen 2003)( Jahnukainen, M., & Korhonen, A. (2003). As a result of this study: teachers think that

physically disabled students can be integrated into general classrooms more than ones with emotional or developmental problems.

According to H. E. Yuker (1988) many research studies has been done to show the effect of characteristics of children with special needs on teachers' attitudes. These characteristics can serve as an additional stimulus to teacher attitudes and behavior. In F. Serajul Haq & L. Mudia's research (2012) were they tried to investigate and compare Brunei trainee teachers' attitudes to specific disabilities and students with high support needs. Overall, the participants supported inclusion, but reviled no favor of accommodating students with sensory, mental, challenging behavior and multiple disabilities. On the other hand J.M. Cassady (2011) in her study was comparing the willingness of teachers to have students with autism and emotional behavioral disorders in the general education classroom. The findings suggest that participants felt that it would be more advantageous to have the children with autism in their classrooms, than children with emotional behavioral disorders. Both these studies suggest organizing and implementing teacher training programs to develop and foster more positive attitudes towards students with special needs. According to F. Rezk El-Ashry (2009) and H. Rae (2010) research two different opposite attitudes were detected. In F. Rezk El-Ashry's study teachers had negative attitudes towards disability while in H. Rae's it was positive. According to H. E. Yuker (1988) difference in the results in such kind of studies must be due to the different techniques used for data collection and analysis. In F. R. El-Ashry's study (2009) there was used self-developed questionnaire on the other hand in H. Rae's study in Scotland the Impact of inclusion Questionnaire (IIQ) was utilized. In last three studies (E.D.C. Wolman & E. Estrada, 2005; J. Bromlee and S. Carrington, 2000; K. Brady & L. Woolfson, 2008) it is highlighted that; teachers' experience together with teacher efficacy, positively correlates with positive change of attitude towards inclusion and pupils with special needs.

According to Shade and Stewart (2001), teachers report frustration, burden, fear, and inadequacies because they don't believe they have the abilities to meet the individual needs of students with special needs in their classrooms. Nature and severity of special needs, labeling, rejection from peers, teachers' feeling of fear, burden and frustration are the main factors that contribute formation of negative attitude towards inclusion.

Cook et al. (2000) contend that teachers' responses to inclusion can be explained with a theory of "instructional tolerance" students who do not reward teachers investment of time and effort do not attract the same level of concern and attachment as students who reward

their teachers' efforts by being successful. Teachers' perception of their own professional competence is eroded by the failure of some students to learn and by continual challenging behavior in the classroom. Feeling accountable for students' lack of progress is personally distressing for teachers. On the other hand, there are signs of hope. Research has established that under certain conditions, positive teacher attitudes can be developed. Firstly teacher attitudes change with experience of inclusion. Cook et al. (2000) found that the greater teaching staff was experienced in inclusion, greater concern were teachers towards students with special needs. According to this research actual experience of inclusion was more effective in development of an "attachment" to their students than was reduced class size, inclass support or formal training in special needs.

# 2.3 The concept of attitudes: Definition and nature

According to model of attitudes it is well known that attitudes are formed from the combination of beliefs. Belief is the psychological state in which an individual holds a proposition. Beliefs are among the most primitive and central constructs. For example our beliefs are key components of our personalities and senses of identity. Many of our reactions to others are based on our beliefs and our perception of the world.

Attitude is a tendency or latent property of the person that gives rise to judgments and categorizations, as well as many other types of responses such as emotions and behaviors. Prislin and Woods framed concept of three fundamental social motives of attitudes: (1) the need to understand reality, (2) to achieve a positive and coherent self-concept and (3) to obtain social inclusion, relate to other people and create an appropriate impression to them.

#### 2.3.1Associative theories of attitude organization

According to model of attitudes it is well known that attitudes are formed from the combination of beliefs. Perhaps the most extensive and far-reaching analysis of the organization of belief-relevant knowledge is embodied in William and Claire McGuire's (1991) conceptualization of the content, structure and operation of thought system. They proposed that in order to cope effectively, with the situations and events that people encounter

in daily life, they attempt to explain events that have occurred in the past and to predict consequences of these events. McGuire and McGuire (1991) postulated some specific strategies that people can use to cope with life experiences. These strategies take into account peoples' desire to have an accurate perception of reality, first one is: "utility maximization": events stimulate thoughts about consequences that are similar to the events in desirability. More clearly desirable (undesirable) events stimulate thoughts about possible consequences that are also desirable (undesirable). Another strategy that helps people to cope with life experiences is (2) events stimulate thoughts about antecedents that are similar to them in desirability. This is desirable (undesirable) events stimulate thoughts about desirable (undesirable) causes. According to research review above, in both strategies beliefs can be changed through knowledge and competence provided by the training course or working experience with students with special needs, therefore changing beliefs will change attitudes. This part will be further expended in discussion part of this study. In next part of this work I would like to say couple of words about theories about attitude changed. There are many theories but I will describe just few of them that are relevant for my work. These theories highlight notion that training course and direct contact with minority groups are the factors that contribute change of attitudes.

# 2.4 Social influence: the role of social consensus in attitudes change

"For the individual, his actions and the beliefs guiding them are either an endorsement of his group, and therefore a bond of social unity, or an expression of conflict with it. Attitudes are not only causally connected with group conditions; they are also part of the mutually shared field. Therefore the investigation of attitudes bring us to the center of the person's social relations and to the heart of the dynamics of group processes."

-Solomon Asch (Albaracin et. al.2005)

Instead of emphasizing individual attitudinal processes here we will say few words about the social nature of attitudes. There are some early theories and researches done to understand the motives that influence our attitudes and actions. According to Deutsch and Gerard's (1955) classic theorizing, people agree with others for normative or informational reasons. Normative influence occurs when people conform to the positive expectations of another,

who could represent "another person, a group, or one's self" Deutsch & Gerard 1955, p. 629) Informational influence involves accepting the information obtained from others as evidence about reality. According to what has been said we can conclude that teacher who hold negative or natural positions towards people with disabilities, after the training program will change them because of normative influence of the trainer (another person) or the college administration(a group) if they hold positive attitudes towards inclusion. Also some of the teachers will change their views because they will be more aware about disabilities and teaching strategies, this will influence informational their understanding of reality towards disability. To defense these ideas I want to mention one research that was performed by Trent, Pernell, Mungai and Chimedza (1998) used pre- and post- concept maps (i.e. visual display of student ideas and concepts) to measure the change in 30 students enrolled in course in multicultural and special education. The results showed that the training had an impact on both number of concepts understood and the depth of that understanding. The students were better able in integrate theory and practice and demonstrated a shift from general understanding of teaching to specific strategies and techniques. Similar findings were reported for teaching students in Australia (Hickson, 1995). A positive attitude change towards people with disabilities was noted on completion of a mandatory disability course component. Another variable that affects attitude formation and change is direct contact with people with special needs. Direct experience with the attitude object is a powerful mechanism of attitude shift. Attitudes formed on the basis of direct experience with the attitude object are better predictors of behavior than are attitudes formed without experience (Regan & Fazio 1977, Songer-Nocks 1976). Also, an attitude formed by merely watching and empathizing with a person who is having a direct experience with attitude object can increase the attitudebehavior correlation for people who have no direct experience themselves (Fazio, Zanna & Cooper 1978) several reasons for this phenomenon have been suggested Fazio & Zanna (1978) emphasized the effect of direct experience on the confidence, certainty and clarity with which the attitude is held. Fazio & Zanna further suggested that attitudes based on direct experience are more evident /salient in memory. Presumably, the more confidence in an attitude or the more salient the attitude is in memory, the more likely it is that the attitude can and will be acted upon. Also this point of view must be enhanced with the findings of Tesser (1978) about "mere thought" effect on attitude change. He has investigated the effects of simply asking people to think about an attitude object and has found that "mere thought" can cause attitudes to become more extreme. Polarization is only likely with increased thought,

however, when the person has a schema (a structure of preexisting information about the issue) that biases the thoughts generated in schema-consistent direction. When a person receives a persuasive message, an attempt is made to relate the information in the message to the preexisting knowledge that the person has about the issue. According to this, training will help teachers to generate information about inclusive education that will become preexisting knowledge about the issue and it will be easier for teachers to apply practically it while working with students with special need and moreover so doing teacher will generate a number of issue-relevant beliefs that will support/change his/her position/attitude towards the inclusion. In conclusion we can see that attitude comprise of three components: affective, behavioral and cognitive (Mishra 2006) Affective is shown by positive or negative emotional expression towards people, events or objects. Behavioral is the tendency to behave in a particular way towards people, events or actions. And cognitive refers to our beliefs formed about the object or person. According to this attitude-behavioral problems has continued to generate a great deal of research, but no longer are researchers questioning if attitudes predict behaviors, they are investigation when attitudes predict behavior?! Here on the first we can say that direct experience with the attitude object can change it. Fazio and Zanna (1981) stated that attitudes formed on the basis of direct experience with the attitude object are better predictors of behavior than are attitudes formed without such experience. This idea is highlighted also by Allpot's (1979; first published 1995) statement about role of contact with minority group and how it changes attitudes, he discusses on the nature of prejudice, indentified that contact with the stigmatized group is one of the key methods by which attitudes can be affected, be it in a positive or negative direction. Another factor that contributes the change in attitude shift is knowledge and this is illustrated particularly in Jennfer Campbell and Linda Gilmore study in Australia. As a result of this study, positive changes in students' attitudes towards inclusion of children with Down syndrome could partially be explained by changes in students' knowledge about Down syndrome. By the end of the course, students had developed more positive and accurate views about the potential for development of children with Down syndrome, this should lead to more accepting attitude towards inclusion of children with special needs. Students' scores demonstrated that at the end of the semester compared to the start, they felt significantly greater coping and significantly less discomfort, uncertainty and fear when interaction with people with special needs.

## 2.5 The medical and social models of disability

The medical model of disability sees the person as the problem and unable to join in with society as a result of their impairment and not as a consequence of the features in our society which could be changed. The medical model also suggests the person with special needs should be "cured" by the medical profession. "Many disabled people internalize the negative message that all disabled people's problems stem from not having "normal" bodies. The medical model therefore can influence the way disabled people think about themselves and can cause feelings of low self-esteem. This can then lead people to believe that their impairments stop them from participating in society, which can eventually lead to further segregation and exclusion. The medical model approach puts an emphasis on personal tragedy which has developed negative language towards people with special needs such as "I will help that poor disabled person". The medical model gives an idea of charity and that disabled people require help. Adults with disabilities living in a society that is primarily approached by medical model may find themselves segregated away into institutions, sheltered workshops and special hospitals. This can hinder their opportunities to find employment and access to choices. Their lives will be determined by medical professionals. Consequently, disabled people will not be able to break out the cycle that they are "in need" and "need care", therefore will be taken care of till the rest of their lives. The medical model creates an unequal and exclusive society.

The social model of disability sees society itself as disabling by not adapting to the needs of everyone. This model emphasizes the importance of inclusion. Inclusion is where everyone, no matter what their ability, is treated equally and in included in all activities. According to Thomas and Loxley (2001) comprehensive education, equality and collective belonging are the factors to implement successfully inclusion. The notion of inclusion therefore does not set boundaries around particular kind of supposed disability". Therefore in creates collective and shared responsibility of society as a whole and the understanding that disabled people are a part of our varied and diverse society.

Vygotsky 1995 in Gindis (1999) pointed out that the primary problem of a disability is not the organic impairment itself, but its social implications: An organic defect is recognized by society as a social abnormality in behavior. Expectations and attitudes of society and

conditions created by the society influence the access of a child with disability to socio cultural knowledge, experiences, and opportunity to acquire psychological tools. Changing negative social attitudes toward individuals with disabilities should be one of the goals of special education.

