The Management of Inclusive Education Practice in Libyan Universities: Empirical Investigation

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Abstract

The aim of this research is to explore the inclusive education practice in Libyan universities. This thesis developed a model of inclusive education based on a review of the literature to empirically investigate in one single model: (1) the affect of philosophy and policy on inclusive education practices; (2) the affect of curriculum design on inclusive education practices; and (3) the affect of teaching methods on inclusive education practices. The researcher designed a questionnaire to investigate attitudes of faculty members towards inclusive educational practice within their universities, and their concerns about inclusive educational practice. Four hundred questionnaires were distributed to faculty members working in four Public universities in Libya; 288 questionnaires were returned with a response rate of 62%.Of these, 41 of the questionnaires received were excluded and 247 were processed for analysis.

The data collected for the purpose of this study is analysed. The analysis includes two parts: First, descriptive analysis is presented, starting with the main characteristics of the respondents and covering the trends of their opinions obtained from their answers, presented in percentages. Second, inferential analysis is conducted using the Structural Equation Model (SEM), applying Exploratory Factor Analysis in the first stage to identify the model that contains the factors that have the most significant impact on Inclusive Education using SPSS, then in the second stage the fitness of the model is tested through Confirmatory Factor Analysis using AMOS. Before implementing the SEM, the data is tested for normality and consistency, in order to ensure its validity for the analysis.

The findings of this thesis largely support the hypothesised relationships proposed in the theoretical model. The model suggests some correlations to complement these factors and work together to influence inclusive education, correlations are suggested to be implemented regarding the dimension of policies, curricula and teaching; this means that when policy factors are designed they should be linked to the factors of curriculum and teaching, as the interaction of these factors could be considered as a new dimension. The results also provide strong evidence of the relationship between policies; curriculum and teaching, which in turn are necessary determinants of inclusive education. This thesis contributes to theoretical and practical knowledge by providing for the first time, evidence about relationship between policies, curriculum and teaching. The study makes recommendations and suggests strategies to deal with the identified challenges and finally provides a roadmap to policymakers educational in Libyan universities that may assist in the successful implementation of inclusive education in Libyan higher education.

List of Abbreviations

AMOS	Analysis of Moment Structure
CFI	Comparative Fit Index
CFA	Confirmatory Factor Analysis
EFA	Education for All
EFA	Exploratory Factor Analysis
ICE	International Conference on Education
RMSEA	Root Mean Square Error of Approximation
OECD	Organisation for Economic Co-operation and Development
STATIC	Scale of Teacher Attitudes towards Inclusive Classrooms
SEM	Structural Equation Model
SEN	Special Education Needs
SPSS	Statistical Package for Social Science
TLI	Tucker Lewis Index
UDL	Universal Design for Learning
UID	Universal Instructional Design
UDHR	Universal Declaration of Human Rights
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UN	United Nations Declaration

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Dedication

I wish to dedicate this study to:

My beloved mother and father;

I would like to dedicate this study to my wife, who was the real cause of my success today,

and my beautiful kids:

Mohamed

Mutaz

Ahmad

andAlya

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CHAPTER 1
INTRODUCTION

1.1 Introduction

Education could be defined as the act or process of educating or being educated. According to the Universal Declaration of Human Rights (UDHR) and reaffirmed by the world statement on Education for All (UNESCO 1994), education has been declared as a basic human right.

Inclusive education has been on the international agenda as far back as the early '90s, with extensive research being conducted in first world countries around the development of inclusive systems of education (UNESCO 1994; Booth 1996; Rouse and Florian 1996; Ainscow 1999; Ballard 1999; Dyson and Millward 2000; Tait and Purdie 2000; Slee 2004), but in developing countries - such as Libya –it is still a relatively new concept, and very little research has been carried out in this area.

The development of inclusive education has grown into a global movement which competes with the exclusionary practices (Ainscow 2005). It symbolises numerous viewpoints and ideologies; specifically the idea that every learner is capable of learning and has the fundamental right, and that assistance should be concentrated on need instead of disability or difficulty experienced. Studies have revealed that even though most countries agrees to the same philosophy and commitment regarding the implementation of inclusive education, it has become more obvious that the perception of inclusive education has diverse meanings in various contexts (Florian 1998; Engelbrecht 2006). Florian, (1998) pointed out that in some of the various definitions of inclusive education, some centre on human interaction, others on diversity, and some on organisational arrangements.

Despite the wide application of inclusive education throughout the world, this approach has not been widely adopted in developing countries. Libya, which is regarded as one, has some strategies in supporting education, one of which is to reform

its higher education and scientific research systems through a national strategic plan and international cooperation.

The purpose of this study was to explore inclusive education practice in Libyan universities. The researcher designed a questionnaire to explore attitudes of faculty members about inclusive education practice within their university, their concerns about inclusive educational practice, and their level of use of inclusive educational practice.

The introductory chapter begins with an overview of the background and the research problem. I then outline the significance of the study and, the research aims and objectives, and the research design. Finally, the organisation of the study is presented in the last section.

1.2 Background and Research Problem

It is generally accepted that improving the performance of an education system is necessary for socioeconomic development, economic competitiveness, equality among different groups in society, better functioning of governmental institutions, democracy and human rights (Baskan and Erduran 2009).

Inclusive education , diversity , education for all, and social justice are all terms that you will find in many recent and older articles, books and conversations devoted to education. These identified areas of concern have influenced the goal of education, considered by UNESCO (1994), to be the guiding principle that presently informs the framework of schools or universities: to provide for every student notwithstanding their conditions, backgrounds, ethnicity and language barriers, including disabled and gifted students, street and working students, students from remote or nomadic populations, and students from other disadvantaged or marginalised groups.

During the past quarter century, there has been a movement toward educating children and youth with learning differences and disabilities together with their age appropriate peers in regular classrooms within neighbourhood schools, an approach referred to as

inclusive education or inclusion. Inclusive education has been subject to multiple interpretations ranging from placement of students with disabilities in segregated classrooms within regular schools, to placement in regular classrooms, to transformation of entire educational systems (Artiles *et al.*, 2006).

The following definition provided by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in the Salamanca Statement and Frame work for Action (UNESCO 1994) is widely referenced throughout the literature. The basic principle of inclusive education involves accommodating all students to learn together notwithstanding their differences or difficulties. In achieving this, an inclusive school should be able to identify and meet the different needs of their students, accommodating diverse learning styles and rates of learning, and maintaining effective and quality education by the use of effective curricula, excellent organisation, teaching skills and quality resources for learning. There is need for a continuum of support and service to correspond with the continuum of special requirements met in schools (UNESCO 1994).

Through the above definition and the literature on inclusive education, as will be discussed later in Chapter Three, two cornerstones of inclusive education have been identified:

(a) Curricula that are accessible and beneficial to all students (Tomlinson 2001; Hitchcock *et al.*, 2005; Frattura and Capper 2006; Stanford and Reeves 2009) and;

(b) Teaching strategies and teaching methods that are accessible and beneficial to all students. (Hunt *et al.*, 2003; Frattura and Capper 2006; Idol 2006; McLeskey and Waldron 2007; Todd 2007).

Giangreco and Doyle (2007) assert that, within an inclusive approach, teachers need to be involved in ongoing substantive instruction for all students in the classroom. However, despite twenty-five years of inclusive education (Hemmingsson *et al.*, 2003; Broer *et al.*, 2005; Giangreco *et al.*, 2006; Tews and Lupart 2008). Although teachers' attitudes toward inclusive education are increasingly positive, they report multiple

concerns regarding the implementation of an inclusive approach (Burstein *et al.,* 2004; Dybdahl and Ryan 2009). In particular, several studies report that teachers feel ill equipped to provide instruction tailored to the ever-increasing range of needs within their classrooms (Smith and Smith 2000; Burstein *et al.,* 2004; Idol 2006).

The issues that gave rise to this research study paralleled those identified in the literature. Concerns related to support for inclusive education, specifically the role of teachers. Consequently, potential solutions needed to include consideration of roles and responsibilities of management as well as current instructional approaches. However, a review of literature in the area of inclusive education yielded limited research on alternative approaches.

Despite growing concern over the roles of teachers, little has been written about the processes for resolving role issues within inclusive schools and school divisions. Moreover, there is an absence of research that explores specific instructional approaches as a catalyst for addressing role issues (UNESCO 1994).

In this study, what are the factors that make Libyan universities inclusive for all students? With my desire to understand how university will be fully supportive of the implementation of the inclusive education policy, my basis was to find out which faculty members' activities or practices were most efficient to assist all students within an inclusive education curriculum and teaching system. To totally comprehend the process by which policies are being implemented, I was required to study some past examples of the successful practices and analyse proof of implementing polices at the university level. I studied four public universities in Libya. In response to a description of this study and selection criteria, universities were nominated by the Ministry of Education based on the university's size and geographical location (east and west Libya). The interest of the researcher in exploring the inclusive education practices in Libyan universities has despite growing concern over the roles of teachers, little has been written about the processes for resolving role issues within inclusive schools and school divisions. Moreover, there is an absence of research that explores specific

instructional approaches as a catalyst for addressing role issues. (UNESCO 1994) arisen for three important reasons:

The first reason was that Libyan higher education suffers from considerable problems with curriculum design and a lack of teachers, which prevent it from implementing of inclusive education - this comes from the several reports arranged by many Libyan experts and presented to UNESCO to be presented at many international conferences. This has led the researcher to investigate these problems in one particular higher education discipline in order to contribute to understanding and informing such problems as much as he can.

The second reason is as a result of the experience of the researcher in teaching in Libyan universities from 2002 to 2007. In this period the researcher noted that there are problems in the curricula design and teaching methods in Libyan universities in responding to the challenges of inclusive education.

The third important reason was that many faculty members have expressed their dissatisfaction with many issues concerning the curricula design and teaching methods, and have called for solutions to be found as soon as possible to reform the current situation of implementation of inclusive education.

1.3 Significance of the Study

The following are reasons that indicate that this research will make a contribution to education:

- This research is significant because it can create a greater awareness of inclusive education and its importance for Libyan universities. It is hoped that faculty members' perspectives and attitudes will help all stakeholders, that is, the local government, the Ministry of Higher Education, teachers, parents, and university management in Libyan education, to improve support and services for all students in universities.

- This research is also intended to inform the Ministry of Higher Education in Libya of the inclusive practices happening in universities that have accommodated all students. It is hoped that the Ministry of Higher Education in Libya may begin to implement positive changes within the current education system and encourage inclusive practices in all universities for the benefit of all students. This research is also significant because it will contribute to the international literature on inclusive education.

- The formulation of education policy has attracted great interest, both nationally and internationally, while minimum attention has been given to the area of implementation and receiving the policy.

- Studies on inclusive education have previously been carried out to some extent in developed countries. There is a need to carry out such studies in developing countries.

- This study is considered to be the first study in Libya which takes into consideration inclusive education in the higher education sector.

1.4 The purpose of the study

The purpose of the study is to explore the inclusive education practice in Libyan universities; this study was designed to address the variables that influence inclusive education practice in Libyan universities. To accomplish this, the following research objectives will be pursued:

1.4.1 Aims of the study

1- To what extent are Libyan universities able to implement the policy of Inclusive Education?

2- To identify and understand curriculum design in Libyan universities in the context of inclusive education.

3- To explore the methods of teaching practice in Libyan universities in responding to the challenges of inclusive education.

1.4.2 Objectives of the study

Objective 1: To find out whether faculty members understand the concept of inclusive education, philosophy and the possible future changes in Libyan universities.

Objective 2: To identify the main challenges faced by Libyan universities with respect to adopting inclusive education practise.

Objective 3: Understand how curriculum design can support the implementation of successful inclusive education in the Libyan universities.

Objective 4: To obtain the factual information on teaching methods in Libyan universities in the context of inclusive education, and suitability for individual differences between all students.

1.5 Research Design

This section provides an outline regarding the study methodology used to meet the study aims. Several procedures were undertaken to reach the final draft of the study instrument. By adopting a cross-sectional methodology, a questionnaire including four open-ended questions, which were used in several empirical inclusive education studies, was used in this study to gather the data from one sample: faculty members in Libyan universities.

The quantitative method which implies the use of the questionnaire was used in this study for the collection of data about the underlying constructs proposed in the theoretical model. These constructs includes philosophy of inclusive education, policy of inclusive education, curriculum, and methods of teaching and teacher practices. These were designed with multi-item measures using 5-point Likert scales, and using items that have been implemented in previous tests to measure them.

The collection of data for this study was by the use of a questionnaire separated into eight parts, including questions measuring the intended constructs and demographic questions. This was because the targeted respondents are from a non-English-speaking region, so a similar approach of back translation was conducted as recommended by cross-cultural methodological researchers (Brislin *et al.,* 1973; Malhotra *et al.,* 1996; Temple 1997). A pre-test was performed before carrying out the final survey, to ascertain that the phrasings of the questionnaire are clear and comprehensible, and the letters of the instrument were archived. A pre-test is needed to find out if there is any fault or issues with the instrument, and to find out the face validity of the measures.

Two statistical techniques were used in the analysis of the data. The preliminary data was analysed with the Statistical Package for the Social Sciences (SPSS) version 18 which gives the descriptive analysis research samples such as means, standard deviations, and frequencies. The measurement model was tested by the use of the Structural Equation Modelling (SEM using AMOS 17) using Confirmatory Factor Analysis (CFA). SEM was conducted using the two-stage approach recommended by Anderson and Gerbing (1988).