# 3 Chapter three Methodology

### 3.1 Introduction

This study aimed to investigate the attitudes of vocational education college teachers toward the inclusion of students with special needs in Tbilisi. Furthermore, the study examined factors that contribute the formation and change of these attitudes, mainly in what extent training course and face-to-face contact makes difference between experimental and control group teachers` attitudes. This chapter will describe the design, population, sample and sample procedure, the instrument of the study, procedure of data collection, data analysis, reliability and validity issues and research ethics.

# 3.2 Research design/strategy

This study used experimental sequential mix method design, as a relevant strategy to measure attitudes of large population. In mix method research both qualitative and quantitative research methods were used.

Quantitative survey research is sometimes portrayed as being sterile and unimaginative but well suited to provide certain types of factual, descriptive information- the hard evidence. More over during quantitative research it is a possibility to collect systematic data that allows for systematic comparison between cases on the same characteristics also results can be generalized from sample to larger population that has been studied (De Vaus 2002). On the other hand qualitative methods are often regarded as providing rich data about real life people and situations and being more able to make sense of behavior and to understand behavior within its wider context. However qualitative research is often criticized for lacking generalizability, being too reliant on the subjective interpretations of researchers and being incapable of replication by subsequent researchers (De Vaus 2002). According to Creswell (2014) Quantitative research has a specific focus on survey and experimental designs. Examining the relationship between and among variables is central to answering questions and hypothesis through surveys and experiments. Moreover, in an experiment,

investigators may also identify a sample and generalize results to a population. According to De Vaus (2002) population is the set of units that the sample is meant to represent. A sample is a subset of a population that is used to represent the entire group as a whole. Sample is obtained by collecting information about only some members of the population. Before selecting the sample it is critical that the population is properly defined. (De Vaus 2002) However, the basic intent of an experimental design is to test the impact of a treatment on an outcome, controlling other factors that might influence that outcome. As one form of control, researchers randomly assign individuals to groups. When one group receives a treatment and the other group does not, the experimenter can isolate whether it is the treatment and not other factors the influence the outcome. In my point of view this type of research will yield much valuable knowledge about opinions, attitudes, and practices. However the idea of developing an instrument and in-depth understanding views of teachers' about inclusion gave an idea to add qualitative approach as a second option to this research. Apparently in this study we used exploratory mixed method approach that has two phases. The researcher used first phase by exploring qualitative data and analysis and then uses findings in a second quantitative phase. The intent of the approach is to develop better measurements with specific samples of population and see if data from a few individuals can be generalized to a larger sample of population. The researcher employs a three-phase procedure with first phase as exploratory, the second as instrument development and third administering instrument to a sample of a population. It has to be mentioned that in this strategy, the data collection is occurred in two phases: qualitative data collection followed by the second quantitative data collection. The qualitative data analysis is used to develop an instrument with good psychometric properties (validity and reliability). The qualitative data analysis will yell quotes, codes and themes:

- 1. The quotes can help to write items for instruments
- 2. Codes to develop variables
- 3. Themes that group the codes into scales

This is useful procedure from moving from the qualitative data analysis to scale development (John. W. Creswell 2014). This type of research will help to develop an instrument with good psychometric properties. In second, quantitative phase using quasi-experimental approach will yell much valuable knowledge about opinions, attitudes and discomfort level of participants. According what has been said above. In exploratory sequential mix method

design first phase involves utilization of qualitative approach, here we are using focus group method to collect the data, after exploring with qualitative data and analysis, then findings are used in a second quantitative phase. In this study quasi-experimental design was used to accomplish second part of this research, by administration of questionnaire to experimental and control group, this method of data collection is particularly useful for studding social facts, opinions and attitudes in population.

To sum up, this study employed a qualitative and quantitative method as a mix method design to develop better questionnaire with specific samples of population and see if the data from few teachers can be generalized to larger sample of population.

# 3.3 Population, sample and sampling procedure

### 3.3.1 Description of the study area

For first phase to explore and collect data from smaller population of VET teachers, two colleges were detected in Tbilisi. These colleges were involved in inclusive vocational education program. Since we had planned focus group discussions which intend to develop pre understanding of teachers' attitudes and knowledge about inclusion and student with special needs, purposeful sampling was used to select a sample from two vocational education colleges. Each teacher of the group had an experience teaching student with special needs; however never attend training or any other kind course in special needs or inclusive education. For the second quantitative phase, questionnaire was utilized in four vocational colleges of Tbilisi. First two vocational colleges were identified in order to select sample for control group and two others to select sample for experimental one. The sample strategy that we used in this study was two-stage cluster sample. In this sampling strategy researcher creates list of colleges and then create list of teachers for each college. Firstly I selected groups of teachers from each college and then select the individual subjects by systematic random sampling. For each college number of teacher staff was 30 teachers approximately we needed 15 individuals from college for each research group. Therefore we selected random starting point and a fixed periodic interval. The population of two vocational colleges was overall 60 people; the sample size for one group was 30. According to this number of

teachers, (n=60) was divided by 30 and every second one was periodic interval; therefore every second teacher was selected.

### 3.3.3 Description of the sample

The subjects in this study included vocational education college teachers from Tbilisi. The sample of this study was divided into subgroups: experimental and control group. To select participants two-stage cluster sampling was used. All the teachers work in vocational education colleges in Tbilisi.

The teachers for experimental group were selected from vocational colleges which took part in project on introducing inclusive education and receiving training treatment about special needs. So teacher participants of experimental group received in-service training. The main priorities of the training course were: training of the teachers of VET colleges and enabling them to teach students with special needs, developing individual educational plans (IEP) together with inclusive education supportive specialist. This training module was organized by the Ministry of Education and Science of Georgia, is was intensive 3-stage preparatory course, conducted by the team of Georgian trainers: In the first module the major themes were covered about philosophy, principles of inclusion and its implementation in colleges. In module two, issues related to inclusive practice were explored. The major theme included: development of individual educational plans, curriculum adaptations and modification. In the third module: on-site supervision by trainer, regarding the students with special needs was accomplished. At these vocational education colleges teachers have received more information about inclusion, moreover 12 students with special needs were enrolled at the beginning of the first semester and teachers had an opportunity to get some experience and practice knowledge gained through training program into their class-rooms. The second control group of the teachers work in vocational education colleges in Tbilisi also, however inclusive education and the training course has not been introduced to these ones. Although, some of the teachers might have a short-time training in the principles of inclusive education, but they were not enrolled in the training course mentioned above and had limited work experience with students with special needs.

### 3.3.2 Procedure of sampling

As we can see this study has two stages, first qualitative and second quantitative. Two different sampling strategies were used to select participants and then collect data from them. At the first stage, the aim was to explore attitudes among teachers and develop better measurement with specific samples of population and see if data and instrument developed on the basis of few individuals can be generalized to large sample of population. In order to obtain rich information about inclusion and how it is seen through eyes of VET college teachers, the purposeful sampling method was used. These teachers have some kind of understanding of inclusion and experience working with students with special needs in the past. In this way 7-8 individuals were selected from the teaching staff of two different vocational colleges. Two focus group meetings were organized, with 7-8 people in each group. I assumed they were information rich as they had some experience and understanding of inclusion.

For the second quantitative stage of the study two-stage cluster sampling was used. Firstly list of vocational colleges were made in area of Tbilisi. Then they were divided in two groups one which was involved in training course and had students with special needs and others who get no training and no students with special needs. Secondly four vocational colleges were selected: two for experimental and two for the control group.

In order to select the sample systematic random sampling was used. In systematic sampling members from a population are selected at random starting point and a fixed periodic interval is used to choose individuals from population. This sampling method was employed with intention that each individual in the population had an equal probability of being selected. Proper sampling is very important for quasi-experimental design. Without proper sampling the results cannot be generalized to the larger population and the sample will not be representative at all (Borders and Abbott 2005).

#### 3.3.3 Instrument

Being an exploratory sequential mixed methods design with the aim to look at attitude change among VET colleges teachers, this study used, for first exploratory phase, qualitative data collection method: focus group. The original idea for the focus group-the focused interviewwas that people who were known to have had a certain experience could be interviewed in a relatively unstructured way about that experience. The focus group technique is a method of interviewing that involves more than one, usually at least four interviewees. Essentially it is group interview (A. Bryman 2012). In this study focus group method was used to emphasize a specific theme or topic to explore it in depth. Also in this study I was interested in the way in which individuals discuss a certain issue as members of a group, rather than simply as individuals. Main aim of using focus group for my study was instrument development. Instrument development refers to contexts in which qualitative research is employed to develop questionnaire and scale items, for example, so that better wording or more comprehensive closed answers can be generated. Also focus group gave an opportunity to determine the information that was needed for further analysis. During focus group sessions, format of questions were open-ended, for which respondents formulate their own answers. Essentially this approach is very helpful to collect information, which cannot be collected adequately with quantitative methods. Moreover, when compared with questionnaires, surveys, tests or interviews, the focus group strategy has several advantages. The basic premise of using focus group is that when quality judgments are subjective, several individuals' judgments are better than one. Also the group process, where participants often motivate one another, it is an effective method for generating new ideas and hypotheses and interview format is flexible to allow for in-depth probing and confirmation (Phillips. 2012).

The questions of unstructured interview guide were carefully planned and sequenced. Openended question is one which respondents formulate their own answers and can be grouped into categories at same stage. Also J. Phillips describes unstructured interview with openended questions pared with focus group method gives opportunity for in-depth probing and analysis. According to what has been said 8 open-ended questions were asked in order to give the participants possibility to express the opinions about inclusion and attitudes towards disability. Such information is more complete and accurate in order to gain a rich description on a topic. The open-ended questions were designed so that researcher could understand how the teachers perceived concept of inclusion and its advantages and disadvantages. Also some

questions were asked to gain in-depth understanding of teachers` opinion about inclusion of children with special needs and how they affect learning and teaching process in classroom.

The questions were used to collect as much information as possible on attitudes cognitive, affective and behavior domains. Instructed interview guide with open-ended items were constructed for focus-group method (Appendix. 2).

Questionnaires are the most common method of collecting survey data (De Vaus 2002). Therefore for the second phase of exploratory mix method design questionnaire was used to gain the essential information. Moreover standardized, structured questionnaire is compatible with quantitative methods (Gall et al 2007). Typically, when using questionnaires, it is difficult to go back to people to collect additional information. Therefore it is crucial to think ahead and anticipate what information will be needed to ensure that the relevant questions are asked (De Vaus 2002). Also language of the questionnaire has to be clear and simple. To accomplish this domed of constructing and developing self-administered questionnaire several steps were made. Scales were developed after analyzing focus group interviews. Moreover results from qualitative part such as quotes, helped to write items for the instruments and themes were used to group items into scales. Also study used a part of already constructed close-ended questionnaire adopted from a Likert-style questionnaire the Interaction with Disabled Persons Scale (IDP) originally developed by Gething (1992). This scale mainly measures attitudes towards people with disabilities by assessing level of discomfort in social interactions as a central factor underlying negative attitudes. IDP scale was used in number of studies (E.W. Hall 2007) (K. Brady et al 2008). It has to be mentioned that IDP is generally used to measure teachers discomfort level shift before and after the training program (K. Tait & N. Purdie 2000). However not the total scale items but just few (3) of them were included in questionnaire. Adaptations were also made to the questionnaire in order to adjust it to the Georgian context. The questionnaire was first translated into Georgian by researcher and reviewed by three Georgian native speakers and two experts in this field. After what some modifications were made in order to make the instrument better understandable for Georgian teachers.

Afterwards, the instrument was pilot tested with a group of 10 teachers of special needs. Some of the questions were double-barreled and for some questions respondents were required to have the necessary knowledge. According to that words in some items were not

understood in the same way within the group and caused confusion. Due to this after pilot test instrument modifications were made. Self-developed questionnaire that was utilized in this study consisted substantial number of items in order to obtain a reliable assessment of an individual's attitude. For this study Likert scale type of questionnaire was utilized. This attitude measurement approach involves providing a statement that reflects a particular attitude or opinion. Respondents indicate their level of agreement or disagreement with the statement (De Vaus 2002). Likert scale was used to indicate the extent of agreement with each statement using a 5-point scale ranging from strongly agree, agree, uncertain, disagree and strongly disagree. All the items in questionnaire had closed format, however there were two open-ended items provided to get more information to make more precise conclusions about issue.

### 3.3.4 Pilot-testing of the instrument

Once a questionnaire has been developed, each question and statement and questionnaire as a whole must be evaluated rigorously before final administration (De Vaus 2002). After the questionnaire was translated into Georgian in order to eliminate ambiguous items, the questionnaire was pilot-tested with 10 teachers. As far as, possible pretesting should be conducted with people who resemble those to whom the questionnaire will finally be given (De Vaus 2002). Characteristics of pilot and final sample: age, gender, education and ethnics were normally matched. Naturally, closer the match between the pilot and the final sample the better (De Vaus 2002).

Bearing in mind this, sample for pilot testing was selected from the vocational colleges. All in all 10 teachers took part in pilot testing. Due to the fact that teachers had just general understanding of inclusion, some of the terms were misinterpreted and misunderstood. This created some kind of problem with understanding the intended meaning of the questions. Because of that some items were deleted and some terms were modified.

## 3.4 Procedure of data collection

First and foremost an approval from the Norwegian Social Science Data Services (NSD) was secured (See Appendix.8). Also permission for conducting the study was sought and received from the Ministry of Education and Science of Georgia. Pre-contacting was also done with

Vocational College principals in order to inform them about my study and get written permission. After that for the first qualitative data collection phase two focus groups were organized in vocational college settings, during the sessions facilitator briefly described the purpose of the study and verbal approval was gained from the participants.

#### Focus group design

(Qualitative phase)

Focus group approach has been used in this work to capture: (1) teachers understanding of concept of inclusion, (2) their attitudes towards disability, (3) factors behind teachers' attitudes and (4) attitudes towards different kinds of disabilities. The focus group members were asked to answer open ended questions. The goal of using such strategy was to elicit an in-depth discussion to highlight main themes, to get realistic picture of pre-existing attitudes and factors that affect them. Final goal of the focus group was to describe pre-existing attitudes of teachers towards disability before the training course. All members of the focus group were vocational education college teachers.

#### **Procedure**

Each focus group sessions were 45 to 50 minutes length. Groups were led by a moderator who facilitated the group discussion. Each group meeting was arranged in vocational education college classrooms, chairs were set around the circle where participants seated themselves when they arrived; audio-recording equipment was placed in the center of the table and moderator was placed at the opposite end of the group. Also moderator had a flipchart and pen to write down all the important messages from group discussions. Verbal consent was obtained from all participants and written permissions for research were gained from the directors of both VET colleges.

#### Focus group format

Format of focus group is outlined below:

- Introduction of research to group
- General introduction
- Explanation of the aims of the study
- Explanation of confidentiality and what will happen to interview material

 Request for permission to tape interviews and explanation of what will happen to the taped information

Prior to the second quantitative phase of the study I got permission to attend above motioned 3-stage preparatory course in inclusive education. This gave me the opportunity to see the reality in Georgia and collect the empirical data. Permission was received from the Ministry of Education and Science of Georgia.

#### Posttest-only control-group design

(Quantitative phase)

The purpose of this study was to examine vocational education college teachers` attitudes towards inclusion. More specifically this study attempted to document whether training and direct contact affects attitude shift. Moreover to make better generalizations in quantitative phase of this study, posttest-only control-group design was used to collect the data.

According to John W. Creswell; "The basic intent of an experimental design is to test the impact of a treatment (or an intervention) on an outcome, controlling for all other factors that might influence that outcome. When one group receives a treatment and the other group does not, the experimenter can isolate whether it is the treatment and not other factors that influence the outcome" (Creswell, 2014). Here we can see that this particular experimental approach; posttest-only control-group design is the best way answer research questions of recent study: How the training and direct contact with students with special needs affect attitude change among teachers.

### 3.5 Procedure of data collection

After completing 3-stage training program, teachers were asked to complete the questionnaire. The form of group administration of the questioners was used. On pre-contact stage I mate all the teachers personally and described briefly the purpose of the study. Data were collected in four different vocational college buildings inside the seminar rooms. The tables and chairs were arranged in rows for the administration of the questionnaires. These were the data collecting procedures for experimental group participants. Data from control group teachers were collected via two vocational college principals who confirmed their will and sign written form of permission. Questionnaire was send to them and they distributed it to teachers. All the questionnaires were returned through vocational college principals.

# 3.6 Procedure of data analysis

There are many qualitative methods for analyzing data and interpreting its meaning and qualitative content analysis (QCA) is one of them.

Focus group interviews were transcribed and analyzed qualitatively. This process was developed by adapting eight stages of qualitative content analysis (QCA) approach described by Margrit Schreier. QCA is a method for systematically describing the meaning of qualitative material. It is done by classifying material as instances of the categories of a coding frame. (M. Schreier 2012). QCA is applied to a wide range of materials: interview transcripts, transcripts of focus group and etc. according to this approach coding frame was created and evaluated. After what a detailed analysis of themes was done to gain and understand the meaning of the data.

For the second quantitative phase of the research for questionnaire data analysis statistical package for Social Sciences (SPSS, Version 20) was utilized with assistance of my Norwegian advisor.

In order to answer research question: whether training and direct contact affects shift of vocational education teachers` attitudes, the following statistical procedures were used. Firstly answers were converted into numbers and classified into codes. So the codebook was produced. Some codes were reversed in order to have all variables coded in the same direction. As long as there was not enough time to get people to answer the same question on

two occasions, in order to ensure questionnaires' reliability Cronbach's alpha coefficient was used. The items which had low reliability coefficient were dropped. The excluded items were analyzed separately. The data further were analyzed using following statistical procedures: Descriptive statistics were used to compare demographic characteristics of teachers that participated in the study. A t-test procedure was used to test the differences between experimental and control group teachers' attitudes, also attitudes of teachers in relation to gender and age. Pearson correlation was used to see how face-to-face interaction affects teachers' attitude shift toward inclusion.

It has to be mentioned that there were open-ended items included into the questionnaire, some of the teachers returned complete surveys. Surveys that provided the most detailed written comments were chosen for the qualitative analysis.

# 3.7 Reliability and validity

Much cotemporary social research is devoted to examine whether a program, treatment, or manipulation causes some outcomes or result. The aim of present study was to examine how the training program affects teacher's attitudes toward disability. More precisely we want to see how independent variable: training program affects dependent variable; attitudes teachers' towards disability. We want to see the causal affect between these two variables. Cook and Campbell (1979) argue that three conditions must be met.

- 1. Co variation. Changes in the presumed cause must be related to changes in the presumed effect. Thus, if we introduce, remove, or change the level of a treatment or program, we should observe some change in the outcome measures.
- 2. Temporal precedence. The presumed cause must occur prior to presumed effect.
- 3. No plausible alternative explanations. The presumed cause must be the only reasonable explanation for changes in the outcome measure. If there are other factors which could be responsible for changes in the outcome measures we cannot be confident that the presumed cause-effect relationship is correct.

According to the fact that present study has experimental design first co variation condition was mate. Experimental group of teacher had treatment and we were measuring outcome after training program. Also treatment was given at first place and the attitude shift was detected. However, in most social research the third condition is the most difficult to meet. Any number of factors other than the treatment or program could cause changes in outcome measure. How can we minimize this kid of threat to validity\_ one way to minimize threat to validity is by Design. According to Bryman (2012); what is the purpose of the control group? Surely it is what happens to the experimental group. In order for a study to be a true experiment, it must control the possible effects of rival explanations of causal finding. The presence of a control group and the random assignment of subjects to the experimental ad control group enable us to eliminate such rival explanation (Bryman 2012). For this purpose, during this study, selection of the sample was controlled by randomization. Interaction of testing and treatment itself also may affect the results of the experimental group; in this case it is desirable to use a design which does not use a pretest.

Here, the major emphasis is on ruling out alternative explanations by adding treatment or control group. Because of this, present study used post-test only control group design to avoid such threat to validity.

According to Cook ad Campbell (1979) researcher has to take in to consideration internal validity of the study. For example threats like: regression, mortality and testing. Regression is the treat to validity in a case if individual selected on the basis of extreme scores, on a particular test will regress toward the mea on a second test administration. In order to reduce threat of regression participants completed questioner not before and after the training, but one time after the receiving treatment, so that score over time could not be changed. Also to avoid mortality questioner was completed in one occasion, is that participates could not drop during study ad data collection procedures. Tacking in to consideration that participants could become familiar with the outcome measure and remember responses for later time test was exposed to them only once. Threats to construct validity are also worth to mention especially more precisely, mono-operation bias. This pertains to the independent variable, cause, program or treatment in your study- it does not pertain to measure or outcomes. If you only use a single version of a program in a single place at a single point in time, you may not be capturing the full breadth of the concept of the program. If you conclude that your program reflects the construct of the program, your critics are likely to argue that the results of your study only reflect the peculiar version of the program that you implemented. To minimize this kid of threat to construct validity tow vocational education colleges were selected in which same training was introduced in different points in time for different teacher participants. And after that participant from both college setting were selected as a member of the experimental group. This was done in order to capture the full breath of the concept of the program and not just part of it. Also questioner was distributed and collected right after complete completion of the training program. Threat to validity as like interaction of testing and treatment also has been taken in to consideration. Does testing itself make the group more sensitive to receptive to the treatment\_it is does, then the testing is in effect a part of the treatment and will affect the outcome. Here test, created threat to treatment outcome. To avoid such kind of consequences post-test was used without pre sensitization by pre testing teacher participant's attitudes right before the training program. Lastly it has to be mentioned that there is a high probability of Experimenter expectancies. When participants just want to please the researcher and give them wrong answers.

Research participants might answer the questions and not be honest for different reasons. There are some early theories and researches done to understand the motives that influence our attitudes and actions. According to Deutsch and Gerard's (1955) classic theorizing, people agree with others for normative or informational reasons. Normative influence occurs when people conform to the positive expectations of another, who could represent "another person, a group, or one's self" (Deutsch & Gerard 1955, p. 629). According to this the fact that the teachers of control group received the questionnaires through the representatives of the Ministry of Education could influence their answers. They may think that they should give answers to please them.

At the last place according to cook and Campbell (1979) there is threat to external validity for any study that aims to generalize finding to larger population. One of them is interaction of selection and treatment: people who agree to participate in a particular experiment may differ substantially from those who refuse, thus results obtained on the former may not be generalized to the latter. Therefore in order to get finding that can be generalized to a larger population, researcher has to take into consideration subjective characteristics of sample of both groups. For this reason stratified random sampling was used for the VET college teachers that were working under same environment and had same characteristics. All of them were teacher of VET College however; all the group members of experimental group received treatment and control group member did not.

The validity of a questionnaire should be overviewed as well. Internal validity can be affected by the methods used to gather your data. Generally unclear question, complicated wording and poor conceptualization can all contribute to lower level of validity (Bordens & Abbott 2005). Interaction of testing and treatment itself also may affect the results of the experimental group; it is desirable to use a design which does not use a pretest. Main interest was to validate the instrument. In order to validate questionnaire after developing indicators we have to make sure that they measure the concept we think they are measuring and ensure that we can rely on the answers people provide (De Vaus 2002). To ensure reliability and validity of indicators in this study pilot testing was done by administering the questionnaire to a similar but smaller sample to that to be used in the actual study. As indicated earlier, the questionnaire was adopted partly from Likert scale questionnaire developed partly from Interaction with Disabled Persons Scale (IDP) originally

developed by Gething (1992) and party statements from questionnaire developed by Jennifer Marie Olson (2003). Also themes and subthemes from qualitative data analysis were used to create factors and items for the questionnaire. During my stay to Georgia I mate tow experts being professional in inclusive education and they revised the questionnaire after what pilot testing was done.

As stated earlier, Cronbach's Alpha was used as the most appropriate reliability measure to use for Likert scale to check the internal consistency.