In the process of analysing the data, the researcher first accessed the measurement model, then proceeded in assessing the structural model. The first assessment was aimed at developing underlying measures through the use of CFA. In this study, measuring the model was carried out in two stages. This has to do with validating the underlying constructs. In the process of examining reliability, Cronbach's alpha and CFA was used in the assessment of the internal consistency of measures. Validity criterion, construct and external validity, which involves convergent and discriminator and external validity, were also assessed. With the completion of stage one, which involves the development of the scale, the research questions were tested (the structural model).

1.6 Organisation of the thesis

The study will be divided into six chapters:

Chapter One: Provides background and the research problem. I then outline the significance of the study, the research aims and objectives and the research design. Finally, the organisation of the study is presented in the last section.

Chapter Two: Since this study deals with perspectives of Libyan faculty members about inclusive education practices, it is essential to provide a comprehensive background and context for the study. This chapter specifically addresses: Overview of Libyan higher education, evaluation of reality of Libyan higher education, the current vision of inclusive education in Libya, and Libyan higher education and inclusive education.

Chapter Three: This chapter will present a review of the literature about inclusive education practices. The chapter will discuss the following subject areas: (a) Defining inclusive education, an evolving vision of inclusive education, the concept of inclusion and the implications for society, inclusive education and social inclusion (b) Curriculum and inclusive education, (c) Teaching and inclusive education.

Chapter Four: This chapter will discuss the methodology of the study, discussing the population of the study, the selection of the sample, the translated instruments, statistical procedures, data collection, and data analysis.

Chapter Five: This chapter presents the analysis of the data collected for the purpose of this study. The analysis includes two parts: First, descriptive analysis will be presented, starting with the main characteristics of the respondents and covering the trends of their opinions obtained from their answers, presented in percentages. Second, inferential analysis will be conducted using the Structural Equation Model (SEM) applying Exploratory Factor Analysis in the first stage to identify the model that contains the factors that have the most significant impact on Inclusive Education using SPSS, and in the second stage testing the fitness of the model though Confirmatory

Factor Analysis using AMOS. Before implementing the SEM, the data will be tested for normality and consistency, in order to ensure its validity for the analysis.

Chapter Six: This final chapter provides related discussions. The chapter will discuss the following: the results as related to the philosophy of inclusive education, policy and implementation of inclusive education, curriculum and teaching methods in Libyan universities, discussing the results of the open-end, and discussing the structural equation modelling related to the research aims. Conclusions, implications, and limitations, general recommendations and recommendations for future research are presented in this final section.

CHAPTER 2

The social environment and Libyan higher education

2.1 Introduction

This chapter discusses the different stages of education development in Libya, starting from the early Ottoman era, when education received very little attention and only focused on religious matters rather than modem education (Hamdy 2007). During the late Ottoman era, the authorities made some disorganised efforts to keep religious education going through small mosques (Zawiya), which were widely spread all over the country. During the Italian occupation of the country an Italian system of education was introduced, which promoted the Italian language and culture, undermining the previously widespread mosque education (El-Fathaly 1980). Moreover, during World War II, all schools were closed as Libya became a major battle ground in the North African region.

On the other hand, following the end of World War II the British, who succeeded the Italians, managed to open schools which were closed during the war. The British worked hard towards promoting education among the people and towards improving the system of education. In this regard, they introduced vocational training for the first time. All this happened at a time when the Libyan people showed great eagerness for education as the only way to achieve economic and social progress. Yet, prior to independence in 1951, education was inadequate in terms of content and form, as the level of illiteracy in the country reached 95 per cent, exacerbated by poor economic resources and deteriorating living standards. In other words, Libya could be described at that time as a breeding ground for illiteracy, disease and poverty, as education was not a priority for the masses.

But nonetheless, five years after independence, policies featuring free and compulsory education emerged for the first time and universities were established in major cities such as Tripoli and Benghazi, and the country witnessed a huge boost with regard to education and modernisation, assisted by the unprecedented oil boom. During this era,

education was gathering pace at all levels as major developments were achieved. Schools can be found everywhere in cities, towns and villages across the country, including female education at all levels.

This Chapter is divided into five sections as follows: (2.2) The social and educational environment in Libya, (2.3) Overview of Libyan higher education, (2.4) Evaluation of reality of Libyan higher education, (2.5) The current vision of inclusive education in Libya, (2.6) Higher education in Libya and inclusive education.

2.2 The social and educational environment in Libya

2.2.1 The social environment

Libya had suffered for a long time under Ottoman rule, the Italian colonisation, as well as the British and French administrations, and during those times a sovereign state in Libya was non-existent. However, even when independence was declared in 1951, that independence was not achieved in the real sense of the word, which made El-Fathaly (1980) describe the state as "a made-up state", as it lacked the natural resources that would contribute to the process of building up a true state. At that time of underdevelopment, disease and illiteracy were prevalent throughout the sparse and scattered population, to the extent that a modern state in Libya was a remote dream. The political scene was dominated by the elite of the most powerful clans and families, who also occupied key state positions until the 1970s (El-Fathaly 1980).

However, given the fact that the traditional leadership was a reflection of conflicts of interests of different groups, this generated power struggles which greatly contributed to the instability of the system. Hence, the country lost its sense of direction to the extent that it became almost impossible for policy makers to outline the right policies that would guide the country to achieve its anticipated socioeconomic and political goals. For example, at the economic level, Libya was one of the poorest countries in the world. In this regard, Higgins, (1968) maintains that before oil was discovered, Libya could be considered as a poverty state, where most people were living in destitution and energy and mineral resources were completely lacking, not to mention

the harsh climatic conditions that would not allow the expansion of agriculture, and the lack of capital, skilled labour and basic infrastructure that only made things worse.

The Libyan population can be described as traditional with regard to behaviour and attitudes. The society generally consists of major social units based on the family, clan, tribe and the village, where the idea of extended family is most important and widely promoted. According to Abdulla (1999: p.124), the extended family and the tribe in general represent the social units that contribute most to strong social belonging. The father is the main authority in the family and his decision is always unchallenged by any of the family members, irrespective of what academic qualifications they hold. Would emphasise that despite rapid developments in all areas of life within the last decade, Libya remains fundamentally a traditional society in which loyalty to the region and tribe is stronger than allegiance to other units. As a matter of fact, individual interests in Libyan society, particularly in the traditional societies, are part and parcel of the family interests and in the case of conflict of interests, family interests come first.

For this reason, individuals should show allegiance and respect to family values and should avoid any behaviour or attitudes that could bring shame on or tarnish the image of their family or clan. Hence individual behaviour and attitudes are always inspired by family values.

Religion is always highly valued among Libyans, to the extent that it constitutes one of the main variables that influence social behaviour. In fact, religious values in Libya have been deeply rooted since the early Ottoman occupation and during the royal era, when religious leaders had the upper hand, dominating all aspects of life until 1970 (El-Fathaly 1980). The fact that religious leaders were highly respected by the public and the high social status they retained gave them an advantage over other social groups to lead society and occupy key positions in politics, education, administration and the judiciary. Nonetheless, religion had always been abused during the colonial era as religious institutions and religious education had been promoted for political purposes, particularly during the Ottoman occupation.

2.2.2 The development of education in Libya

2.2.2.1 Education during the first Ottoman rule (1551-1711)

Most of the few reports available on the development of education during the pre-independence period would suggest that the Ottomans were not concerned about education. For example, Fergiani (1983) states that under the Turkish, education received little official support. Likewise, Habib, (1975) points out that on the whole, the Turks neglected education. Habib (1975) also points out that the history of education is closely tied to the last 400 years of colonial rule. He also suggested that the early education after the Muslim conquest in 643 AD was mainly religious and centred around mosques as schools (Habib 1975). So, education during the Ottoman era could be described as private, religious education.

However, given the economic hardships at that time, education was not valued by the community and it was less popular. Moreover, there were very few private schools in the main cities and these schools were inaccessible to the majority of people due to lack of transport. The main purpose of these religious schools was to graduate teachers of the Arabic language and religious subjects, or sharia judges to work in very remote areas (Attir 1980; El-Fathaly 1986).

2.2.2.2 The period of the Karamanli dynasty in Libya (1711-1835)

During the Karamanli period, Libya in general and Tripoli in particular witnessed some development in the education system (Deeb and Deeb 1982). As trade prospered in that part of North Africa during the 19th and 20th centuries, Europeans came in large numbers to settle in Libya, particularly the French and the Italians, and the first non-Islamic school was established in Tripoli in 1804.

2.2.2.3 Education during the second Ottoman rule (1835-1911)

During the second Ottoman occupation, significant efforts to promote religious education were made. The Zawiya, which served as religious centre for the Sunni movement as well as schools, became important from 1843 onwards (Habib 1975;

Deeb and Deeb 1982). The first Zawiya was established in Albeidah town in eastern Libya and more followed later in other cities and towns across the country, where these establishments served as multipurpose institutions, i.e. religious, educational and economic institutions. Then, during this period, the first schools for modern education were established in major cities, where the total number reached 17 schools (Attir 1980). However, with the increasing European influence in North Africa at the end of the 19th century, more educational reforms were introduced by the Turkish administration, including the establishment of a teacher training school and a school of arts and handicrafts.

2.2.2.4 Education during the Italian occupation (1911-1943)

Religious education continued to be the main type of education available until the Italian occupation. In this regard, Deeb and Deeb,(1982) would argue that "The Italian colonial period saw a new era in the development of education in Libya." From 1911, the Italian invaders were determined to "Italianise" education and to stamp out the influence of Arab culture. To reach that end, in 1914 they established the Italian-Arabic school, where all subjects except the Arabic language were taught in Italian. Then, by 1915, all mosque schools were subject to inspection and censorship by the Italian authorities. All Zawiyas were closed down and their assets confiscated (Habib 1975).

However, despite all that, the Italian administration invested some funds in education by opening a few primaries, secondary and vocational schools. Furthermore, after World War I the Italian administration made some improvements to the educational system, yet few Libyan parents would take their children to an Italian school (Habib 1975). Then between 1940 and 1943 during World War II, virtually all schools in the country were closed down (Deeb and Deeb 1982).

2.2.2.5 Education during the British administration (1943-1951)

The British reopened schools that had remained closed for four years during World War II. Unlike the Italians, the British made education available for all Libyans and

improved the educational system significantly. For example, in 1944, they introduced a two-year teacher training course for women in Tripoli, enrolling 76 students in the first year and 77 in the second year (Deeb and Deeb 1982: p.26). The British and Italian systems remained separate, although the two systems were under the control of the British administration.

Despite the fact that the British administration focused more on non-religious education and the establishment of vocational schools, the new education system remained inadequate because of the very few schools available and the inadequate curriculum taught at these schools. But nonetheless, the academic year 1943/44 saw a huge boost for the educational process, as schools were opened in most major centres. People showed great interest and the turnout was unprecedented, indicating the keenness of the Libyan people to acquire knowledge (Attir, 1992: p.286). Initially the British introduced the same curriculum that was taught in Palestine but changed their minds following consultation with the Libyans, who convinced them to switch to the Egyptian curriculum (Habib, 1975).

2.2.2.6 Education during the pre-independence and post-independence periods

Before independence in 1951 education was limited in form and content, made available to only a small number of people, and most educational facilities were closely linked with mosques as education was predominantly religious. Hence very few educated people existed and illiteracy was prevalent, affecting 90 per cent of the total population of Libya. The situation could be described as poor if not awful, as secondary schools for girls did not exist, nor did female primary school teachers (Attir, 1992: p. 288).

When Libya was granted independence, there were less than 20 university graduates in the whole country and consequently there was a severe shortage of qualified people required to fill the administrative and executive positions that were once filled by the British. So, in order to boost education in the country, the 1951 constitution and the education ordinance of 1952 gave all Libyans the right to an education, by making primary education compulsory for children. Furthermore, education was given priority

in government plans and huge budgets were allocated for this purpose in the five-year development plan (Habib, 1975: p.281; Attir, 1992: p.278). At the time most Libyans believed that modern education would be the only way out of the economic underdevelopment. For this reason, their zeal for education boosted education, particularly male education, culminating in the establishment of the first university in 1955.

As a matter of fact, the discovery of oil in the early 1960s had caused fundamental changes in the economy in favour of educational planning. Hence, schools were established in rural areas no matter how remote those areas were, and many university colleges, as well as vocational schools and training centres, were established. Also, in the aftermath of the discovery of oil, female education became more common and education became more diversified. Those who had received a modern education became increasingly involved in the decision-making process at the social level, which further enhanced their position in society.

2.2.2.7 Education after 1970

Based on the established belief that modern education was the only way out of the state of economic underdevelopment, Libyan society achieved considerable progress towards modernisation, assisted by the strong commitment of the revolution to education. During the last 40 years, since 1970, education has become available for everyone as schools are now found everywhere in Libya. The number of university graduates in the country provides a clear indication of the progress in education that has been achieved so far, as this number had already exceeded 10,000 graduates in the late 1970s, as compared to only 14 or fewer in 1950 (Attir, 1992).

Furthermore, the revolution decided to introduce some changes to the educational system to ensure that the long-term requirements of Libyan society were met in the most effective way possible, taking into account the following guidelines (Deeb and Deeb 1982): First - educational planning should focus on vocational and technical education to provide learners with necessary technical skills. Second - higher education should focus on applied sciences that would help the development of the

Libyan economy. Third - the age of compulsory education should be raised from six to nine years, to provide the opportunity for the maximum number of children possible to join schools. Fourth - the fair geographical distribution of schools and other educational institutions to cover the whole country. Fifth – the new educational plan should give more attention to adult and further education (Deeb and Deeb 1982). Eventually the above guidelines provided planners with more scope to develop the educational system even further. For example, by the early 1970s, significant changes had been introduced to the system at all levels (Deeb and Deeb 1982).

The educational system in Libya has played a major role in the realisation of the concept of national identity, particularly following 1970. From the table shown below (table 2.1) one can easily judge the efforts that were made by the revolution in the area of education in the first five years or so.

Table 2.1- The number of schools and students 1970-1975

Type of School	1970-71		1971-72		1972-73		1972-74		1974-75	
	S	**A**	**S**	**A**	**S**	**A**	**S**	**A**	**S**	**A**
Primary	1311	148371	1397	405435	1687	451928	1807	484986	1906	515811
Intermediate	185	37047	198	43346	230	54744	366	37928	420	90463
Secondary	30	8260	36	9426	44	10908	61	13471	68	14680
Technical	14	3088	15	3202	14	3375	12	3411	13	2883
Total	**1556**	**40214**	**1666**	**467393**	**2052**	**531945**	**2323**	**531945**	**2497**	**591402**

Source: Deeb and Deeb (1983: p.36)

However, Fergiani (1983, p.35) points out that "education, according to the revolution is one of the most important supports of real development towards a better community, and the only means for upraising human capacities to the maximum ability of talents." For this reason the revolution has concentrated from the outset on improving the quality of education to match international standards (Fergiani, 1983), and giving every citizen the right to a free education, including compulsory education for children.

This is dictated by the conviction that the Libyan image of Libyan society cannot change for the better unless a new educational philosophy has been adopted and female education addressed (Barton 2003). In order to reach that end, the state allocated just under LD 220.5 million (Libyan dinars) to the education sector in the two-year development plan of 1973-75, as compared to just over LD 57.5 million allocated for this sector in the seven years from 1963 to 1970 (Barton 2003).The following table (2.2) indicates the changes that have taken place and the level of development and modernisation as reflected by three educational plans between 1969 and 1973 (Barton 2003).The table features increases in the number of primary, intermediate and secondary school pupils, both male and female, as well as increases in the number of teachers, schools and classes during the same period.

Table 2.2- Features the increases in the number of pupils, teachers and classrooms 1968-1974

	1968-1969			**1973-1974**		
Descriptions	**Primary**	**preparatory**	**Secondary**	**Primary**	**preparatory**	**Secondary**
Male Pupils	183080	25637	6237	372612	62487	12202
Female Pupils	87537	3544	944	107648	20009	2542
Teachers	9161	2076	608	19631	5128	1364
Schools	1069	144	25	1716	372	61
Classrooms	**8311**	**818**	**250**	**16995**	**2570**	**521**

Source: Fergiani (1983: p.38)

2.2.2.8 Women's education in Libya

The fact that the promotion of female education is closely associated with the September 1 revolution in 1969 does not mean that the revolution marked the beginning of female education. In this respect, Obeidi (2001) maintains that "under the monarchical regime some encouragement was given to an expanded role for women in society. This was clear in the increasing numbers of girls' schools during this period. But as yet the revolution has put more emphasis on developing the role of women in society. Obeidi (2001) goes on to argue that the ideology and policies of the Libyan

regime towards women have changed and developed substantially over the years since 1970.

Likewise, Deeb and Deeb (1982, pp.73-74) would argue that the most significant development in the emancipation of the Libyan women has been in the area of education, and there is little doubt that the major impetus behind the education of women has come from the government. So, it could be argued that the government realised that educated women could play a major role in society at all levels, including economic, social and political levels (Deeb and Deeb, 1982: p.75). Consequently, numerous female schools have opened all over Libya since 1969, and girls' education up to intermediate level has become compulsory ever since (Deeb and Deeb 1982; Obeidi 2001).

The following tables (2.3) feature statistical information illustrating the significant changes that have taken place with regard to women's social status in terms of emancipation and education since 1969. These tables include selected statistical information related to specific periods between 1969 and 1996. This period is specifically significant as it marks the beginning of women's education in earnest; even though the following periods are equally important where considerable developments in women's education have taken place.

Table 2.3- Women's school and university education in Libya during the period 1969-70

Level	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75
Primary	107047	128709	159566	190235	214880	234360
Intermediate	5707	6554	9055	12728	19181	25401
Secondary	1071	1258	1574	1990	2475	2951
Technical	1679	1984	1897	4087	7574	10966
University	299	385	496	719	888	1309
Total	**115803**	**138505**	**122588**	**197158**	**244998**	**274986**

Source: Deeb and Deeb (1982: p.36)

2.3 Overview of Libyan higher education

This section deals with several issues relating to Libyan higher education. The first issue to be discussed is the history of Libyan higher education, which is divided into three stages. Secondly the topic of evaluation of the current reality of Libyan higher education will be addressed, combining the strategy and aims of Libyan higher education, obstacles that it faces, and the proposals set out for its development.

2.3.1 The history of Libyan higher education

The history of Libyan higher education was divided into three stages. The first, from 1955 to 1972, begins with the establishment of the first Libyan university in the city of Benghazi, with a branch established in Tripoli in 1957. The period is marked by the gradual increase in the number of faculties and subjects covered. Stage two (1973-1985) only saw the construction of two more universities, Elnajem Elsateah University in the city of Al-Breega (mid-northern Libya) in 1982, and Sabha University (southern Libya) in 1984. During this time, the number of university students increased from 11,243 (1975-6 academic year) to 34,118 (1983-4 academic year), with the larger increases in the later years possibly linked to the earlier opening of many more secondary schools in the country, allowing a significant expansion of higher education provision. The third stage (1985 – present), policy of opening new universities throughout the country was adopted, which resulted in a total of 25 universities being created: nine main universities; seventeen described as 'Department Universities' (branches of the nine main universities); and three universities of special nature. These universities are listed in table (see appendix G).

More recently (2009) the universities listed in Table were reorganised to become the 12 named universities listed in Table 2.4; this table also provides information on the number of teaching staff of Libyan and non-Libyan origin; and the male, female and total number of students in each university (General Authority for Information, 2006). It may be noted that most, but not all, of the universities are predominantly staffed by Libyan nationals; that there are generally more female than male students; and that the

two oldest universities (Benghazi and Tripoli) account for nearly half of the total student numbers.

Table 2.4: The number of students and teachers at Libyan universities, (2009-2010)

Name of university	Number of teaching staff	Number of students
Tripoli	741	60912
Benghazi	619	50055
Sabah	368	10365
Naser	139	800
Omar El-Mukhtar	550	23835
AL-koums	289	7606
ALzowia	344	21633
Sert	416	21956
JableGharbi	226	14195
Asmarya	116	1427
Musrata	281	14195
Total	**4138**	**227043**

Source: Libyan higher education (2010)

2.3.2 The financing system of Libya's higher education

Libyan law emphasises that study is considered free of charge for Libyan students at all stages of education (excepting postgraduate education); for this reason the higher education sector is financed by the public budget. Accordingly, the government allocates approximately 20% annually of the general budget of the country for education.

2.3.3 The educational systems of Libyan university education

Two educational systems are implemented in Libyan university education, which are:

- **Academic year system**

The study period in accordance with this system ranges between four years in most specialisations and six years in others such as medical specialisations. The study year starts in the month of October and finishes in June or July, comprising a number of

compulsory modules determined by the university administration. In this system there are no optional modules offered, although the number and kind of modules taught in similar departments and specialisations vary among universities. The system of exams is divided into two types: the first one is a mid-year test for all modules, the second one is a final test, in which the student has to obtain fifty percent overall in each module to pass it. Students who are not able to pass all of the modules are given a second chance by doing supplementary exams and they are allowed to refer two modules to be completed in the following year.

- **Semester system**

The study period of this system is three years, and four years in some departments. Each year is divided into semesters, each consisting of compulsory modules. A student can transfer two modules to the following semester if he/she could not pass them, otherwise he/she can repeat the exam of modules which have not been passed in the next semester without attendance.

2.4 Evaluation of reality of Libyan higher education

Although higher education in Libya has witnessed a significant development in the last twenty years in terms of expansion in the establishment of universities, and increasing the number of students enrolled, this quantitative expansion came at the expense of quality (Bashshur 2004). Therefore, higher education in Libya faces many problems that hamper its ability to catch up with and meet modern demands, and fails to meet the society`s needs.

Accordingly, Libya has realised that the most important way to accomplish the goals intended for higher education is by evaluating its reality, so as to investigate its related strengths and weaknesses. To draw more light on this matter, it is useful to discuss the following aspects: (a) Strategy and aims of Libyan higher education (b) Barriers and obstacles in Libyan higher education and their solutions (c) Recommendations and proposals to develop higher education (see appendix H).

2.5 The current vision of inclusiveeducation in Libya

To understand the overall perception of Libyan education, there are three phases of evolution during this concept. This development reflects, in fact, the social and economic development and the cultural heritage of the Libyan society, and these phases are: 1) 1970s phase'; 2) 1980s phase'; 3) the present stage or the present time.

In the first phase, the social, economic, cultural and scientific real state in Libya requested that the concept of inclusive education is primarily focused on the high rate of illiteracy of Libyan society over 85% of men and over 90% of women are illiterate. (2008)

In other words, the priority of the educational system was the spread of education in the society to combat illiteracy and its impacts, and access to inclusive education for all population groups.

The second phase is the 1980s; there was a major achievement in spreading education among all people, and literacy rates increased among the population of males and females alike. Thus, education developed in quantity and quality, and in this period the concept of inclusive education evolution developed significantly

The third phase of the concept of the inclusive vision of Libyan education is the current period. It is noted that since the beginning of the third millennium, there has been great development in the concept and vision of inclusive education. This development comes in response to the domestic, social and economic growth in Libyan society itself, and in response at the same time to regional and global changes, especially the development of knowledge and technology, and the emergence of what is known today as the knowledge society and the knowledge economy. (2008)

As for university education, by the application of inclusive education the number of students has developed from 19,315 students in the academic year (1980 - 1981), to 279,150 students in the academic year (2006- 2007). These students have studied and graduated from more than ten universities, and there were many other results and

achievements through applying the concept of inclusive education in Libya; the most important of these are:

- The growing and increase of education enrolment rates at all educational levels for both genders (males and females).
- The increasing awareness and social demand for education.
- The adoption of decentralised and local financial budgets earmarked for education, and work on its renewal and development.
- The high degree of ambition among young Libyans as a result of inclusive education, and the wide cultural movement that accompanied it, sought prospects and perceptions of the various population groups, including young males and females; also the social mobility caused by education led to the expansion of the group of qualified people from the different educational and training institutions, whose professional and living style within society has changed and improved thanks to this education. They were freed from illiteracy, and they acquired modem professional knowledge and skills in various fields of specialisation.
- The multiplicity and diversity of educational opportunities and patterns, the growth of technical and vocational education as a basis for social and economic growth in the community, and as a basis for the industrial and technical base founded in Libya, which is progressively growing.
- Homogeneity of social components weaving in a single cultural identity that led to the unity of thought, action and reaction.
- The availability of a large number of teachers, and training the necessary administrative staff and educational inspectors and supervisors.
- Growth and development of higher education, and the trend for the establishment of specialised universities and technical higher institutes, all

serving social and economic development, in addition to contributing to building the knowledge society which begins, day after day, to grow and increase in quantity and quality.

- Change the status of women in the society since they have became partners with men in all paths of social life.

2.6 Higher Education in Libya and Inclusive education

The higher education system in Libya is considered to be relatively recently established, since the first College of Arts and Education was founded in 1955, to form a base of the Libyan University in the city of Benghazi; there were only33 male students. This university has grown and the number of universities and colleges developed with it to reach 14 universities with more than 300 scientific sections and departments in the academic year (2004-2005).

The previous achievements of education and the intellectual, economical and technical changes in the world have apparently prompted Libya to the perception and understanding of the concept of inclusive education as being broader and more inclusive than countermeasure concepts, to include the following educational activities:

Continuing the dissemination of education for all and the preservation of past achievements; building the human capacity for all segments of the population with the prevailing concept today in the developed world; linking educational needs, expectations and aspirations of all segments of society; the development of the specialised secondary education system that was introduced in Libya in the 1980s;some amendments recently witnessed, requested by the current development stage and the social, economic and geographic privacy of the Libyan society. These amendments include:

Determine the number of specialisation sectors in secondary specialised education to only six sectors and the introduction of new specialties such as computer sciences,

languages and economic and social sciences, and introduction of new specialties such as computer sciences, languages and economic, administrative and legal sciences.