Using the SPSS enhanced the accuracy in the data analysis.

To check the quality of the focus group interview guides, they also were revised and pilottested prior to the administration.

Diffusion of treatment is also another threat to internal validity, there was chance for participants of control and experimental group communicate with each other during completing a questionnaire. This communication can influence how both groups score on the outcomes. In my study I was trying to keep groups as separate as possible during the experiment. To ensure this questionnaire was given to control group members firstly and it was collected within two days from participants, in order to not give them time to communicate with experimental group members that were working in another VET college.

### 3.7 Research ethics decline

Most professional codes of ethics stress the importance of five ethical responsibilities towards survey participants: voluntary participation, informed consent, no harm, confidentiality and privacy (De Vaus 2002).

According to De Vause (2002) the principle of voluntary participation requires that people not be coerced into participating in research. In preset study consent form has announcement section about teachers| voluntary participation. Voluntary participation in many cases creates problems to researchers because some participants may decline to participate in surveys. In this resent study participant s were met personally and informed that their participation was very important for the results. Some of the teachers refused and they were replaced by others. Another ethical code closer related to the notion of voluntary participation is the requirement to informed consent. Essentially, this means that research participants must be fully informed about the procedures and risks involved in research and must be given their consent to participate. Consent form was attached to questioner in this study. (See Appendix.1) Also members of the focus and experimental groups were met personally and research aim was explained to them as well. Last two ethical codes are confidentiality and anonymity. Almost all research guarantees the participants' confidentiality- they are assured that identifying information will not be made available to anyone who is not directly involved on to study. According to De Vause (2002) there are three main reasons for assuring confidentiality:

- 1. To improve the quality and honesty of response, especially on sensitive issues.
- 2. To encourage participation in the study and thus to improve the representatives of the sample
- 3. To protect a person's privacy.

According to that participants were not required to put down their names and surnames on the questionnaire.

To sum up, in this resent study the following ethical principles were followed: First and foremost an approval from the Norwegian Social Science Data Services (NSD) was secured (See Appendix.8). Also permission for conducting the study was sought and received from the Ministry of Education and Science of Georgia. Pre-contacting was also done with

Vocational College principals in order to inform them about my study and get written permission. The respondents were informed that participation was voluntary; the purpose and the context of the study were also explained to them. The participants were informed that the investigation would be used for a Master Thesis and would also be an integrated part of the project.

# 4 Data presentation and analysis

This chapter presents the data analysis and the findings in two parts. This study used mixed methods research to create self-developed questionnaire and to evaluate how training and direct contact effects VET college teachers attitude shift towards inclusion. The results are reported in to three parts. Firstly I will present qualitative results from focus group discussions. These results will contribute to create an instrument for quantitative part of this research. Secondly, the effect of three demographic characteristics on attitude shift is explored, namely: age, gender and frequency of face-to-face contact with students with special needs. Finally comparisons are subsequently explored between experimental and control group using self-developed questionnaire. Table 1 shows summary of the sample for focus group participants and others who completed questionnaire.

Table 2

I stage (qualitative)	Two Focus groups for VET teachers	7-8 in each group (totally 15)
II stage (quantitative)	Experimental group	28
II stage (quantitative)	Control group	28 (totally
		56)

# 4.1 Qualitative phase data presentation

First of all I began with analyzing data that were collected during the qualitative phase. For a qualitative thematic analysis of the data Focus group interviews were transcribed and analyzed qualitatively. This process was developed by adapting eight stages qualitative content analysis (QCA) approach described by Margrit Schreier (Schreier 2012). More precisely in my study, interview guide was used to divide very large total coding frame into smaller parts. Each set of interview questions focused on one topic corresponding to one part of the coding frame. As 7 open-ended questions were asked during one session of focus group we arrived at 6 sections of coding frame. Some topics

yielded far more material than others; they also required more categories than others. So themes were divided into subthemes in this coding frame.

# 4.1.1 Findings

An analysis of each group's responses, as well as responses across the two groups, revealed the following themes. (See table.2) Direct quotes from the participants have been included to emphasize their perspective.

Table 3

themes	Sub-themes	Group 1	Group 2
Teachers understanding of concept inclusive vocational education and training	Social inclusion, integration into society via studding in VET college, Universal accessibility, access to education, adopt colleges to welcome people with special needs, enrollment in professional training courses and Paid job opportunities, for student with special needs.	x	X
Attitudes toward acceptance of students with special needs	Solidarity, support, hope and optimism, pity, appreciation, discrimination, acceptance	x	X
Teachers understanding how inclusion can effect college staff and students	College and other students will be more and more prepared to receive people with special needs; there will be more qualified professionals who deal with students with special needs, opportunities for integration in society through leisure time and learning activities, access to education and access to paid job.	X	X
Important factors behind teachers` negative attitudes	VET colleges have poorly adapted physical environment, No qualified professional, Lack of inservice training for VET college teachers, No interaction between health professionals, educators and family members of students with special needs, lack of multidisciplinary assistance In VET colleges, mismatch of student's abilities and chosen profession, rejection from classmates	X	X
Important factors behind teachers` positive attitudes	and discrimination.  Willing to support and teach students with special needs, willing to learn how to use IEP, open to get more knowledge and experience from other countries how to implement inclusion in VET system, willing to be involved in training programs, all members agreed that inclusion	х	х

х

#### **Totally 6 themes**

#### Theme 1: Teachers' understanding of inclusive vocational education and training

The first theme that was prevalent across the focus group was concept of inclusive vocational education and training and how the teachers understand that. Because this theme yielded more material during discussion it was categorized into sub themes. From the participants point of view inclusive vocational education enhances socialization of students with special needs, it creates universal access to education for all and finally it will create paid job opportunities for everyone. The teachers agreed that inclusive vocational education is more about integration of students with special needs in to society. Inclusion will enhance socialization process of student with special needs. Participant commented that:

"Mainly it is integration... and it's not an easy process, our society is not ready to accept these students, however if we will start this process more and more people will be aware

About their differences and that they are part of our society, so I agree that this is an opportunity for them to feel themselves part of society."

Also teachers agreed that this concept included access to education for all and paid job opportunities in future. Participant's comments:

"My understanding of this concept is more like free access to education and then maybe an opportunity for them to find a job, in order to be integrated into society."

Teachers also agreed that inclusive education means that college will be more adapt to welcome people with special needs. For example:

"There was an example in my practice how the classmates were treating their friend who was physically disabled, they were playing in the snow together and taking care of him. This kind of relationship develops inside of the children, time after time they become more supportive and caring, and they accept students with differences...."

According to what has been said teachers also indicted that inclusion improves social skills of students with special needs as well as promotes true friendship among students with and without disabilities.

#### Theme 2 teachers Attitudes toward acceptance of students with special needs

A second theme that was prevalent across the focus group was teachers` acceptance of students with special needs: during discussions participants agreed that they want to teach and support students with disabilities, however teachers felt that the possibility to be enrolled in vocational education classroom setting should be given to the pupils depending on their "condition" and "special needs". However teachers felt that the inclusion of the children with special needs can be beneficial for regular students, because inclusion awakes a feeling of friendship and support. Also some feeling of hope and optimism was detected throw discussions:

"Time after time our society will accept students with disabilities, because they are human beings and have equal right as we do..."

Some of the teachers showed a feeling of appreciation:

"I had one student he was 30 years old, and he used to work so hard and affectively, I was teaching him to be a tiler, he was really good at it and very actively involved in classroom activities..."

Most of the comments indicated the teachers favor and show solidarity toward students with special needs, but still teachers felt that preparation for inclusion was needed. According to the teachers the type of disability is important in "determining whether a students should be included or not".

Third theme factors behind positive and negative attitudes should be also highlighted. During the discussions several very important issues were brought up for example: VET colleges

have poor adaptation of physical environment, no training provided for VET college teachers and there is lack of qualified professionals. Also poor interaction between families of student with special needs and teachers or health professional creates much problem. Sometimes parents hide special needs of their children and it creates confusion among teachers they do not know what to do and how to approach students. Some of the teachers mentioned another obstacle for example: students without special needs might not accept peers with disabilities and discriminate them. Participants comment:

"But sometimes class will not accept "them" they will call labels and actively discriminate, these are boys you know they like to laugh at each other and make fun of weak ones.."

So the issue of preparing class, before student with special needs will be enrolled in, is a problem for teachers. They need psychological and special education teachers and assistance:

"The class needs to be prepared by psychologist; somebody has to talk with them (class) before introducing students with disabilities..."

All participants agree that special education and general education teachers need to collaborate in order for inclusion to be successful. Teachers demonstrated will to support and tech students, also to work in multidisciplinary teams and use IEP. Teachers wanted to be involved in training programs to get more knowledge and experience from other countries. Participants comment:

"Different kinds of approaches how to teach, would be very helpful, because we do not know how to teach these students. Examples of other countries would be very helpful for us... obviously we need training..."

Last theme was about discomfort. Mainly teachers were demonstrating feeling of discomfort experienced during direct contact with student with special needs. One participant mentioned:

"I mate him (student with disabilities) yesterday and was talking with him 30 minutes. When I went home afterwards I was totally devastated, like a mother first of all, like a teacher and a person, they should have access to education of course but we have to be prepared as well..."

To sum up, all the groups favor inclusion. Positive attitudes mentioned in all groups were: solidarity, empathy, support and appreciation. While the negative ones were: discrimination

and depreciation. Moreover participants agreed that they need ongoing training and in-service programs in order to prepare them to feel competent in teaching students with special needs and overcome feeling of discomfort while interacting with them.

# 4.2 Quantitative data presentation and analysis

From qualitative content analysis of the interviews, themes, sub-themes and quotes were grouped to create items that were divided into four scales/factors of the questionnaire:

- 1. Teachers' general attitudes toward inclusion,
- 2. Attitudes depending on students' disabilities (LD, EB/D and CD)
- 3. Factors behind positive and negative attitudes and
- 4. Discomfort during direct contact with students with special needs.

After defining factors there was performed an extensive review of the literature to locate standardized measures that matched my qualitative findings. Some measures were found for example: The Interactions with Disabled Person's Scale (IDP; Gething, 1991), questionnaire that was used in Jennifer Marie Olson's study "Special education and general education teachers attitudes toward inclusion" (2003) and self-developed questionnaire form study "Regular teachers' attitudes towards inclusion of students with special needs into ordinary schools in Tbilisi" (T. Tabakhmelashvili 2009). Also some new items were created and added to develop a survey instrument. Before administering, instrument went through several refinements. First of all the questionnaire was pilot-tested with 10 teachers. The purpose of this pilot study was to investigate the validity and reliability of developed questionnaire and to secure feedback from participants to make modifications to the instrument. After administration of the instrument some of the items were deleted and because language was too complicated and ambiguous, some terms in the questionnaire were modified in order to improve the language and avoid misunderstandings. Afterwards this self-developed instrument became the posttest only control group assessment tool in a quasi-experimental study. The final step in the mixed methods process was to use the measure to validate effect of the training program on attitude of teacher of VET College. In order to check the internal consistency of the questionnaire Cronbach's Alpha was used. The whole scale was divided into four factors. They were defined as: general attitudes towards disability (10 items), attitudes according different kinds of special needs as: learning disability, emotionalbehavioral disability and cognitive disability (8items), factors behind positive and negative attitudes (3 items) and discomfort (feeling of discomfort experienced during direct contact with students with special needs 4 items). Cronbach's alpha results for each factor are listed as follows: factor one general attitudes towards disability .826, factor two attitudes according special needs .728, factor three factors behind positive and negative attitudes .251, factor four discomfort .628. Here you can see that all factors except factor three: factors behind positive and negative attitudes had high reliability alpha coefficient. The items which had low reliability coefficient were dropped. The excluded items were analyzed separately. After dropping items that had low alpha coefficient the total item alpha coefficient was calculated that gave us result of 0.745, indicating a good reliability of the scale (See Appendix. 4)

Items excluded due to the low internal consistency were analyzed separately. In the data analyzing part total test score and the three factor scores were calculated. Total test score (TTS) was calculated by summing the 23 items of the questionnaire and determining the mean score for each individual of experimental and control group. Results are reported in two parts. Firstly, we will see how three demographic characteristics namely: age, gender and frequency of face-to-face contact affect teachers` attitudes. Secondly, in order to determine if the training course affected teachers` attitudes shift, within control and experimental group, the results from Total Test Score (TTS) and three factors will be compared. The data were coded in Microsoft Excel software and exported to SPSS Version 20. Some codes were reversed in order to have all variables coded in the same direction (De Vaus, 2002).