The introduction of advanced educational and pedagogical techniques, and pay attention to computer sciences and mathematics in all disciplines and at all levels of education, the introduction of digital technology skills in school curricula, Embark on learning and make adjustments in the style and method of final examinations for secondary education certificate; Renewal and diversification of education patterns, especially secondary and university education, to respond to the needs of the different groups in the society, and respond to the Libyan labor market as it is today and what is expected in the future,

Offer a greater opportunity for the private sector and the local community sector to contribute to the dissemination of education and ease the burden on the State general budget

Interdependence and complementarily between the different educational stages, within the educational system on one hand, and

Interdependence and integration with the overall society and its development on the other, and

Exchange educational and international experience to use in further renovation and development of the inclusive concept of education in Libya

Particularly in science and high tech, and in building the knowledge economy, the rehabilitation of a large numbers of teachers and raise their scientific and professional experience to be able and qualified to teach the new developments in various branches of knowledge, and train them to cope with modern teaching techniques. Interdependence and integration with the overall society and its development on the other.

CHAPTER 3

Inclusive Education: a review of the literature

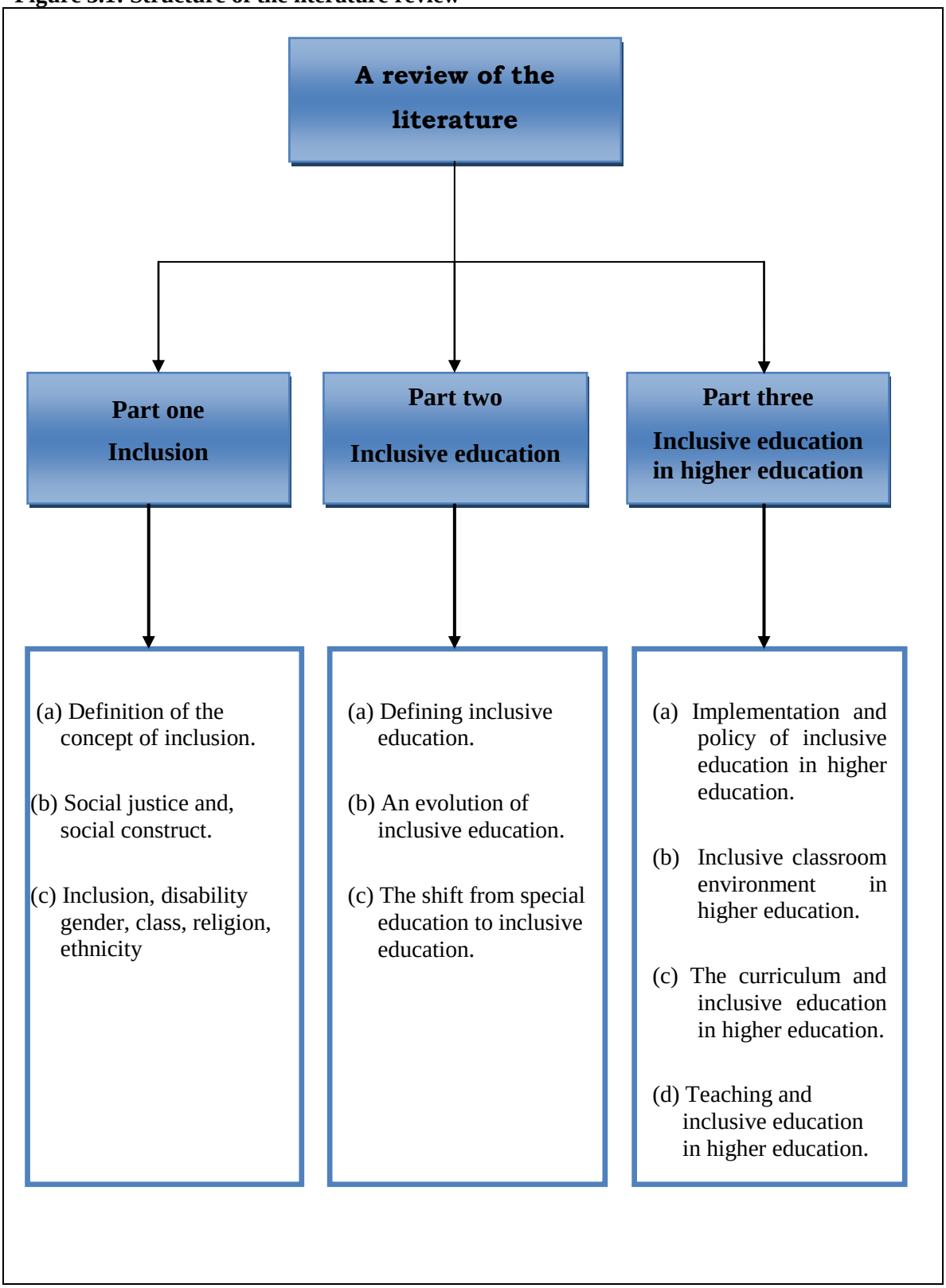
3.1 Introduction

This chapter aims to provide a foundation to understand the background of the research problem in this study. The research problem under investigation is to explore inclusive education practice in Libyan universities, also supporting the government in endorsing legislation and to encourage the effort of different applications.

Adopting inclusive education has been a serious challenge to so many nations of the world. Some of the major factors hindering the growth on universal education in different nations are result-oriented awareness campaigns, insufficient financial requirements and inadequate experienced teachers and learning materials such as textbooks and academic curricula (Eleweke and Rodda 2002). Some familiar impediments in some countries abroad include insufficient resources and information, lack of skilled and trained instructors and academic staff, inadequate education systems, lack of parental participation/encouragement, gender discrimination. On the other hand, there are hindrances as regards financial requirements of education, assessing education institutions as a result of geographical location and regional discrepancies resulting from conflict and post conflict issues in different areas.

The subject matters that make up this study (i.e. conceptualisation, data collection, data analysis, and write-up) that are considered necessary topics to discuss are: (a) Inclusion (b) Inclusive education (c) The inclusive education in higher education, implementation and policy of inclusive education, curricula and inclusive education, and teachers and inclusive education.

Figure 3.1: Structure of the literature review



3.2 Inclusion

This part is divided into three sections as follows: (a) Definition of the concept of inclusion, (b) Social justice and, social construct, (c) Social inclusion, and disability gender, class, religion, ethnicity.

3.2.1 Definition of the concept of inclusion

Despite the apparent convergence of international policy and legislation around the inclusion agenda, the definition and meaning of inclusive education is still the subject of much heated debate and defining best practice is no simple task (Slee, 2001). The value of aiming for the development of an inclusive education system in which tolerance, diversity and equity are striven for is uncontested; the means by which this is to be achieved is much more controversial. Dissatisfaction with progress towards inclusion drove demands for more radical changes in many countries (Slee, 1996). In developed countries, however, it is easy to forget that an estimated 115-130 million children across the globe do not attend school at all. Just as alarming are the countless others within the school system who are being excluded from quality education or who are dropping out of school early (UNESCO, 2005). Inclusion involves a particular emphasis on the educational rights of those groups of learners who may be vulnerable or at risk of exclusion or underachievement.

Inclusion appears to be a grand and elusive concept. The fact that a single accepted definition has yet to gain currency reflects its complex and contested nature (Florian, 1998). Inclusive education looks at both the rights of students, and how education systems can be transformed to respond to diverse groups of learners. It emphasises the need for opportunities for equal participation for any students with disabilities or special needs in the education system, preferably in a mainstream environment. Despite many developments, Ainscow *et al.* (2006) contend that the development of inclusive practices in schools is not well understood.

Inclusion has been conceived as a new principle that challenges much of existing practice in the field of special needs education (Ainscow, 2000). There is a plethora of definitions for as Nind *et al.* (2004) saliently observe, inclusion is a much contested territory and not an 'easy task' (Naicker 2005). Like the phrase inclusive education, there is a lot of debate in literature since different people conceive of it differently.

There has not been a universally accepted definition for the concept of inclusion (Pearson 2007). According to Beveridge, (1999) it is open to differing interpretations Mitchell (2005) notes that inclusive education is a complex and problematic concept .There appears not to be a universally accepted definition of the concept (Mitchell, 2005) as different countries define the concept from their individual social and cultural perspectives. For example, Mitchell, (2005) points out that Canada's federal charter's understanding is similar with the principles enshrined by the Salamanca Statement (UNESCO, 1994). However, in the Libya, there is no official definition in spite of the fact that the country regards the concept to mean placing children with Special Education Needs (SEN) in the general education. A number of definitions have been proposed for the concept of inclusion some of which see inclusion as 'mainstreaming, or 'integration'. There is an ongoing debate surrounding their connotations. Consequently, (Mitchell, 2005) points out that the better way to understand the concept is to make a distinction between them.

Salisbury (1991) sees 'integration' as 'push in' while Ainscow (1995) conceive of 'forcing' the child with SEN to participate in an existing structure. This means that in mainstreaming and integration the child has to adapt to fit into (Hunt and Goetz 1997) the regular education curriculum. Also, it means the child's needs and circumstances are used in determining what educational provision he or she receives. Hence, the school system 'remains largely unchanged' (Ainscow, 1995). On the contrary, Kivirauma *et al.* (2006) find the distinction bizarre since the push in or fit in description fails to fulfil or satisfy the 'democratic' aims of integration, of which equal treatment is a major goal in this connection. They put forward the argument that integration demands a change of paradigmatic viewpoint from the - individual- to the group. Thus, they see integration to be concerned with groups and school classes

where the natural differences of pupils are accepted within everyday routines of the groups and classes.

Defining inclusion in schools raises consideration of two fundamentally interrelated issues: (a) connotative and denotative intent and (b) daily practice (Aniftos and McLuskie 2003). Operationally defining inclusion is necessary for several reasons. First, the way teachers, parents, administrators, and other stakeholders define inclusion affects attitude and, ultimately, the extent of implementation. A second reason for giving inclusion a definitive identity is to involve more stakeholders in discourse (Sandall and Schwartz 2002) in order to strengthen common bonds (Gomez and Diken, 2003) while simultaneously addressing inequalities and systematically utilizing accessible resources to maintain inclusive environments.

Lupart (1999) describes authentic inclusion as a regular education classroom wherein the teacher, operating under the principles of a unified risk-free learning environment, plans for and delivers differentiated instruction with the intent of promoting academic progression in all students. Lindsay (2007) argues that the most important condition for effective sustained inclusion is a change in educators' attitudes from negative to positive. In order to achieve authentic inclusion, Libyan’s education system and education stakeholders must undergo collective pedagogical change in its infrastructure, cultural values, norms, and pedagogical beliefs.

3.2.2 Social justice, and social construct

The term inclusive education is derived from a philosophy- based principle which implies achieving utmost involvement of the entire society in education by minimising hindrances and inequitable practices (Ainscow *et al.* 2006). Dyson (1999) explained that these definitions of inclusive education differ majorly, not only between cultures and education systems but to the culture and education systems.

The idea of inclusive education is focused on the vital necessity to encourage democracy to create a platform that will give every student the opportunity to gain from the existence of high quality education made available by the idea of inclusion,

which is a major approach for supporting education and change in societies (Connolley and Hausstätter 2009). Involvement in the aspect of education could assist in dealing with traditional situations as regards to poverty and impending structural issues of transformation of societies and cultures to develop the variety of national societies, and in so doing creating diverse groups socially interacting with each other (Connolley and Hausstätter 2009).

The major purpose of social integration was aimed at solving the problem of exclusion and social discrimination basically with regard to information technology, communications, disregarding youth with problems such as lack of education, unemployment, job seekers, insufficient educational opportunities, insufficient learning ability from immigrants, similarity of cultures, lack of identification of planned education or comprehending the values of cultural pluralism, stigmatisation of cultural varieties and problems of social integration (Arnesen and Lundahl 2006).

Inclusive education could be viewed as a means of attaining social integration. Using social integration and education to emphasise the main problem connected to inclusive education, it means an attempt to solve the problem of poverty and culture in society; the contemplation of varieties of culture as it relates to multiculturalism, integrity as well as in the convenient environment for learning in a framework of shared values. In addition it assumes security of the entire population, both the minorities and the majorities, migrants and exiled population (Nind *et al.* 2003).

Some of the important factors considered in encouraging the improvement and carrying out of inclusive education are:

- Acknowledgment of the need to give precedence to inclusive education in government policies. Applying inclusive education in social policy is an effective method to manage or eradicate harmful consequences of social instability, cultural dissolution and residential isolation. Inclusive education is advantageous in resolving the problem of cultural and ethnic differences in migrants and social schools, and creates an environment for successful government and effective social policy (Florian 1998).

- To encourage standard quality and unbiased access to all forms of education by constructing, diversification and flexibility of verities of values and channels to the education system with standard structures and content, on the basis of expressive global ideas of fundamental education for young people (Florian 1998).

- Building towards a specific pattern of bringing a realistic platform for success in education for the children, with the focus of providing standard training for students requirements for present and potential, with consideration of differences in cultural ethnic backgrounds, beliefs, philosophical and religious background and immigrants.

- Providing clear working strategies and ideas to create opportunities for meaningful learning, to see school as an important catalyst for bringing change to education, an incorporated unit, an institutional base for education and academic which is strongly spread through the school curriculum, starting with childhood education to youth education (Nolet and McLaughlin 2005).