To answer the research questions the following statistical procedures were used to analyze responses on the first and second parts of the questionnaire.

- Descriptive statistics were used to compare demographic characteristics of teacher participants.
- 2. A t-test procedure was used to test the differences in-between control and experimental group, comparing Total test score (TTS) and three factor scores.
- 3. In order to explore the strength of the relationship between face-to-face contact and attitudes, Pearson Correlation test was used.
- 4. Descriptive statistics were used to analyze items that were excluded due to the low intern consistency

Before applying t-test to test scores we need to check if scale variables are approximately normally distributed. For this purpose I used one-sample Kolmogorov-Smirnov test. This test simply calculates the probability of the sample having the distribution it has assuming that it

has been drawn from a normal distribution. However, results stated that P was not significant at .05 level. (p>.05 or p= .065). This gives us opportunity to state that results are normally distributed and we can use t-test for analyzing the data. (See appendix.3)

### 4.2.1 Teacher and VET college-related demographic information

The study was carried out in two types of VET colleges. The sample consisted: 56 vocational education teachers, whereas 28 teachers were enrolled in training course and had work experience with students with special needs and 28 teachers without practice and training treatment. From these 56 teachers experimental and control groups were allocated.

Table.1 shows the frequencies and the percentages of the teachers from these schools.

Table.4

	Frequency	Percent
1. Experimental group	28	50%
2. Control group	28	50%
Total	56	100%

In these VET colleges all 56 participant teachers were provided with survey. A total 28 (50%) out of 56 teachers were enrolled in experimental group and 28(50%) were control group members.

Table.5

Gender	Frequencies	Percentage
1. Female	44	78.6%
2. Male	12	21.4%
Total	56	100%

According to the Table.2 there were forty-four female teachers (78.6%) and twelve (21.4%) male teachers. Age of 56 Teachers participants ranged from 23 to 75 years, with a mean 44.54 and standard deviation of 14, 383

#### 4.2.2 Teachers' attitudes

To answer the first research question:

# 1. Is there any difference between experimental and control group teachers` attitudes toward inclusion?

A t-test procedure was used to test the differences between those two groups. A t-test was used to compare the TTS and three factor scores (teachers` general attitudes towards inclusion; attitudes according student`s needs LD, EB/D, CD and discomfort). A total test score (TTS) was calculated by summing 24 items of the questionnaire and determining the mean score for each individual. Factor scores were also determined in the same manner for each three factors. The results of the t-test indicated that there was a significant difference between the experimental and control group teachers responses for TTS (t=2.596; p=0.012) (See appendix.7). The teachers of experimental group were more positive than teachers from control group. Those teachers who work at VET Colleges with students with special needs and were enrolled in training course were more positive towards inclusion than those who do not have this opportunity. Further consideration of t-test analysis determined significant differences for two factors: teachers` attitudes towards inclusion (t=3.539; p=0.001 sig. 2-tailed) and discomfort (t=2.676 p=0.01)

No significant differences were found between experimental and control group members according to attitudes towards inclusion depending on student's disabilities (LD, EB/D, CD) (t=0.845; p=0.402).

Table.6

	Group one(experimental) and two(control)	N	Mean	Std. Deviation
Teachers` attitudes towards	1.00	28	4.0607	.56131
disability	2.00	28	3.5750	.46078
Attitudes towards LD. EB/D	1.00	28	3.3232	.54424
and CD.	2.00	28	3.2021	.52739
Discomfort level	1.00	28	2.6143	.88180
	2.00	28	3.3036	1.03940
T. 1.T. 1.0	1.00	28	3.6946	.50371
Total Test Score	2.00	28	3.4014	.32161

Consequently, results for the TTS and for two factors (teachers` attitudes towards inclusion and discomfort) indicated that greater contact with students with special needs and enrollment in training course led to more positive attitude and lower level of discomfort. In conclusion teaching and interacting with students with special needs paired with information and knowledge about inclusive education gives us attitude change in positive direction.

#### Research question number two:

# 2. Demographic characteristics of the participants and their effect on attitudes towards inclusion.

The teachers of both groups were asked to respond to additional items related to demographic information. T-test and Pearson's r was employed to identify any effect of age, gender and contact with students with special needs on attitude change.

**Gender:** An independent-samples t-test was conducted to compare the attitude scores for males and females in order to explore whether males and females differ significantly in terms of their attitudes. However no significant differences were found for gender

Contact with students with special needs: All teachers of VET Colleges were asked to indicate the frequency of contact they had with students with special needs in order to see how direct contact affects attitude shift. In order to explore the strength of relationship between direct contact and attitudes, Pearson Correlation test was used. Pearson correlation coefficient -0.384 was negative indicating a correlation between frequency of contact and attitudes shift. (Sig (2-tailed) value was P=-0.384, significance level .003). For the TTS this indicated that greater contact with students with special needs teachers have more positive attitudes towards them. (Appendix. 5)

**Age:** In order to explore relationship between age and attitudes, t-test was run over data. A significant difference was found (t=5.342 p=0.001). The older teachers hold more negative attitudes compare to younger ones. (Appendix. 6)

Table. 7

	Age	N	Mean	Std. Deviation	Std. Error Mean
Attitudes	1.00	36	3.6306	.42347	.07058
7 ttittudes	2.00	20	3.0850	.22542	.05041

#### The analyses of items excluded due to the low internal consistency

For items, listed below, reliability and internal consistency alpha value was too low, therefore they are analyzed separately.

The room for special education should be used as a resource room when the teacher can't adequately meet the needs of the SNE student.

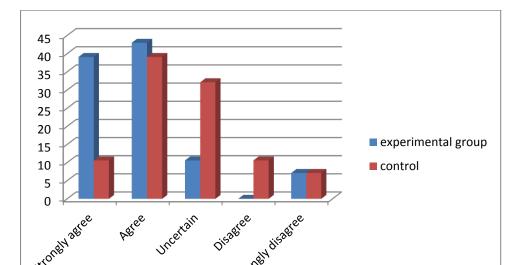


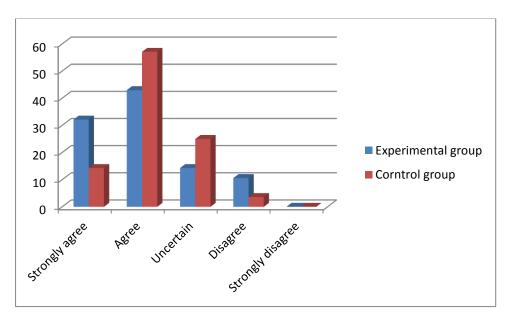
Table8. (All numbers are in percentages)

	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
Experimental	39.1	43	10.6	0	7.13
group					
Control	10.6	39.1	32.13	10.6	7.13
group					

Here we can see that most of the teachers from both groups agree that resource room should be used only in emergency situations. However more teachers from experimental group indicated strongly agree (39.15) than control group members (10.6%).

Special education assistants and VET College teachers need to collaborate in order for inclusion to be successful.

Table9

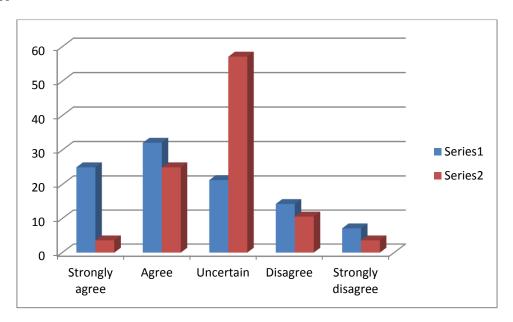


	Strongly	Agree	Uncertain	Disagree	Strongly disagree
	agree				
Experimental	32.13	43	14.3	10.6	0
group					
Control	14.3	57.1	25	3.6	0
group					

The respondents of experimental group (32,13 %) strongly agreed that assistants and teachers need to work collaboratively and only 14.3 % of control group members strongly agreed with that. However more teachers from control group indicated that they agree with this statement (57.1%) than experimental group members did (43%). We can see that teachers` opinions about this statement are similar with little difference in percentages.

Teachers of vocational education colleges have the knowledge, skills, and experience to teach students with disabilities in their classrooms.

Table 10

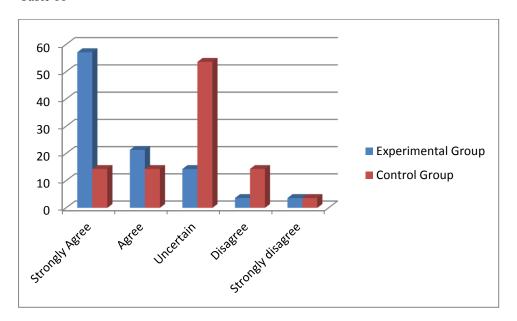


	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
Experimental	25	32.13	21.3	14.3	7.13
group					
Control	3.6	25	57.13	10.6	3.6
group					

Results on this statement are not so surprising. Most responses from experimental group both in strongly agree(25%) and agree(32.13%) section are far more then from control group (3.6%, 25%). Whereas 57.13 % of control group members are not sure if they have enough knowledge and skills to teach students with special needs.

Vocational education teachers are provided with ongoing trainings and in-services in order to prepare them to feel competent in teaching students with disabilities in the general education classroom.

Table 11



	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
Experimental	57.13	21.3	14.3	3.6	3.6
group					
Control	14.3	14.3	53.6	14.3	3.6
group					

57.13% of teachers from experimental group strongly agree that they are provided with training courses, while 53.6 % of control group members uncertain about that and 14.3 disagree with this statement.

# 5 Chapter Five: Discussions, Conclusions and Recommendations

## 5.1 Introduction

This study aimed to investigate the attitudes of vocational education college teachers toward the inclusion of students with special needs in Tbilisi. Furthermore, the study examined factors that contribute the formation and change of these attitudes, mainly in what extent training course and face-to-face contact makes difference between experimental and control group teachers` attitudes. This chapter will start with a discussion of the findings of this study compared with other studies presented in Chapter Two. This chapter will follow with conclusions of the results of this study. This chapter will end with recommendations for further studies and the participants of this study.

## 5.2 Discussion and conclusion

The results of this study concur with the general consensus of the literature reviewed that a continuum of services and a face-to-face contact with students with special needs change VET college teachers` attitudes in positive direction.