- To rebuild the professional role of educational instructors, teachers and academic staff, with consideration of ethical social values and responsibility. Recognise the importance of properly trained teachers to improve their understanding and reactions/attributes in handling the standards, refining their ways of teaching to correspond to the cultural and social contexts; gradually more complex and decisive teachers should be considered and code signs and co-developers should be considered in inclusive education policies in the schools, not just as implementers of curriculum change (Scruggs and Mastropieri 1996).

In general the effort in achieving inclusive education needs a combined opinion and actions;

a) The idea of social justice and social inclusion.
b) The viewpoint relating to the student's learning capability.
c) The basic ideas that encourage teaching and good learning practice.

Endorsement of understandable political ideas and the technical action of procedures and outcomes surrounding the curriculum (Nind 2005).

Though social integration is important, it is not completely associated with the implementation of inclusive education, in relation to the creation of schools' educational requirements that will suit the requirements of people and various communities, responding to various learning requirements, notwithstanding their social background, culture or personal characters. Inclusive education is not a choice of mechanism or inequality of any kind, but focuses its objectives on ways of incorporating a variety of standards in education, developing social structure which is the major purpose of education. Though there is still need to be sure whether education truly induces the development of a more inclusive society or if it is, in other words, a replica of social exclusion and generation of different forms of unfairness in the education system (Arnesen and Lundahl 2006).

There are controversies associated with the addition of education and social integration despite the fact that education can contribute to the encouragement of equal opportunities among people to introduce them into society with the lowest amount of social justice which is required to achieve democratization in the entrance to knowledge. This gives the public the opportunity to achieve the needed skills to take part in the various sectors of social life (Silver 1994; Vislie 2003).

Social construct

An examination of the international literature on inclusive education suggests that the concept of inclusive education is elusive and has different meanings in different contexts (Florian 1998; Kavale and Forness 2000; Dyson 2003; Hodkinson 2005; Singal 2006; Friend and Bursuck 2011). In other words, inclusive education is not a fixed concept, but a social construct that is dependent on the context and the needs to be addressed in that context (Darling-Hammond and Bransford 2005). Theorists of change also argue that implementers are not passive recipients of policy: Individuals construct their own meanings of what constitutes desirable change (Bowe *et al.* 1992; Clark *et al.* 1999).

There are two models that take the individual and the environment into consideration the social justice perspective and social construction model. Taken together, these models explain the source of the disability and address the systems in place that obstruct student learning.

Social Justice Perspective

The social justice perspective addresses the environmental and individual components of disability. Through this perspective the environment creates "the source of the disability" and is the focus for the interventions that enable equitable education for the learners in the environment (Evans and Penney 2008). The social justice perspective goes beyond acknowledging the barriers in the external environment by ensuring that students themselves are valued. According to Evans (2008), knowing how to create an inclusive environment is a necessary but not sufficient condition for working effectively with students with disabilities. Educators must also understand the students themselves.

Social Construct model

This model dictates that disability is defined by how others react to bodies that do not fit the expectations of the environment (Ang 2010). By recognizing the oppression present within the environment, student affairs educators can begin modifying it to suit all learners in the community. Therefore, the model places the responsibility for change in the hands of the people who control the external environment (Johnson and Fox 2003), not those adversely affected by an environment that does not meet their needs.

Both the social justice and social construction models suggest that change needs to occur in the structural and relational ways campus stakeholders build learning environments. In working to eliminate ableism on college campuses, ability, as an identity type, needs to be incorporated into the work of multicultural education (Villa *et al.* 2005).

Hackman (2012) stated that students with disabilities are experiencing educational barriers depriving them of educational opportunities to which their peers have access. Universal Instructional Design (UID) is a philosophy that works to engage students in the learning process, regardless of their ability level, age, gender identity or expression, race, religion, ethnic origin, language, social class or sexual orientation (Connolley and Hausstätter 2009).

Danforth and Rhodes (1997) argue the term social constructionism has been used to describe positions claiming that what is assumed and understood to be objectively real by persons in the course of their activities is more accurately said to be constructed by those persons in their thoughts, words, and interactions. In terms of special education, social constructionists have typically focused on the way a given disability diagnosis or category gained the status of "reality," how the "real" came to be considered real (Danforth and Rhodes 1997). Disabilities have been explained and used as political and social artefacts, realities created in broad sweeps of social activity by professionals and others.

Sleeter (1996) explained the increased diagnosis of students with difficult learning from relative obscurity to assumed reality. In her analysis (1996) learning disabilities arose as a politically acceptable means of differentiating the poor academic performance of White, middle class students from the school difficulties of poor, non-White students (Sleeter, 1996). In response to the expanding social constructs in the areas of disabilities and special education, Danforth and Rhodes (1997) state that by failing to question and contest the disability construct as universally true and real, even inclusion advocates have unintentionally worked against their own integrationist and civil rights purposes, supporting the devaluation and stigmatization of students 'with disabilities' while decrying the same.

Even well meaning special educators, who have advocated for more respectful and egalitarian ways of identifying, labeling, and serving students with disabilities, are still working within a system of social constructivism that identifies students by their abilities and disabilities. Social constructivism assumes that the various forms of

‘disability’ are not physical absolutes, but social designations that are made by people in interaction and relationship (Danforth and Rhodes 1997). Disability, therefore, is considered to be constructed by society, or a social construction.

3.2.3 Inclusion and disability, gender, religion, ethnicity

The inclusive education movement was focused primarily on people with disabilities and learning difficulties. This assumption can be seen across the literature and across a number of legislative documents (Ainscow *et al.* 2006). More recently the concept of inclusion expanded to embrace those who are at risk of marginalisation or exclusion for whatever reason. It can be thought of as an approach that seeks to address ‘barriers to learning and participation’, and provide ‘resources to support learning and participation’ (Ainscow *et al.* 2006). This support is seen as all activities, including those considered to be extra or co-curricular which increase the capacity of schools to respond to diversity (Booth and Ainscow, 2002). Some of these reasons are associated with ability, gender, race, ethnicity, language, care status, socioeconomic status, disability, sexuality, or religion (Rix 2009). One major reason for this broader approach is that many of these factors interact or act in combination and can result ultimately in marginalisation or exclusion. Focusing on a single factor, such as disability in isolation, has the potential to lead to faulty assumptions (Topping and Maloney 2005). In this context, policies on inclusion should not be restricted only to the education of pupils identified as having special educational needs (Booth and Ainscow, 1998).This guidance states that educational inclusion is more than a concern with one group of pupils such as those who have been or are likely to be excluded from school… It is about equal opportunities for all children and young people whatever their age, gender, ethnicity, attainment or background (Booth and Ainscow, 1998).

Inclusive education should also be made a continuous process different from the mere swap of a temporary condition which improves the student’s extent of involvement and minimises the exclusion of culture, communities and curricula and communities to local learning centres; the ability to recognise and respect differences in students due

to age, gender, ethnicity, language, class and disability; a change in attitude, behaviour, teaching methods, curricula and environment to meet the needs of all students (Department of Education 2001).

Booth *et al.* (1998) went on to understand the broad range of inclusive education as a condition that includes and excludes as well as providing lots of involvement and exclusion, race, class, gender, poverty, gender and unemployment, students classified as low achievers, people with disabilities or different behaviour education, both in relation to participation and learning, in traditional special education, and acceptance of difference, and the whole school, and in democracy and society at large. Furthermore, they viewed education as a process by which all children acquire the right to enrol in the neighbourhood school. Education must not be confused as just a gathering of pupils, but instead should be taken in the sense that it addresses different stakeholders (students, teachers, parents, etc.). Hence education should be taken as a medium through which it can serve as an instrument that could bring changes in the school system, as well as the participating students and other individuals, education in the schools involved, and cultures, educational policy in general, and on social justice. The most important aspect of education is the fact that it is a continuous process and not just a phase that can be reached at any short given moment.

3.3 Inclusive education

This part is divided into four sections as follows: (a) Defining inclusive education, (b) an evolution of inclusive education, (c) The shift from special education to inclusive education (e) Empirical research on the efficacy of inclusive education

3.3.1 Defining inclusive education

There has been no generally accepted definition of inclusive education (Ainscow *et al.*, 2006). He went on to give an explanation to describe the meaning of inclusive education; he came out with a definition of inclusive education as a way of creating a comprehensive society at large. In the author's perception, inclusive education is not restricted to the involvement of those children or young people with disabilities. For

that reason inclusive education is aimed at eliminating every learning hindrance, and with the involvement of all concerned learners susceptible to exclusion and marginalisation (Maher 2007).

The definition of inclusive education from the view point of UNESCO (1994) in their Section for Special Needs Education which states that:

"The main point of inclusive education is the idea of every student learning together at any possible time notwithstanding the learning differences among them. The educational institutions practicing inclusive education should understand and respond to the various requirements of their students, being compliance to divers methods and rates of learning and making available quality education for every student by designing an effective curricula, organisational management, teaching skills, quality recourse use and corporation with the communities."

White Paper 6 on education, entitled "special educational needs - building an inclusive education and training" gave the definition of inclusive education as: a situation where there is need to recognize that all the students can learn and that all adolescents need assistance; where there is the recognition of the fact that all students are different in some way and have different learning needs which are equally valuable and a normal part of our human experience; as a mechanism where structures in education and other methodologies employed in learning are modelled to meet the peculiar needs of learners.

Miles and Singal (2010) explained inclusive education as a way of eliminating barriers to learning and with the involvement of all students vulnerable to segregation and marginalisation. It serves as a calculated plan to help improve successful learning for students. The common goal of inclusive education is to minimise and eliminate the outside barriers against each person's right to education, at least at the basic level, and to encourage access, involvement and success in learning, quality basic education for all (Miles 2000).

According to Lawson (2005) inclusive education may be used to refer to different things which includes the involvement of learners in general in conventional learning environments, and where all learners' participation results in optimum levels of attainable achievement.

Cartledge and Johnson, (1996) explained inclusive education as the efforts made in giving adequate basic education to children in schools and classrooms with other pupils , the student's age, his colleagues, in order to increase the social competence of learners with disabilities.

Some other schools of thought view inclusive education as being for the wellbeing of all students (Daniels 2000; Nind *et al.,* 2003). Inclusive education is a method of achieving human rights in social relation and conditions (Clough and Corbett 2000); the process of developing the students taking part in the curriculum and minimising the marginalisation of cultures and societies in the environment is the most essential centre of learning (Booth 1999) a procedure relating to the morals concerned with growing a school's capability to act in response to learner variety and encourage more involvement for all students.

Landsberg and Nel (2005) explained inclusive education as a way of building an inclusive community and academic system which is meant to identify and act in response to variety of their students' requirements, and in so doing making sure that every participant, notwithstanding their physical, social, emotional, intellectual conditions or any other conditions, is strictly involved. Department of Education, (2005) gave a further insight of inclusive education as a simultaneous response to students of different backgrounds and different abilities and capabilities, some which may be seen as challenges to the institution.

Form the above explanation the idea of inclusive education is regarded as a recent development with the potential to make major changes in notions, human life and human right and in general in the education system. The idea of inclusive education is a conceptual agenda which could be defined in various ways. For instance the method of inclusive education can be related to a system of education that is seen within a

university situation. Alternatively, when considered from a broad viewpoint, inclusive education can be related to some education system within a community based setting.

In all perspectives relating to inclusive education, theoretical definitions still exist in correlation to each other. Basically, in respect of this study the writer came up with an explanation of inclusive education which is explained as relating to access for all students to learning facilities and services at all times and notwithstanding their location, most importantly at a specified time and a consistent educational institution with specified assistants for people with various conditions, and getting extra knowledge from various kinds of students. By so doing, the variation will now become an advantage to encourage learning among children and adults. Inclusion has to do with recognising and elimination of difficulties (Pivik *et al.*, 2002). As a result, it has to collect and analyse information from many different sources in order to plan improvements in policies and practices.

In an effort to resolve the issue UNESCO supported the suggestion of inclusive education to progress, mainly starting from a small consideration on special education or integration to a bigger and more comprehensive definition that is currently used by UNESCO: a process of tackling and reacting to the variety of needs of all students by increasing partaking in learning, cultures and communities, and minimising exclusion in education. It has to do with restructuring and amendment of article, and structures, methods and strategies, with the main goal is for all students up to the age appropriate and believe that it is the responsibility of the public education system to teach all students (UNESCO 2005).

Inclusive education is an emergent concern for many, which is meant to create educational restructuring in both developing and developed countries alike. Conventionally, the idea of inclusive education has been restricted to the group of students with special needs, mainly those with physical and/or mental disabilities and refugees. The move towards and feedback have been fundamentally corrective, majorly by putting up various platforms, tracks and special institutions which take care of institutional and pedagogical segregation and isolation (Ajuwon 2008).

Thomas and Vaughan (2004) explain that the drive towards influencing inclusive education is a convergence of several streams of deliberation, namely social, political and educational.

Sebba and Ainscow (1996) described inclusive education as a process in which schools apply to relate to all students as individuals through the reviewing and reformation of the curricular stipulation, and at the same time rechannel the resources to develop equality of opportunities. The inclusive education helps the schools to increase their admission capacity and reduces the number of students who are excluded.

In contrast, there is a need for a change in attitude towards the relationship with disabled people, owing to the fact that they also can be relevant in nation-building (Mapsea 2006), filled with the concept of building educational curricula and the expansion of the education system in different countries of the world. Nevertheless, the perception of education differs from country- to- country even for those operating with the same education system. An example of this is seen in Libya, where the education system restricts female children from enrolling as a result of religious and cultural beliefs, compared to the education system in the western world where there is equal opportunity for both male and female to be enrolled into educational institutions.