The first major finding of this research was that experimental group of teachers had more positive attitudes then control group members. Many interpretations can be made to these findings. First of all in broad terms, results have clearly supported the prediction that more information about inclusion and exposure to SNE students is accompanied by more positive attitude. This concurs with the results of previous researches (F. Rillotta et al 2007; M. A. Melekoglu 2011). In these similar studies undertaken in different countries results stated that teacher` attitudes to inclusion became positive after they received appropriate sensitization and training in special and inclusive education. Also, first and foremost teachers need to be confident to manage working with SNE students in order to be positively disposed. Therefore they need ongoing training and enrollment in to courses about inclusion. According to H. E. Yuker (1988) in service training is designed to improve the competence and knowledge of teachers. Because of this many school systems implemented programs and courses to increase

teachers' abilities to manage students with special needs in regular educational classrooms. Especially training that emphasizes competence of the disabled person as well as dialog and teamwork leads to positive attitudes. Present study had same results as other studies undertaken in different countries (K.D. Swain et al 2012; E. W. Hall 2007; Z. Secer 2010; K. Tait et al 2000; J. Campbell, L. Gilmore 2003). In all these research studies a repeated measurement with t-test from pre- and post-survey showed a statistically significant difference. Results suggested that a special education course paired with work experience with students with special needs can significantly influence in positive way teachers attitudes. This finding also proves the explanation stated in theory chapter. People desire to have accurate perception of reality in order to better solve problems. In this discussion part I want to link findings with some associative theories of attitude organization and change described in theory chapter above. Perhaps the most extensive and far-reaching analysis of the organization of belief-relevant knowledge is embodied in William and Claire McGuire's (1991) conceptualization of the content, structure and operation of thought system. They proposed that in order to cope effectively, with the situation and events people encounter in daily life, they attempt to explain events that have occurred in the past and to predict consequences of these events. McGuire and McGuire (1991) postulated some specific strategies that people can use to cope with life experiences. These strategies take into account people's desire to have an accurate perception of reality, first strategy in called "utility maximization"; according to this concept; events stimulate thoughts about consequences that are similar to the events in desirability. More clearly desirable (undesirable) events stimulate thoughts about possible consequences that are also desirable (undesirable). For example; if the teachers knows, from the training program, that working collaboratively with special teacher and whole family of student with special needs, will enhance pupils social environment and therefore this will create positive thought, that goals that are listed in IEP can be reached effectively with the help of more experienced others and shared responsibilities and collaboration among teachers. Here one can see that positive knowledge stimulates thoughts about possible consequences that are also desirable and positive, but on the other hand teacher who is sure that he/she is the only one who is responsible for student development and encounters problems that cannot be solved alone for example: student cannot start reading because he/she has learning disability and needs extra help of special teacher of parent at home. Without any kind of support and knowledge teacher will face too much failure with this student and afterwards will develop negative thoughts that inclusion

has no meaning. Another strategy that helps people to cope with life experiences is that: events stimulate thoughts about antecedents that are similar to them in desirability. This is desirable (undesirable) events stimulate thoughts about desirable (undesirable) causes. As a conclusion, in order to better perceive the world and solve the problems teachers enroll in training course where knowledge and experience changes their way of thinking. This concept is approved in J. Merie Oslon's study (2003) were general teachers and special teachers attitudes were compared. The results indicated that there were some significant differences between special education and general education teachers` attitudes. This may be attributable to the fact that special teachers have more factual information about inclusion (H. E. Yuker 1988) According to this we can assume that training course and working experience with students with special needs, for teachers, will change their beliefs and therefore will change their attitudes. This was all about knowledge and how it can affect attitude change. However there is another factor that influence attitude shift according to the results of the study. This is a direct contact and frequency of face-to-face interaction with students with special needs. The findings of the study demonstrated differences in responses between the teachers who had students with special needs in their class-rooms and who do not have them. This indicated that work experience with SNE student's changes attitudes in positive way. Therefore, direct contact with minority groups, is perhaps one of the most successful techniques to change the attitudes. Similar findings were reviled in a study of T. Tabakhmelashvili (2008). Were results indicate that solely the information about the principles of inclusive education is not sufficient to form and/or change the teachers` attitudes, but the experience of having children with special needs in schools makes difference. According to another study (A. Carroll et al 2003) authors had more elaborated aim. They asked teachers to indicate the frequency and type of face-to-face contact they had with people with special needs and their role during this contact. After pre-post data collection significant difference were found for the TTS, this indicated that greater contact with people with disabilities led to significant lower level of discomfort, as they were using Interaction with People with Disability Scale (IDP). We can see that training course paired with practical experience about interacting with students with special needs affects attitude change in positive way. However aim of the study was not only to see the difference between the groups biased on TTS, but to see also difference in any according to three factors, (1) general attitudes towards inclusion, (2) attitudes towards different kinds of disabilities and (3) discomfort. Teachers who feel more competent and have a greater belief in the power of their profession are more comfortable in accepting some responsibility for the

children's difficulties. Therefore participation in the training course had the greatest impact in two areas, namely general attitudes and discomfort. Study also reviled that these two groups do not differ from each other in the terms of attitudes toward disability type (LD, BC, EB/D). There is a possibility that experimental group had limited varieties of students with special needs in their class-rooms. As far as I know from college data base, in 2013 most SNE students that were enrolled in VET colleges, were physical impaired and had hearing problems, just few of them had developmental and learning disabilities. This might be reason why those two groups demonstrated no difference on this occasion. Teachers of both group had no positive either negative attitudes according students different needs. No significant differences were found in the attitudes of male and female teachers. Age was another factor that affects how teacher perceive students with special needs. The older teachers hold more negative attitudes compare to younger ones. Inclusive education seems unreal for many of them.

To sum up, it would seem that teaching experience, knowledge about special needs and participation in courses can contribute to the personal growth of teachers as well as their knowledge of individuals with special needs.

## 5.3 The analysis of the teachers' comments

There were two open ended questions in the questionnaire for teachers to provide additional comments about inclusive education. Therefore VET college teachers were asked to respond to additional items. The teacher's comments made on open-ended items provided interesting data for discussion. Participants demonstrated respect to people with special needs, but with some preconditions. The participants meant that all students should in principle be included, but the severity of the disability and extra experience to accommodate the physical environment should be taken into account. One teacher demonstrated appreciation of the students with special needs. Stating that she had a student who is now a designer and they are still connected professionally. Here we can conclude that some teachers have good experience teaching students with special needs and they see consequences of inclusion vocational education. However, there were also teachers who commented that enrollment of students with special needs in general classrooms, will make them feel more stigmatized and develop low self-esteem. Majority of participants agree that special education and general teachers

need to collaborate in order for inclusion to be successful. The majority of participants from control group also stated, that in order to meet the needs of students with special needs a continuum of services and training programs are needed.

From the perspectives of the participants of the study the main obstacles to the inclusion is lake of training and teaching experience. These findings are supported by previous researches.

## 5.4 Limitations of the study

Limitations are matters and occurrences that arise in a study which are out of the researcher's control. They limit the extensity to which a study can go and sometimes affect the end result and conclusions that can be drawn. Every study no matter how well it is conducted and constructed has limitations. Here in this section limitations of resent research will be discussed, and recommendations will be made for future research. Firstly we have to mention the limitations of the first qualitative phase. Clearly, it is unlikely that just one group will suffice the needs of the researcher, since there is always the possibility that the responses are particular to that one group. Calder (1977) proposes that, when the moderator reaches the point that he or she is able to anticipate fairly accurately what the next group is going to say, and then there are probably enough groups. Livingston and Lunt (1994:181) used saturation as a criterion:" the number of focus groups was determined by continuing until comments and patterns began to repeat and little new material was generated." When this point of saturation is reached we can say that is enough for the study. According to the aim of the study to develop a questioner on the basis of the focus group discussions in this study we used only 2 focus groups. This might be limitations because there were only two VET college teachers participating in those discussions from only capital. Moreover, to develop questionnaire with good properties we should explore more focus group discussion with teachers who would be chosen and picked from different regions of the whole country. Limitation of quantitative part is meanly addressing the fact that researcher had no possibility to meet all group member of control group. The consent from and brief description of the study might not be enough for participant to understand the purpose. Also number of the participants in control and experimental group were not so large. Also it was first try to develop questioner according to focus group discussion in Georgian context so in future more qualitative approaches and more focus group discussion should be organized to further develop the instrument. Last limitation that should be mention is that some factors might have influenced the teachers' answers.

According to Deutsch and Gerard's (1955) classic theorizing, people agree with others for normative or informational reasons. Normative influence occurs when people conform to the positive expectations of another, who could represent "another person, a group, or one's self" (Deutsch & Gerard 1955, p. 629) Informational influence involves accepting the information obtained from others as evidence about reality. According to what has been said we can conclude that teacher who hold negative or natural positions towards people with disabilities, after the training program will change them because of normative influence of the trainer (another person) or the college administration(a group) if they hold positive attitudes towards inclusion. Some of the teachers might have intention to please the trainer or the researcher. Despite of the limitations some good suggestions might be made for further research and policy maker to improve the in-service training practice in inclusive education.

## 5.5 Recommendations

The results of the present study have important implications for future teacher education programs. First, it is necessary to review that knowledge on disabilities and teaching of diverse learners with special needs is pertinent and crucial to the teachers' development of positive attitudes toward inclusion. More training in instrumental and behavioral management skills allows teacher to be more accommodating toward diverse learners in the classroom irrespective of the disabilities. Second, positive teachers' attitudes can be developed through cooperation and collaboration between special and general educators. This collaborative effort requires more resources administrative support, in-service professional development programs, and more time for preparation and planning. Training is highly influential in changing teachers' attitudes. Future researchers should investigate whether teaching experience and additional in-service training increase positive attitudes as well as confidence in instructional skills of teachers involved in inclusive programs. Also a case study approach to research provides a more in-depth understanding of best practices in teaching and areas that require further attention to improve the education of all students with diverse needs. This approach will be one of the best ways to detect more information for further development and improvement of future educational services in VET colleges. It has to be mentioned that positive attitudes develop during the critical years for student teachers at the university, and this affect how the teachers view students in general class-room settings in future. In

particular student teachers need to be adequately exposed to all categories of disabled persons especially those with high support needs. To increase teachers' confidence in handling disabled learners in VET colleges, teacher education programs need to emphasize and import skills such as curriculum differentiation, variation of teaching strategies to meet and address students' individual needs and making appropriate testing accommodations. Research of a qualitative nature will give more in-depth understanding of these issues.

#### Reference:

Allport, G. W. (1954). The nature of prejudice. Reading, MA: Assison-Wesley

Albarracin D, Johnson, BT, Zanna, MP (eds.) 2005, *The handbook of attitudes*. Lawrence Erlbaum Associates, Publishers, Mahwah, New Jersey, London

Boucher, C. R., & Dino, S.L. (1979). Learning disabled and emotionally disturbed: Will the labels affect teachers planning? *Psychology in the Schools*, 16, 395-402

Bryan, T., & McGrady, H.J. (1972). Use of a teacher rating scale. *Journal of Learning disabilities*. 5, 199-206

Booth, A., Papaioannou, D., and Sutton, (2012) A. Systematic Approaches to a Successful Literature Review. London: Sage Publications.

Brownlee, J., & Carrington, S. (2000) Opportunities for authentic experience and reflection: a teaching program designed to change attitudes towards disability for pre-service teachers. *Support for learning*. Vol. 15 No. 3 (2000)

Brady, K., & Woolfson, L., (2008) What teacher factors influence their attributions for children's difficulties in learning? *British journal of education Psychology*, 78, 527–544. DOI: 10.1348/000709907X268570

Bryman, A. (2012) Social Research Methods. Oxford: Oxford University Press

Bordens, KS & Abbott, BB 2005, Research Design and Methods. A process approach. Sixth edition. McFrawHill

Carroll, C. F., & Repucci, N. D. (1978). Meanings that professionals attach to labels of children. *Journal of Consulting and Clinical Psychology*, 46, 372-372.

Casey, K. (1978). The semantic differential technique in the examination of teacher attitudes to handicapped children. *The Exceptional Child*, 25, 41-52.

Center, Y., & Ward, J. (1987). Teachers' attitudes towards the integration of disabled children into regular schools. The

Exceptional Child, 34, 41-56.

Cassady, J., M, (2011). Teachers` attitudes toward the inclusion of students with autism and emotional behavioral disorder. *Electronic Journal for Inclusive Education*, 2 (7).