Barton (2003) explained education as not only concerned with the students with special requirements in the institutions, but pointed out the interest in the learning environment and effectiveness of learning for all students. In other wards he pointed out that education is a free process which is focused on liberating the learner from the shackles of discrimination. In an effective education system every person is equally valued regardless of whether they require special attention or not.

King (2003) explained inclusive education to be a situation where every student in an institution, despite their capability and condition, is regarded as part of the school community. This includes the students, education instructors and academic staff. Some of the prerequisites to achieve an inclusive education system in the institutions includes group assessment and functioning with the mindset of social justice and way

of life, influencing the ability of each student to learn, with the assistant of the ideological background that assists in exercising excellent teaching and learning and to support the wide range of opinion.

The concept of inclusive education has been understood in different ways, but presently it is commonly linked with a procedure with the intention to assist with the segregation among students, through the building on the rate of involvement and minimising segregation (Blanco Guijarro 2008).

UNESCO (2009) described inclusive education as a way of fortifying the competence of education system to meet students' needs, considering that as a general principle inclusive education should be a direction to all education policies and practices with regards to The fact that education is a fundamental right of human rights, and the basis for a more just and equal society. In simple terms, the direct movement towards inclusive education through rehabilitation barriers and exclusion through a culture and profound changes in school structures, is practical and logical (Ainscow 1995; Slee 1995; Carrington 1999; Thomas and Loxley 2001). Inclusive education can be regarded as a way of taking action on various requirements of the children, youths and adults by encouraging and improving their involvement in the process of learning and the cultures to minimise their social exclusion from education. In achieving this, there will be a need for restructuring the approach and strategies with more generic ideas that will accommodate every child of a suitable age group added to an assurance the in the normal education system it is responsible to educate every child (UNESCO 2009).

The foregoing definitions viz-a-viz the researcher's study focus are aligned as far as the areas of philosophy, implementation, policy, curricular and teaching methods. This is because inclusive education is all about equality in the process of education and as such is relevant as far as the policy and philosophy are concerned. When the factor of collective participation is considered, the Libyan objective of teaching methods comes to light. In a nutshell the practice of inclusive education is a route by which the stated aims of philosophy, implementation, policy and teaching methods could be made

possible. Hence this study will focus on all the policies, curriculum, teaching methods and philosophy in Libya that support the practice of inclusive education.

3.3.2 An evolving vision of inclusive education

Exclusion from participation in economic and social life, political and cultural communities is one of the paramount challenges facing individuals in most societies around the world (UNESCO 2005) . The evolvement of inclusive education as a movement seeks to challenge exclusionary policies and practices. It can be regarded as part of a wider struggle against the human rights violation, and unjust discrimination as it also seeks to make certain that social justice in education predominates. Hence, it is generally accepted that inclusive education has its foundations in the human rights pronounced in the United Declaration of Human Rights in 1948 (UNESCO 2005) which explains. The need for compulsory education and its channelling to the full development of human personality and fortification for human right basic freedoms. This will assist in the promotion of understanding, acceptance and friendship among all nations, racial/religious groups and shall enhance the activities of the United Nations for the peace treaty.

Everyone has the right to education. Education must be free, at least in the elementary and fundamental stages.

Inclusive education has been indirectly advocated since the United Nations Declaration (UN) in 1948 and has been cited at all phases in a number of key UN Declarations and Conventions (UNESCO 2005) . These include:

• The 1948 Universal Declaration of Human Rights which ensures the right to free and compulsory elementary education for all children. This aspect of the declaration ensures that all children should have access to a compulsory primary education, because at this stage learning is known to be faster as the child's perception and retention is proven to be sharper.

• The 1989 UN Convention on the Rights of the Child, which ensures the right to receive education without discrimination on any grounds. Under this convention all

children are deemed to be treated as equals without any favouritism for the purpose of an unimpaired perception in the process of early education.

• The 1990 World Declaration on Education for All (Jomtien Declaration), which set the goal of Education for All (EFA). These goals are known to involve easy and flexible curriculum, accessibility to all without taking cognisance of any disability, without any discrimination on the basis of sex, race, colour, belief, poverty and creed.

• In 1993, the rule of the United Nations to achieve equal opportunities for people with disabilities, which does not confirm the equal rights of all children, youth and adults with disabilities to education, but education, should be provided in the "integrated framework" and "school in general."

• Salamanca Statement in 1994 and work on the education of persons with special needs, which requires schools to have accommodate all students regardless of their intellectual, physical, social, emotional, linguistic or other.

• Global Education for the year 2000, the Dakar Framework for Action of the Forum on Education for All and the Millennium Development Goals, which states that all children have access to primary education is free and compulsory for 2015.

• The 2001 EFA Flagship on the Right to Education for Persons with Disabilities: Towards Inclusion. All disabled persons seeking education must be allowed equal access to the same formal education with no recourse to their physical conditions and appearances.

• The 2005 UN Disability Convention which promotes the rights of persons with disabilities and mainstreaming disability in development. Disabled persons under inclusive education are expected to contribute equally to development without any reference to their disability or special needs.

There has been definition of inclusive education among other complimentary perspectives to be related to the efforts of the international community to achieve education for all. According to Ainscow and Miles, (2008) the policy discussion on the concept of inclusive education in this context has usually focused on two main

concerns: The impasse between special education and integration (or mainstreaming) as well as the principal strategies and techniques for progressively merging students with special needs into regular schools: investments in physical facilities and equipment; curricular restitution and amendments; changing teachers' practices; and the process of responding to the anticipations and needs of targeted excluded groups mostly connected to ethnic, gender, cultural, socio-economic and migrant issues.

It has been discovered that it will be very difficult for students with peculiar weaknesses to integrate into universities. The problem of these deficient students must be tackled by the practice of inclusive education. Students in general have been situated in usual schools without significant institutional introduction and curricular variations in terms of school custom and teaching practices. These students may be of different social, ethnic, religious, race, gender or economic background. Incorporating all students into universities remains a major challenge to educational institutions. According to Peter, (2004) who refers to this as the replacement concept, inclusive education is theorized as a place and not as a service delivered. Practically, incorporation may risk becoming a verbal device rather than actuality, which could be more about a spatial alteration of school classrooms than a modified curricular subject and teaching relevant to student's erudition needs. Opertti and Belalcazar, (2008) agree that indeed, the number of drop-outs may increase among students with special needs when they are incorporated into typical schools that have not embarked on a complete set of institutional, curricular and educational changes. In fact, drop-out rates among students had increased with special needs when they are integrated into regular schools that have not undertaken a comprehensive set of institutional changes, and educational curricula.

On the other hand, the targeted-group approach has actually widened the scope and content of the concept of inclusive education, recognising that inclusive education also raises issues of cultural and social exclusion (Slee 2001). In response to these issues, precedence has been given to certain excluded groups in policy planning and in the allocation of resources by the Ministry of Education. Such precedence, however, has not necessarily gone in compliance with inventive approaches for providing relevant

learning prospects. Without a doubt, the layout and enhancement of policies on inclusive education should not be only understood as the entirety of ideas and endeavour in of certain groups. Thus, the concentration of inclusive education should not be reduced to targeted categories; but rather be extended on the delivery of quality; approachable and different learning surroundings and prospects for all (Aikman *et al.,* 2005).

According to Tutt, (2007) the true contest lies in providing inclusive settings in all schools through the delivery of a varied continuum of services within a school system that is expressed with other social policies. While playing a key role in developing an extensive understanding of inclusive education amongst a range of stakeholders, including high level policy makers, curriculum developers and teachers from over 150 countries around the world, (UNESCO 2008) inclusive education is the means to confront the contest facing education in general. This extensive understanding is revealed in the Conclusions and Recommendations of the International Conference on Education (ICE); this concept is broad as far as inclusive education is concerned and it can be viewed as a general guiding principle that will enhance learning for the purpose of sustainable development, lifelong learning for all and unhindered access to learning opportunities for all levels of society (UNESCO 2008). Amid other things, the emerging ideology of inclusive education moreover functions to offer a universalized and holistic method of quality education for all, giving a wider understanding of how the perceptions of equality, equity and quality interrelate (Acedo 2008).

Equity, according to Ainscow *et al.,* (2006) can be seen as: (a) treating everyone with equality; (b) reducing variance across social factions by taking along the accomplishment of the less fortunate to the same level as those of the more fortunate factions; (c) attaining a mutual standard for all students both in basic numeracy and literacy; and (d) meeting the wants of all individuals through various treatments so as to take student multiplicity into account. Equity is relevant in the process of inclusive education because it ensures the equality of students as well as bridging the gap between different groups in society.

A broader idea of inclusive education with its hand full concept of ‘all’ and an improved awareness of dissimilarity, presents a powerful base for a thorough understanding of how the theory of equality, equity and quality networks work (Ainscow and Miles 2008). In other words, a wider notion of inclusive education pictures the theories of equity and quality as interdependent. In this context, inclusive education has increasingly been accepted as a general and changeable tactic for educational transformation within a filtered EFA action, which is a scheme for moving away from a principally access-oriented method (Opertti *et al.,* 2009). This ideology is an improvement over conventional EFA consideration which mainly saw the EFA targets as detached from one another. For instance, the separation of equity and quality were as the primary and secondary class of schooling. Likewise, it has been recommended that the idea of inclusive education, with its wider belief of ‘all’ and a superior growth of alteration, could hold the key to enhancing the value of education (Ainscow and Miles 2008). Certainly, the conformation of equity and quality allows education systems to effectively respond to students’ diversities and as a result, provide better sustenance of education for all in the longer term through quality method and products. Hence, inclusive education should be recognised as the principle of education for all (EFA) and must be an essential part of education transformation from idea to practice.

3.3.3 The shift from special education to inclusive education

Mittler (2000) pointed out an obvious switch from special education to inclusive education around the world. Having experienced the marginalisation of disabled students for a long time in the special schools, the only option was to incorporate into mainstream schools, especially in the western world, during the early 1980s (Mittler 2000; Opertti and Belalcazar 2008). The physically challenged were incorporated to study alongside the non-disabled once without the required facilities to assist them in effectively participating. This combination was carried out in various forms which include unfair marginalisation in the special and mainstream schools, irregular removal from mainstream classes and placement in special classes in mainstream schools and marginalised activity groups. Mittler (2000) pointed out a

misunderstanding between integration and inclusion in the subject as they are used interchangeably; he explained the difference between them as regards their value and practices. The majority of African education systems are influenced by the education systems of the wealthy western countries (Lomofsky and Lazarus 2001; Kristensen *et al.*, 2006).

Mmbaga (2002) explained that incorporation of the western education system lead to difficulty and misunderstanding in applying the terminology and ideas. 'Integration' implies to complete or incomplete physical placement of disabled students in the mainstream schools and 'inclusion' is not only physical presence, it implies the processes of changing values, attitudes, policies and practices in the school curriculum and beyond. Inclusion is a term used by the mainstream for over two decades, but the effort being made to realise education for all has been going on for about five decades.

Inclusive education is a new way of thinking about specialised education. The shift from special education to inclusive education signals a dramatic philosophical change. Inclusion is a belief in the inherent right of all persons to participate meaningfully in society. Inclusive education implies acceptance of differences and making room for persons who would otherwise be excluded. This practice of educating students who have disabilities together with their non-disabled peers means creating learning communities that appreciate and respond to the diverse need of its members (Lindsay 2007).

Presently, inclusive education is more or less regarded as generating high-standard, friendly and vast learning environments for everyone. It is no longer believed to be a developing idea majorly targeted to a specific group of people. Inclusive education system no longer refers to an education system that focuses its responsibility on a particular group of students, but one that accommodates and makes provision for varieties of student responding to each of their different, specified and distinctive behaviours in studying, with more attention paid to those in danger of marginalisation and underachievement going by the normal basis of setting and provisions. The consideration of culture, local, and individual differences is the main purpose of

inclusive schooling, which needs a mutual acceptance from the various concerned groups and the fundamental values of each society and culture. If such compromise is not reached, the respect for various cultural norms and values will be disregarded which will lead to marginalisation and discrimination (Rouse and Florian 1998; Ainscow 2005).

In consideration of the above explanation, UNESCO (2003) gave a definition of inclusive education as that method of education that can tackle and act in response to various requirements of students by adequately involving the study of culture and communities so as to reduce exclusion in the education systems. In achieving this method of education it involves reconstruction and modification of the content, method of approach, curricular structure and the strategies using the same objectives that focus on every child of specified age bracket and the mindset that it is the responsibility of a regular system to educate every student.

A more general idea of inclusive education, includes a sufficient view of all with a greater approval of diversity, existing and efficient encouragement for a complete understanding in which the idea of equal opportunity, justice and fairness interrelate (Ainscow and Miles 2008). A more general idea of inclusive education envisages the idea of equality and excellence working together. Opertti *et al.,* (2009) explained inclusive education as being more generally renowned as a holistic and transformative method for transforming education within a sophisticated EFA engagement and as a method to help grow beyond a primarily access-oriented approach. This idea creates a higher platform above the normal EFA philosophy which mainly views the EFA targets disconnected from each other. For example, equity and quality were unconnected, in relation to the primary and secondary levels of education.