- Campbell. J., & Gilmore, L., (2003). Changing student teachers` attitudes towards disability and inclusion. *Journal of Intellectual & Developmental Disability*, Vol. 28, No. 4, pp. 369–379, December 2003
- Cook, B. G., Tankersley, m., Cook, L., & Landrum, T. J. (2000). Teachers' attitudes toward their included students with disabilities. *Exceptional Children*, 67(1) pp115-135.
- Children of Georgia 2006, *Assessment for Social Inclusion*. Research Project undertaken by NGO Children of Georgia with support of UNICEF
- Cook, T. D. and D. T. Campbell (1979). *Quasi Experimentation: Design and Analytical Issues for Field Settings*. Chicago, Rand McNally.
- Calder, B. J. (1977). Focus groups and the nature of qualitative marketing research. *Journal on Marketing Research*, 14, 353-364.
- Deutsch, Morton; Gerard, Harold B. A study of normative and informational social influences upon individual judgment. The Journal of Abnormal and Social Psychology, Vol 51(3), Nov 1955, 629-636. doi: 10.1037/h0046408
- Dupoux, E., Wolman, C., & Estrasa, E., (2005). Teachers` attitudes toward integration of students with disabilities in Haiti and the United States. *International Journal of Disability, Development and Education* Vol 52, No. 1, March 2005, pp. 43–58
- De Vaus, D. (2002). Surveys in Social Research (5<sup>th</sup> ed.). London: Routledge.
- El-Ashry, F., R, (2009) General education pre-service teachers` attitudes toward inclusion in Egipt. Doctoral dissertation University of Florida (2009)
- Farrell, P., and Ainscow, M. (2002). *Making special education inclusive: From research to practice*. London: David Fulton Publishers
- Fazio, R.H., Zanna, M. P., & Cooper, J. (1977). Dissonance versus self-perception: An integrative view of each theory's proper domain of Application, *Journal of Experimental Social psychology*, 13, 464-79
- Fazio, R. H., & Zanna, M. P. (1981). Direct experience and attitude-behavior consistency. *Advances in Experimental Social Psychology*, 14, 161-202.
- Frith, G. H., & Edward, R. (1981). Misconceptions of regular classroom teachers about physically handicapped students. *Exceptional Children*, 48, 182-184.

- Gergauli, G (2011). "Inclusive education- State plan and public attitudes". MA thesis, Departament of psychilogy, Tbilisi State University, Georgia
- Gindis, B. (1999), Vygotsky's Vision: Reshaping the Practice of Special Education for the 21<sup>st</sup> Century. *Remedial and Special Education November 1999 20: 333-340*.
- Gall, M.D., Gall, J.P. & Borg, W.R. (2007). *Educational Research: An Introduction* (8th ed.). Upper Saddle River, NY: Pearson Education
- Gething, L., & Wheeler, B. W. (1992). The Interaction with Disabled Persons Scale: A new Australian instrument to measure attitudes towards people with disabilities. *Australian Journal ofPsychology*, 44, 75-82
- Hewstone, M., & Stroebe, W. (2001). <u>Introduction to social psychology</u> (3rd ed.). Oxford: Blackwell.
- Hughes, S. L., Kaufman, J. M., & Wallace, G. (1973). What do labels really mean to classroom teachers? *Academic Therapy*, 3, 285-289.
- Hannah, M. E., & Doherty, C. (1982, October). *Children age and sex: Do they make a difference in attitude?* Paper presented at the annual convention of the National Association of school psychologists, Toronto.
- Hall, E., W, (2007). The effects of disability awareness trainings with career and technical educators teaching in high need rural schools. State university of NewYork-Geneseo 2007 26(5)
- Hickson, F. E. (1995). *Attitude formation and change toward people with disabilities*. Unpublished Doctoral thesis. Sydney, NSW: University of Sydney.
  - Jahnukainen, M., & Korhonen, A. (2003). Integration of students with severe and profound intellectual disabilities into the comprehensive school system: Teachers' perceptions of the educational reform in Finland. *International Journal of Disability, Development and Education*, 50 (2), pp 169-180.
- Keogh, B. K., Tchir, C., & Winderguth-Behn, A. (1974). Teachers` perceptions of educationally high risk children. *Journal of learning disabilities*, 7, 367-374.
- Konza, D., (2008). In clusion of students with disabilities in new times: responding to the challenge. University of Wollongong Research Online. Faculty of Education Papers (Archive) Faculty of Social Sciences
- MoES. (2008). National Strategy and Action Plan for Education of Children with Special Needs 2009-2011. Tbilisi, Georgia: Author.

- MoES. (2012-2016). Project: Introduction of inclusive education in vocational education and training system in Georgia. *Publisher Ministry of education and since of Georgia*. 2012
- Moore, L., & Fine, M.J. (1978). Interaction among factors in the Opinions About Mental Illness Scale in scores of non psychiatric nurses: A comparison with other studies. *Psychological Reports*, 43, 876-878
- Melekoglu, M. A., (2013) Examining the impact of interaction project with students with special needs on development of positive attitude and awareness of general education teachers towards. inclusion. *Educational Consultancy and Research Center*. Educational Sciences: Theory & Practice 13(2) Spring 1067-1074
- Nader, A. (1984). Teacher attitude toward the elementary exceptional child. *International Journal of Rehabilitation Research*, 7, 37-46
- National Curriculum and Assessment Centre 2005, *Project, Introduction of Inclusive Education in General Educational Institutions for Ten Schools in Tbilisi* (Tbilisi).
- National Curriculum and Assessment Centre 2007, *The Attitudes toward inclusive education of the society of Georgia*, Tbilisi.
- Olson, M. J (2003). "Special education and general education teacher attitudes towards inclusion". Master of Science Degree With a major in Guidance and Counseling. The Graduate School University of Wisconsin-Stout May 2003
- Phillips, J., (1991) Handbook of Training Evaluation and Measurement Methods, 3rd Edition. Gulf Publishing Company
- Panda, K. C., & Bartel, N. R. (1972). Teacher perception of exceptional children. *Journal of Special Education*, 6, 261-266.
- Rist, R. (1970). Student social class and Teacher expectations; The self fulfilling prophecy in ghetto education. *Harvard Educational Review*, 40, 411-451
- Rosental, R., & Jacobsen, L. (1968). Teachers` expectancies: Determiners of pupils` IQ gains. *Psychological Reports*, 19, 113-118
- Rae, H., (2010). Teachers` attitudes to mainstream Schooling. *LEARNING DISABILITY PRACTICE*. December 2010 Vol. 13 No.10.
- Regan, D. T., & Fazio, R. H. (1977). On the consistency between attitudes and behavior: Look to the method of attitude formation. *Journal of Experimental Social Psychology*, 13, 28-45
- Rillotta, F., & Nettelbeck, T. (2007) Effects of an awareness program on attitudes of students without an intellectual disability towards persons with an intellectual disability. *Journal of*

*intellectual and developmental disability*. ISSN 1366-8250 print/ISSN 1469-9532 online # 2007 Australasian Society for the Study of Intellectual Disability Inc.

DOI: 10.1080/13668250701194042

Shakespeare, T 2000, 'Social models of disability and other life strategies', *Scandinavian Journal of Disability research*, Vol. 6, NO. 1. pp.8-21.

Swain, K. D., Nordness, P. D. & Learer-Janssen E. M. (2012). Changes in preservice teacher attitudes toward inclusion, *University of Nebraska-Omaha* 56(2), 75–81 DOI: 10.1080/1045988X.2011.565386

Shade, R. A., & Stewart, R. (2001). General education and special education preservice teachers' attitudes toward inclusion. Preventing School Failure, 46(1). Retrieved September 18, 2002 from: <a href="http://web9.epnet.com/citation.asp">http://web9.epnet.com/citation.asp</a>

Schreier, M. (2012) Qualitative content analysis in Practice. SAGE Publications; London

Secer, Z., (2008). An analysis of the effects of in-service teacher training on Turkish preschool teachers` attitudes towards inclusion. *International Journal of Early Years Education* 

Vol. 18, No. 1, March 2010, 43-53

Tabakhmelashvili, T (2008). "Regular teahcers' attitudes towards inclusion of students with special needs into ordinary schools in Tbilisi". MA thesis, Department of Special needs Education, Faculty of education, University of Oslo, Norway.

Tait, K., & Purdie, N., (2000). Attitudes toward disability: Teacher education for inclusive environments in an Australian university. *International Journal of Disability, Development and Education, Vol. 47, No. 1, 2000* 

Trent, S., Pernell, E., Mungai, A., & Chimedza, R. (1998). Using concept maps to measure conceptual change in preservice teachers enrolled in a multicultural education/special education course. *Remedial and Special Education*, 19(1), 16-31.

Tesser, A. (1978). Self-generated attitude change. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. II, pp 289-339). New York: Academic Press

Thomas, G. & Loxley, A. (2001). *Deconstructing special education and constructing inclusion*. Buckingham: Open University Press

UNESCO. (1994). Salamanca Declaration and Framework for Action on Special Needs Education. Paris: Author. Retrieved 2012, June from:

http://www.unesco.de/fileadmin/medien/Dokumente/Bildung/Salamanca\_Declaration.pdf

.

UNESCO. (2005). *Guidelines for Inclusion: Ensuring Access to Education for All*. Paris: Author. Retrieved 2012, June from:

http://unesdoc.unesco.org/images/0014/001402/140224e.pdf

United Nations (1993) *Standard Rules on the Equalization of Opportunities for Persons with Disabilities*, Viewed 7 March 2008, <a href="http://www.un.org/ecosocdev/geninfo/dpi1647e.htm">http://www.un.org/ecosocdev/geninfo/dpi1647e.htm</a>

National Curriculum and Assessment Centre 2005, *Project, Introduction of Inclusive Education in General Educational Institutions for Ten Schools in Tbilisi* (Tbilisi).

UNESCO 1994, The Salamanca Statement and Framework for Action on Special Needs Education. Adopted by the World Conference on Special Needs Education: Access and Quality. Salamanca, Spain. Viewed 7 March 2008, <a href="http://www.unesco.org/education/pdf/SALAMA\_E.PDF">http://www.unesco.org/education/pdf/SALAMA\_E.PDF</a>

UNESCO 2004, <a href="http://portal.unesco.org/education/en/ev.php-url\_iD=12078&url\_documents">http://portal.unesco.org/education/en/ev.php-url\_iD=12078&url\_documents</a>. TOPIC&url\_sECTION=201.html

UNESCO 2004, *Increasing Teacher Effectiveness*, International Institute for Educational Planning, viewed 7 January 2008,

http://unesdoc.unesco.org/images/0013/001376/137629e.pdf?class=IIEP\_PDF\_pubs&page= Fund\_79&estat\_url=http://unesdoc.unesco.org/images/0013/001376/137629e.pdf

UNESCO 2007, *Global perspectives on teacher learning*. UNESCO: International Institute for Educational Planning, Viewed 4 January 2008,

http://www.unesco.org/iiep/PDF/pubs/Fund84.pdf?class=IIEP\_PDF\_pubs&page=<strong> Global%20perspectives%20on%20teacher%20learning</strong>&estat\_ url=http://www.unesco.org/iiep/PDF/pubs/Fund84.pdf

UNESCO(1997), viewed 6 December 2007, <a href="http://portal.unesco.org/education/en/ev.php-url\_ID=11895&url\_DO=DO\_TOPIC&url\_SECTION=201.html">http://portal.unesco.org/education/en/ev.php-url\_ID=11895&url\_DO=DO\_TOPIC&url\_SECTION=201.html</a>

UNICEF 2007, *Implementation of the convention on the rights of the child in Georgia*, Viewed 15 February 2008, http://www.unicef.org/georgia/rights\_8343.html

Unicef, viewed 12 March 2008, http://www.unicef.org/infobycountry/georgia.html

United Nations (1948) *Universal Declaration of Human Rights*. New York. Viewed 7 March 2008, http://www.un.org/Overview/rights.html

United Nations (1993) *Standard Rules on the Equalization of Opportunities for Persons with Disabilities*, Viewed 7 March 2008, <a href="http://www.un.org/ecosocdev/geninfo/dpi1647e.htm">http://www.un.org/ecosocdev/geninfo/dpi1647e.htm</a>

Yuker, E. Harold (1988) Attitudes toward persons with Disabilities Springer: New York

## **Appendices**

## Appendix 1: Questionnaire in English

The present study aims to explore vocational education college teachers` attitudes towards inclusive education. This research is being conducted through the University of Oslo. This questionnaire asks about your personal attitudes how you receive inclusion and students with special needs. Do not write your name on this questionnaire. Your responses will be anonymous and will never be linked to you personally. Your participation is entirely voluntary. Thank you for your cooperation

## Questionnaire for the teachers

Section I: Background variables

Please, put a tick on your responses to the following items

1.	Gender
Fei	male [ ] Male [ ]
2.	Your age []
3.	Name of vocational college you are working in: [ ]
4.	How often you are having face-to-face interaction with persons with special needs.
E	Everyday [ ]
S	everal times in a week [ ]
S	everal times in a month []
S	everal times in a year []

#### Part 2: Vocational Education College Teachers' Attitudes toward Inclusion Scale

General Directions: In the following pages you will find statements of ideas and attitudes about inclusion of students with special needs in general education classrooms. There are many different opinions about this subject and I would like to know your personal opinion. There is no right or wrong answers and people agree with some of these statements and disagree with others. Please, circle the number to the right of each statement that best describe your agreement or disagreement with the statement

Scale: (1) Strongly disagree (2) Disagree (3) Uncertain (4) Agree (5) Strongly agree

1. Students with special needs should be given every opportunity to function in the general classroom where possible.

12345

2. The special education room should only be used as a resource when the general education teacher cannot adequately meet the needs of the student with disabilities

12345

3. Students with special needs should participate in the VET college classroom theoretical and practical activities

12345

4. The inclusive environment in VET college classrooms will promote the academic growth of the students with special needs.

12345

5. The inclusive environment in VET college setting will promote social independence among students with special needs.

12345

6. Inclusive environment in VET college setting has beneficial effect on the social and emotional development of the students with special needs.

12345

7. Isolation in a special classroom has beneficial effect on the social and emotional development of the students with special needs.

12345

8. Students with special needs can be best served in isolated special classrooms 1 2 3 4 5

9. Students with special needs are likely to create confusion in the teaching and learning procedures.

12345

10. Students with emotional and/or behavioral disabilities are able to participate productively in general education classroom <u>learning</u> activities 1 2 3 4 5

11. Students with cognitive disabilities are able to participate productively in general education classroom <u>learning</u> activities

12345

12. Students with learning disabilities are able to participate productively in general education classroom <u>learning</u> activities.

12345

13. Special education teachers and general education teachers need to collaborate in order for inclusion to be successful

12345

14. General education teachers have the knowledge, skills, and experience to teach students with disabilities in their classrooms.

12345

15. General education teachers and other staff are provided with ongoing, training and inservices in order to prepare them to feel competent in teaching students with disabilities in the general education classroom.

12345

16. As a Vet college teacher do you want to teach students with special needs in your classrooms?

12345

17. If you do not support this statement please explain

12345

18. Do you think that VET college physical environment as well as teaching staff are adequately equipped and trained in order to implement the inclusion education successfully?

12345

19. I feel frustrated because I don't know how to help student with special needs

12345

20. I feel uncomfortable and find it hard to relax when communicating with students with special needs

12345

21. I tend to make contacts only brief and finish them as quickly as possible while interacting with people with special needs

12345

22.I feel unsure because I don't know how to behave

22.	Please make further comments in the space provided below:
• • • • •	

## Appendix 2: Focus group Interview guide

- 1. In your opinion, what is inclusive education?
- 2. Do you support the inclusion of student with special needs in vocational educational colleges?
- 3. Do you have a desire to teach students with special needs in your group?
- 4. Why multidisciplinary approach is important for implementing the inclusion?
- 5. What are the positive and negative effects of the inclusion?
- 6. Do you think that the teachers have relevant knowledge and experience in order to teach students with special educational needs?
- 7. Enrolment of students with special needs in VET college classrooms will negatively affect academic performance of the whole class.

## Appendix 3: Reliability of the scale

**Case Processing Summary** 

	Cases					
	Va	lid	Mis	sing	To	otal
	N	Percent	N	Percent	N	Percent
Total Test Score	56	98.2%	1	1.8%	57	100.0%

**Tests of Normality** 

	Kolmogorov-Smirnov <sup>a</sup>			ov <sup>a</sup> Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Total Test Score	.114	56	.065	.950	56	.021

a. Lilliefors Significance Correction

## Appendix 4: Reliability of the scale

Cronbach's alpha for three factor are represented separately and at the end there is a result for the whole scale:

## 1. Factor one: General attitudes towards disability

**Case Processing Summary** 

tare treatment y			
		N	%
	Valid	56	93.3
Cases	Excluded <sup>a</sup>	4	6.7
	Total	60	100.0

a. Listwise deletion based on all variables in the procedure.

#### **Reliability Statistics**

Cronbach's	Cronbach's	N of Items
Alpha	Alpha Based on	
	Standardized	
	Items	
.826	.833	10

## 2. Factor two: Attitudes according student's needs LD, EB/D, CD

### **Case Processing Summary**

		N	%
	Valid	56	93.3
Cases	Excluded <sup>a</sup>	4	6.7
	Total	60	100.0

a. Listwise deletion based on all variables in the procedure.

#### **Reliability Statistics**

Cronbach's	Cronbach's	N of Items
Alpha	Alpha Based on	
	Standardized	
	Items	
.728	.729	8

### 3. Factor three: Discomfort

**Case Processing Summary** 

Case i recessing cammary			
		N	%
	Valid	56	93.3
Cases	Excluded <sup>a</sup>	4	6.7
	Total	60	100.0

a. Listwise deletion based on all variables in the procedure.

#### **Reliability Statistics**

Cronbach's	Cronbach's	N of Items
Alpha	Alpha Based on	
	Standardized	
	Items	
.628	.635	4

## 4: Reliability of the scale

Scale: ALL VARIABLES

**Case Processing Summary** 

cace i recessing cammary			
		N	%
	Valid	56	93.3
Cases	Excluded <sup>a</sup>	4	6.7
	Total	60	100.0

a. Listwise deletion based on all variables in the procedure.

#### **Reliability Statistics**

Cronbach's	Cronbach's	N of Items
Alpha	Alpha Based on	
	Standardized	
	Items	
.826	.833	10

# Appendix 5

Face to face contact and Attitudes.

**Group Statistics** 

#### Correlations

	Ooriciations		
		Everyday	Attitudes and
		(1)Every week	Contact
		(2) Every	
		Months(3)	
		Every year	
5 1 (4)5	Pearson Correlation	1	384 <sup>**</sup>
Everyday (1)Every week (2) Every Months(3) Every year	Sig. (2-tailed)		.003
	N	56	56
	Pearson Correlation	384 <sup>**</sup>	1
Attitudes and Contact	Sig. (2-tailed)	.003	
	N	56	56

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

## Appendix 6

## T-Test age and attitude

## **Group Statistics**

	Age	N	Mean	Std. Deviation	Std. Error Mean
Attitudes	1.00	36	3.6306	.42347	.07058
Attitudes	2.00	20	3.0850	.22542	.05041

			for Equality of	t-test for Equality of Means	
		F	Sig.	t	df
	Equal variances assumed	4.145	.047	5.342	54
Attitudes	Equal variances not assumed			6.290	53.953

		t-test for Equality of Means		
		Sig. (2-tailed)	Mean Difference	
Auti	Equal variances assumed	.000	.54556	
Attitudes	Equal variances not assumed	.000	.54556	

## Appendix 7

## T-Test factors and TTS

## **Group Statistics**

	Group one(experimental) and two(control)	N	Mean	Std. Deviation
Teachers` attitudes towards	1.00	28	4.0607	.56131
disability	2.00	28	3.5750	.46078
Attitudes towards LD. EB/D	1.00	28	3.3232	.54424
and CD.	2.00	28	3.2021	.52739
Discomfort level	1.00	28	2.6143	.88180
	2.00	28	3.3036	1.03940
Total Test Score	1.00	28	3.6946	.50371
	2.00	28	3.4014	.32161

		Levene's Test for Equality of Variances		t-test for Equality of Means
		F	Sig.	t
Teachers` attitudes towards	Equal variances assumed	1.339	.252	3.539
disability	Equal variances not assumed			3.539
Attitudes towards LD. EB/D	Equal variances assumed	.011	.915	.845
and CD.	Equal variances not assumed			.845
	Equal variances assumed	.978	.327	-2.676
Discomfort level	Equal variances not assumed			-2.676
	Equal variances assumed	4.848	.032	2.596
Total Test Score	Equal variances not assumed			2.596

		t-test for Equality of Means		
		df	Sig. (2-tailed)	Mean Difference
	Equal variances assumed	54	.001	40571
Teachers` attitudes towards disability	Equal variances assumed  Equal variances not assumed	52.025	.001	.48571 .48571
Attitudes towards LD. EB/D and CD.	Equal variances assumed	52.025	.402	.12107
	Equal variances not assumed	53.947	.402	.12107
	Equal variances assumed	54	.010	68929
Discomfort level	Equal variances not assumed	52.603	.010	68929
Total Test Score	Equal variances assumed	54	.012	.29321
	Equal variances not assumed	45.877	.013	.29321

	t-test for Equality of Me			eans
		Std. Error Difference	95% Confidence Interval of the Difference	
			Lower	Upper
Teachers` attitudes towards	Equal variances assumed	.13724	.21056	.76087
disability	Equal variances not assumed	.13724	.21032	.76110
Attitudes towards LD. EB/D	Equal variances assumed	.14322	16607	.40821
and CD.	Equal variances not assumed	.14322	16607	.40822
	Equal variances assumed	.25759	-1.20573	17284
Discomfort level	Equal variances not assumed	.25759	-1.20604	17253
Total Test Score	Equal variances assumed	.11294	.06678	.51965
	Equal variances not assumed	.11294	.06586	.52057

## Appendix 8

#### Norsk samfunnsvitenskapelig datatjeneste AS

NORWEGIAN SOCIAL SCIENCE DATA SERVICES

NSD

Harald Hartagies gate 29 N 5007 Bergen Norway Tel: +47-55 58 21 17 Fax: +47-55 58 96 50 nsd®nsd uib no www.nsd uib no Org nr: 985 321 884

Lage Jonsborg Institutt for spesialpedagogikk Universitetet i Oslo Postboks 1140 Blindern 0318 OSLO

Vår dato: 26.07.2013

Vår ref:34871 / 3 / MSI

Dares date

Deres ref:

#### TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 26.06.2013. Meldingen gjelder prosjektet:

34871 Behandlingsansvarlig Vocational educational college teachers` attitudes towards inclusion

Universitetet i Oslo, ved institusjonens øverste leder

Daglig ansvarlig Student Lage Jonsborg Ana Lelashvili

Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstiller kravene i personopplysningsloven.

Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, ombudets kommentarer samt personopplysningsloven og helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema <a href="http://www.nsd.uib.no/personvern/meldeplikt/skjema.html">http://www.nsd.uib.no/personvern/meldeplikt/skjema.html</a>. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, http://pvo.nsd.no/prosjekt.

Personvernombudet vil ved prosjektets avslutning, 30.06.2014, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen

Knut Kalgraff Skjåk

Marte Byrlyeland Marte Byrkjeland

Marte Byrkjeland tlf: 55 58 33 48 Vedlegg: Prosjektvurdering

Kopi: Ana Lelashvili, Tbilisi Gldanis Khevi building first A ap.#87

Avdelingskontorer / District Offices

OSLO: NSD: Universitetet i Oslo, Posthoks 1055 Blindern, 0316 Oslo Tel: +42-22 85 52 11 insditituio no

TRONDHEIM: NSD: Norges teknisk-naturistenskapelige universitet, 7491 Trondheim: Tel: +47-73 59 19 07 kyrie svanovillevit ritiu no
TRONDHEIM: NSD: SVF, Universitetet i Tronsio, 9037 Tronsio, Tel: +47-77 64-43 36 insdimavillevi uit no