This generic comprehension brings a reflective change in the idea of theory and workability of inclusive education, reflecting to all the aspects of education systems, especially in relation to educational exclusion. Govinda (2009) cited the present UNESCO commissioned study, which pointed out that educational exclusion is a long standing experience which is closely related to the organisation of education systems,

and in the past has barred some group of individuals. Therefore to imply a change, it has to take some time with the capacity to endure and a general effort from every stakeholder of these education systems.

3.4 Inclusivity in higher education

This part is divided into four sections as follows: (a) implementation and policy of inclusive education in higher education, (b) Inclusive classroom environment in higher education, (c) the curriculum and inclusive education in higher education, (d) teaching and inclusive education in higher education.

3.4.1 Implementation and policy of inclusive education in higher education

This section deals with the policy and implementation of inclusive education. Past studies have revealed that there are lots of issues that hinder the success of inclusive education. Notwithstanding, the general idea of inclusive education is more than accommodating learners with difficulties in an inclusive system that caters for the different requirements of learners, the past studies have indicated that there are limited the policy implementation in both depth (the approaches to inclusive education in universities) and breadth (the number of universities that have received training in inclusive education) (Johnstone and Chapman 2009).

A major challenge facing countries around the world is how to go about implementing an effective inclusive education system (Avramidis 2005). The basic principle of inclusive education is accommodation for all students without regard for the intellectual and physical, social, emotional and language, or other by all institutions. Lockwood (2003), goes on to say that the differences in students ought to be respected and teaching and learning needs to be "adapted to the needs of the students rather than the students being fit into an existing set of expectations." Furthermore, inclusive education in developing countries could mean even more resources devoted towards the implementation of the system. These can be in the way of quality and modern equipment to aid teaching and learning among all the categories of students.

In a World Conference UNESCO (1994) explained the need to accommodate every learner, regardless of physical, intellectual, social, linguistic or other conditions. Those involving children with special needs, gifted children, street and working children of nomads or remotely, children from linguistic, ethnic, or cultural minorities and other parts of the region groups vulnerable or marginalised. The educational institutions that have implemented this inclusive system should take note and connect to the various requirements of the learners simultaneously so as to maintain the quality and method of education. This feat can be achieved through standard and suitable curricula, functional institutional arrangements, effective strategies of teaching, efficient utilisation of resources and working in partnership with local and regional communities (UNESCO 1994). In addition to this it will be very effective to come up with more vibrant and effective policies relevant to teaching and learning for implementation in the general universities, for the purpose of making learning and teaching easier, relevant and more efficient. The implementation of policies in the area of inclusive education will require determination and dedication because it is an area that is relatively new to developing nations besides being very time and resource consuming.

UNESCO (2005) inclusive education creates a way of handling variations among the pupils that are vibrant, comprehensive entrenched in common sense. To achieve this there is need for change in approach to the extent that technical and organisational resistance creates numerous barriers to studying. The major objective should be to set into motion the Universal Declaration of Human Rights; this also provides better understanding of a wider knowledge of basic education for all. This brings about the need to develop a more elastic and accessible curriculum, which accommodates all genders and cultural variations. There is a need to bring in changes in every education system and in everyday classroom exercises that will be in line with the recommended objectives, which gives room for more self-governing of educational establishments, providing good encouragement to educational instructors and staff, providing a more effective training for teachers, and creating a more elastic and effective university curriculum. After a session with Mel Ainscow, UNESCO (2004, booklet 5) has

accepted a working pattern that assists in managing inclusive classes that are acquainted with learning, with the idea of reorganising education institutions through an approach that allows supportive teaching and group learning.

Implementing inclusive education implies a development of broad learning strategies to accommodate and include learners with special needs. This is based on individual perceptions of special needs and the focus that is put on the university's organisation and culture (Armstrong and Moore 2004). The universities have to be committed to and responsible for the process of restructuring themselves in response to the diversity of learners. In this regard the declaration of rights charter, if implemented, will go a long way in advancing the process of effective inclusive education worldwide. For instance, developing nations that lack resources when compared to their developed counterparts from the industrial world will especially have the opportunity under the charter to advance the process of inclusive education. This, therefore, could link the policy on the declaration of rights and inclusive education with a view to achieving better learning and teaching methods (Eleweke and Rodda 2002).

To successfully implement inclusive education Hay (2003) states that the university has to provide quality education support services. Educators have to perform their usual duties while providing special support and attention to learners with special needs at the same time. In order to survive, educators must be able to deal with the unpredictable, immediate, public, simultaneous, and multidimensional demands of classroom life in ways that win and maintain some respect from their colleagues, learners, and themselves (Nind *et al.*, 2004).

Factors that affect the implementation of an inclusive education policy:

The rationale for this section is to probe the factors that encroach on the execution of inclusive education:

Peters (2004) conducted one of the studies that offered comprehensive findings on such factors in developing countries; and suggests an Inclusive Education Framework as a theoretical lead to viewing the intrinsic system of relationships and factors in

inclusive education advancement. In the content of this framework, there are value-added factors and ideas from literature on inclusive education. The Inclusive Education Framework provided by Peters (2004) consists of four elements which are: inputs, processes, outcomes, and contextual factors in the scheme.

Peters (2004) explained concerning inputs, which he mentioned that provision of access is with regard to inputs. She argued that the access provision is majorly affected by the socio-economic and cultural factors in a family. These factors include economic survival needs, and traditional societal approaches towards disability; which are combined with distance from university, accessibility of university buildings, discrimination, lack of trained teachers, and resource support to address teachers' working conditions. Implementation of inclusive education students' characteristics are also to be considered as the second most important (Peters 2004). She warns that the enormous majority of learners in most countries have mild impairments and are frequently neglected due to the fact that learners with moderate to severe impairments get more attention. According to Peters (2004), these learners are prone to comprise a major percentage of drop-outs and repeaters. According to Peters (2004), attitudes and lack of political will from of government administrators and parents is the third critical input. Peters (2004) identified the state of teachers' work as the fourth critical input; he argues that the states within which teachers must carry out their work have an important impact on their ability to make available effective teaching. Among other conditions, she cites class ratios, participation incentives, administration support and sufficient time to develop confidence.

In the Input-Process-Outcome-Context model for inclusive education, the assertion made is that university climate as well as teaching and learning are two domains critical in the process of inclusion, according to Peters (2004) And in these domains, a critical factor for an effective execution of inclusive education is the whole school approach. In addition to this approach, another factor observed as critical in establishing inclusion is the alliance with other sectors in the community. Peters (2004) emphasises the need for continuous assessment of the implementation activities of inclusive education programmes with regard to the outcomes of inclusive education.

In 2006, David Mitchell presented his paper in Cape Town; there he acknowledges the factors that tend to coerce the implementation of inclusive education or factors that are used to justify the non-implementation of inclusive education. These include a "one size fits all curriculum", lack of support for inclusion, lack of coordination among government departments and non-governmental systems, large classes, lack of appropriate assessment, media ignorance, negative attitudes in society and from teachers, inadequate monitoring of universities, lack of skills in teachers.

Ainscow (2005) argument was based on the education institutions; he pointed out that policy documents, conferences and in-service training courses are small influence activities which may not create an important change in thinking. This author supports the ideas that tenders towards inclusion "should aim at building the size of local neighbourhood mainstream universities so as to assist the involvement of different range of learners". During his explanation, he pointed to the contextual factors affecting methods in the universities by the performance of their duties; these include: The views and actions of individuals within local contexts, including members of the community whose interests are served by the university, staff who have responsibility for the administration of the school system and the criteria that are used to evaluate the performance of the school.

Ainscow (2005) further argues that for progress to take place towards inclusion it requires that a group of stakeholders within a specific framework should look for a common programme to guide their conversation and practice. Six variables that invade or encroach on university effectiveness in establishing inclusive educational practices were cited by Forlin (2004). These variables are: attitudes of university staff, parents, students, and local community, previous contact with people with various needs, previous involvement in inclusive schooling, supposed personal efficiency, the type and quality of available support, and awareness and acceptance of people who are perceived to be different.

In conclusion, the key variables acknowledged in studies focusing on the implementation of inclusive education in various contexts can be summarised as

follows: Firstly the issue of dedication to the policy of inclusion, where it is expected that all the educational processes should conform to the ideals as provided under inclusive education and learning; the content of the syllabus, which should strictly cover all the inclusivity of education for all without any hindrance due to gender, race or any ; the attitudes towards inclusion, which will ensure that the process is not faced with any form of sabotage by forces within and externally alike; and the ability to address the various needs of learners, meaning that all peculiar requirements of the pupils are taken into cognisance for the purpose of equality in learning. The support of learners and teachers in establishing inclusion should be viewed with importance in that there will be quality dissemination of knowledge to all the learning parties and their tutors; as well as the implementation framework, which ensures conforming to the set out guidelines; and the existence of the cooperation between the various departments involved in the process of inclusive education.

3.4.2 Inclusive classroom environment in higher education

A university faculty should be a place where unbiased ideas, knowledge and experiences can be disseminated to students and other learning groups. The faculty can also serve as an avenue for checks, assessment and monitoring of other relevant academic works and ideas for the purpose of improving teaching and learning used specifically for teaching and administrative purposes. The faculty must want to teach unbiased material and believe in the importance of a diversified education for inclusive education implementations to be effective (Stevens and Charles 2005). There must be a condition for diversity where all social groups feel included and welcome (Richards, Brown et al. 2007) before an inclusive curriculum can be effectively implemented. Faculty should be a place where both teaching and learning comes under a free and equal setting devoid of any cultural, racial, and religious bias. It should also promote the free expression of frustration and opinions that are more often than not considered abominable in the process of change and growth. The whole notion of a faculty, therefore, is to encourage freedom of learning and teaching for all irrespective of their class, creed or affiliation (Whitt, Edison et al. 2001). Organista, Chun, and Marin (2000) explained the main challenge in teaching differences, which they said is

the ability to create an environment in which inclusive education can be taught. An established and average classroom could be effective in creating a conducive environment for teaching and learning among students from different cultures and backgrounds. Professors should make sure that learners are open to hearing and reflecting upon others' perspectives and willing to confront their own underlying biases. (Higginbotham 1996; Mahoney and Schamber 2004; Richards *et al.,* 2007) . Though it may be difficult and out of place for many faculties to believe there could be fundamental prejudgments, which they must challenge and address such problems before they can be capable and effective multicultural professors (Montgomery 2001; Richards *et al.,* 2007). An inclusive classroom environment can be created by the faculty as soon as these criteria are accomplished.

Based on the findings from such studies, campus officials may decide to make use of classroom settings that could aid all students and offer more support for (e.g. gender, race, and disability) in all the sciences. This alone is not enough, though. Students spend little or none of their time with the campus officials compared to the time they spend in classroom with the faculty and professors. Campus officials could insert policies which are in support of inclusive classroom, but to ascertain the effectiveness of the policies there is need for practical assistance of the faculty (Feagin and Sikes 1995; Morey 2000; Engberg *et al.,* 2005; Mayhew and Grunwald 2006). Some policies in universities that have to do with students taking different course have been observed to have weak correlations with inclusive teaching behaviours (Simoni *et al.,* 1999), possibly due to the fact that faculty didn’t consider inclusivity in their general courses, i.e. if the learners are learning about diversity topics and problems in the mandated courses. Making efforts to persuade faculty to be inclusive in all the courses they teach, could result in the production of teachers who are not culturally sensitive (Wasonga and Piveral 2004) and not getting ready to teach an inclusive education. This study pointed out that there are some factors connected to inclusive teaching and curricula that require examination and addressing so as to make faculty teaching more inclusive without coercion from campus officials.

Some findings from different studies have revealed that study environment can have an impact, either positive or negative, at different levels which includes;

The guideline of association and building of knowledge (an inclusive environment make the explanations from different viewpoints that enhance the conversation easy). Different laws and checks need to be instituted by the authorities overseeing the implementation of inclusive education for a better and effective transmission of knowledge. Such regulations could protect and make learning easier among the less privileged students.

The impact of meta-curriculum (one class allows inclusive and productive learning between diverse groups of pupils; improve knowledge, while non-inclusive learning contexts increase the continuation of stereotypes). This curriculum to a large extent makes education and its dissemination more transparent, as the productive potential of all students is tapped, thereby discouraging the creation of segregation and stereotypes among learners.

The impact of emotional level to learning (in a classroom environment where the learning experience is categorised by positive emotions - excitement of discovery, joy, etc.- productivity is increased by motivating pupils for future learning; compared to emotions such as fear, boredom and other negative emotions which are highly un-motivating for pupils and their academic success).

The dynamics of power in the classroom (in creative classes instructors use their capacity to encourage all students in their own ways of studying. In some cases the negative response to study can result in eventual hindrance to studying -to learn can be an ultimate form of resistance from those that are vulnerable to harsh environment). Leadership among the learning groups should be made open and transparent to make students feel equal and able to have similar opportunities without any fear or favour.

And finally the determination of the student - a student does not last long when they feel less competent than others or when they feel marginalised). It is therefore imperative for students and learners alike to be made to feel comfortable in the

learning sessions and environment, which will in turn result in more active participation in class work and prolong the hours of study.

In providing and managing an inclusive environment in an academic environment; findings have revealed that inclusive education is realised in an academic environment with the use of special methods and working patterns which are different from the ones used traditionally (Westwood 2004).

Meijer, (2003) explained that carrying out inclusive education should be focused more on quality education that encourages actual inclusive educational variation, which is attained by the use of joint efforts, action in involvement, encouraging of group works in the classroom and outside classrooms.

In developing these methods, involvement should be more targeted on the relational perspective than on the personality, to enable a sense of belonging and improve association and friendship. The main aim is basically to build a comprehensive community (Soodak 2003). This strategy, as a result, leads to a sort of cohesion amongst students and the entire learning community. By this interdependence, collaboration and exchange of ideas is made possible. On a more functional basis, personal relationships may develop, thereby promoting community development through the concept of inclusive education.

The introduction of this general method for initiating inclusive practices underpins the encouragement of a joint and relational dimension, which is related with the academic environment. The teaching and learning atmosphere in the classroom is more often than not influenced by the extent of personal relationships that develop therein. And this goes a long way in smoothening the path of knowledge for the simple fact that understanding among the members of learning groups can influence learning itself (Bourdieu and Wacquant 1992). The progress in the classroom that creates a sense of security which builds self-confidence and acceptance is important for the development of children and youths, and also adds to the progress of any targeted academic work. Therefore it is important to create some platforms to assist in developing methods for building and maintaining an inclusive environment. This implies that when the

learning process is conducted in a secure environment the participants tend to be more relaxed, and, as result, better focused, being confident that no harm will come to them while in session. In the end positive results are derived due to the smooth running of the classes.

The acknowledgment of this significant relational dimension in many researches has stressed the necessity for a careful expansion of methods that guarantee reverence for diversity, with the expansion of appropriate physical environments, so as to build in an authentic and successful development of skills in all students. This purpose, which entails time and steady work, is actualised through a reflective process for development in the areas of teachers in relation to their attitude regarding profound personal variations.

Monsen and Frederickson (2004) explained that the right attributes and beliefs of teachers and students are the frame work for building a classroom climate.

Corbett *et al.,* (2005) explained that inclusive education is focused on linking individual students with the entire classroom environment. Considering this, the classroom activities should take note of the values, skills and knowledge that individual students bring to the classroom, and there should be room for communication among peers to develop a sense of belonging in the classroom environment.

According to Soodak, (2003) among the academic strategies as regards to teacher - student communication which may add to the growth of an inclusive classroom are: making use of inclusive language with regular use of male, female and first names; the prevention of generalisations; the prevention of value judgments and prejudices by the teacher using self-reflection about their involvement; giving comment to students focusing on controllable causes such as effort; the avoidance of embarrassing exposure of a pupil to others; being alert to the body language of pupils; being as objective as possible in conversations; serving as a model interacting with everyone and respecting all opinions.

3.4.3 The curriculum and inclusive education in higher education

A curriculum could be explained as a cultural artefact which symbolizes a set of options regarding the knowledge and values that should, in due course, be passed in order to preserve the community that own such values. As a cultural artefact it symbolizes power, and what is remaining of a curriculum describes a lot about the values held by those who have less power. Values and ideology are contained within the curriculum and it is believed that people that partake in the curriculum share these (Nunan *et al.,* 2000).

In a democratic society, a curriculum, subjected to some conditions, may serve as a lift for social change. Explicitly, the information, knowledge, skills and attitudes enclosed within it can signify views which are not necessarily those of the groups which hold economic power. This kind of curriculum seeks to change or reform social values and attitudes concerning social justice, social harmony, ethical or moral stances or other value positions which are considered a priori 'good'. In situations that curriculum is referred to as a social lever, it faces challenges and opposition from those that hold social engineering in all aspects, causing severe challenges to the right of individuals and more especially to the democratic systems. Thus, in using the curriculum to take care of issues like racism, equity, multiculturalism, sexism and social class it is made transparent to charges that it is shaped by ideological values. This means that ideology is only contested where it is overt (Ang 2010).

Inclusive education proposes the involvement of all students to the same regular curriculum that makes available the widest possible range of learning experiences. Thomas *et al.,* (1998), explained that the subjection of students to different curricula as regards to their abilities means that their status as learners could be questionable. Therefore, inclusive education for students should be interconnected with the core general education curriculum, specifically the same curriculum established for all students with and without disabilities. Nolet and McLaughlin (2005) explained that in a time where there is increased importance on standards-based university reform, the

general education curriculum is seriously influenced by academic content standards and achievement standards.

There has been a recorded high rate of drop-out and academic failure which has been related to the boredom of classroom-based instruction, resulting from situations where learners only sit and listen to the instructor without contribution such as thinking and talking with others. This concept explains the outcomes of passivity of learners in the learning process, which is different to the expectation and objective of the inclusive curriculum which this study intends to explore. According to Florian and Rouse (2009) inclusive education is anchored in collaboration and active participation of learners in the learning procedure.

Research carried out in the United States and the European Union has verified that curricula across educational systems function as meditational devices for inclusive education (Espin *et al.,* 1998; Cesar and Oliveira 2005). Inclusive education brings into consideration the kind of curriculum to satisfy learners' needs. Which students will access a curriculum, participate in it, and benefit from it, are also up-and-coming topics in discourses about characteristics of inclusive universities and classrooms (Thomas *et al.,* 1998; Karger and Hitchcock 2003) Students' involvement in bringing normal education curricula motivates amplified professional accountability for instructional decisions and students' learning outcomes (Nolet and McLaughlin 2005; Browder *et al.,* 2007).

3.4.3.1 An inclusive curriculum

A set of bounded information, knowledge, skills or attitudes is referred to as a curriculum. Curriculum, which is also a term meaning the period required for a student to graduate, has a time limit and fixed scope. The term curriculum has undergone numerous reviews in areas to do with its boundaries as well as the set of information, knowledge, skills and attitudes within the boundaries by those responsible for the subject. It has been argued that the purpose of a curriculum is essentially to reproduce groups that value the information, knowledge, skills and attitudes within the curriculum and that are authorised by people in control (Drake 1998).

Teaching, learning and assessment practices that are proactive in responding to the diverse needs of the student population are referred to as an inclusive curriculum. ’Flexibility’ and ‘clarity’ are the two unifying principles of an inclusive curriculum. The inclusive curriculum can be altered to satisfy learners’ needs, as it employs the use of different and appropriate teaching and assessment methods. The process of the inclusive curriculum also ascertains that all of the information that is important to a student’s study is delivered in a clear and timely manner (Gravelle 2000).

At the centre of schooling stands the curriculum. What the student does, the method of their instruction and their assessment is specified through the medium of a good curriculum. The range of learning experiences that are intended to lead to the acquisition of specific knowledge, skills, processes, values, and attitudes are called the "curriculum". The planned sequence that will be used to help students acquire the expected outcomes, statement of expected student outcomes and descriptions of material and activities are actually contained in a curriculum; as a result, the term ‘curricular practices’ is used to refer to the different activities undertaken by teachers for the purpose of carrying out the curriculum (Villa *et al.,* 2005).

UNESCO (2008) defines an inclusive curriculum as flexible, relevant, and adjustable to the diverse characteristics and needs of lifelong learners. The kind of inclusive societies to which we aspire, equitably distributing opportunities, and eliminating poverty and marginality, are reflected in an inclusive curriculum. The democratisation of learning opportunities is actually enhanced through increased understanding and responses to student diversity that are made possible by curricula. The process of providing options, flexibility, and consideration for all learners within universities and classrooms, and the guarantee of their individual right to education as well as combining the density and strength of key concepts (i.e. the value of diversity, the right to lifelong learning, comprehensive citizenship education) is the goal of a good curriculum (Opertti *et al.,* 2009).

Blanco (2009), observed that it is important that the content of the curricular, settings, provisions, and processes should be both common and different to all learners, in a

departure from a standardised approach based on the needs and competences of an average learner, due to the fact that this produces an education system structured around the logic of a homogeneous average learner, one that does not consider the diversity of students. For him, inclusion is not about individualised educational provision, but rather diversified and personalised provision within a common framework. In a like manner, if they are to be inclusive, educational systems must move towards a common, universal design, based on the diversity of needs of all students, and away from individualised actions which compensate for specific groups.

It is imperative to develop a curriculum content, processes, provisions, and settings which recognise that all learners are different and that the goal of an inclusive curriculum is to enrich and make available what is generally available to everyone in the classroom. Florian (2010) noted that where specialist support is needed it should be provided in such ways that minimises the stigma of marking some students as peculiar; essentially such additional support should be given under a common vision of effectively including all learners. Flrian (2008) and Florian and Rouse, (2009) further observed that the process of inclusive curriculum should be able to respect students' individual characteristics, while extending at the same time what is commonly available to all learners within the context of general educational provision.

Halinen and Savolainen, (2009) wrote that a number of countries, particularly those in Northern Europe, are now developing diverse, coherent, and flexible curricular frameworks as tools for inclusion. They provide formal, non-formal, and informal learning opportunities in terms of multiple, flexible, and connected pathways, settings, provisions, and processes based on a lifelong learning perspective, which are supported by centralized and decentralized processes. Countries, such as Finland and Sweden, are making an effort to move away from segmented institutions, pedagogical specialisations, and strict time constraints. The principle of lifelong learning cuts across and along all educational pathways and provisions, in terms of access, processes, and outcomes, starting crucially from early childhood care and education.

Furthermore, as innovative ways to conceive and organise curricula in terms of structure, objectives and content, interdisciplinary competency-based approaches have been proposed, in order to develop an inclusive curriculum and respond more effectively to diversity. Cox (2008) explained competence as knowledge, skills, values, and attitudes, followed by the capability to make use of them in some context. The main recognisable advantage of competency-based approaches is their essential flexibility to a multitude of real-life settings for a range of learners and universities.

According to UNESCO (2010), in Tunisia, China and Uruguay this type of approach has helped diversify learning objectives based on a more flexible and relevant exit profile of learners. These approaches have in addition allowed learners to progress, regardless of their different starting points in terms of performance, and enabled teachers to adapt their teaching to the pace of different learners (UNESCO 2009).

A considerable re-conceptualisation of teachers' attitudes, roles, and competencies implies a good inclusive curriculum. Teachers themselves and all other stakeholders in the educational process should be able to have an understanding of the subject if it is to be reflected in the education system as a whole. Accordingly, four core dimensions of re-conceptualisation are readily identified (Opertti *et al.*, 2012).

The curriculum has been defined 'as a dense and flexible contract between politics/society and teachers' (Braslavsky 2001). Curriculum in this perspective can be seen as both a policy and technical issue involving multiple stakeholders from within and outside the educational system, and in addition as a continuous and dynamic development of learning processes and outcomes.

Delors (1998) found out that student's intellectual, emotional, social and creative growths are addressed under the inclusive curriculum. The inclusive curriculum has been fundamentally built on the four pillars of education in the twenty first century; they are in form of learning; to know, to do, to be and to live together. He further explained that inclusive curriculum carries an instrumental part to play in fostering tolerance and promoting human rights, and is a powerful tool for surpassing cultural, religious, gender and other differences. For that reason an inclusive curriculum takes

gender, cultural identity and language background into consideration. It is a course of action which has to do with breaking negative stereotypes, not just in textbooks but importantly in teacher's attitudes and expectations. Multilingual approaches in education could be regarded as a source of inclusion, particularly in situations where language is considered as an essential part of a student's cultural identity. Even more so, an effective impact on learning results in the early years of studying was noted as teaching with the student's first language.

To facilitate changes in students' beliefs about social identity in general - and about gender in particular - there is a vital need for a gender-inclusive curriculum. According to Arnett (2000) , at a critical point in their identity development known as emerging adulthood, a gender-inclusive curriculum is especially relevant for college students. This enables the college students to develop the rationale as well as the emotional maturity to make decisions about the available opportunities to them within the larger culture. The students' knowledge in the area of identity-matched exemplars is very important for the simple fact that the mixture of self-concept with social context determines the academic and occupational options open to people.

According to Lips (2004) a good instance of this is where female students may declare a whole positive self-perception with regards to a male dominated field, yet at the same time find themselves without similar chance compared to their male counterparts in imagining career opportunities for themselves in the same contexts. The inability to construct a "possible self' (Ruvolo and Markus 1992) within a male-dominated domain can be attributed to life-long lessons about femininity and gender roles (Dasgupta and Asgari 2004; Killeen *et al.*, 2006), including educational curricula that confirm gender stereotypes by emphasising or focusing predominantly on male accomplishments and by failing to include female examples (Warren 1989; Basow 2004; Wyer *et al.*, 2007).

Inclusive education encourages the admission of every student and readiness to reform the university curriculum in responding to their needs. Norwich (2008) discovered some fundamental problems encountered by those that implement inclusive education : identification, placement and curriculum. The identification problem relates to

whether and how to recognise students with major learning difficulties as regards their disabilities; the placement problem involves the decision on whether and to what extent all students should learn in inclusive classrooms; the curriculum dilemma, which is the major aspect of this study, involves the decision about whether all students should learn the same common curriculum content as their peers. The present study aims to uncover some of the issues and difficulties that are part of this dilemma.

As inclusive education has turned out to be widespread, the interest in curriculum viewpoints has increased among educators and researchers, and lots of the authors that has written about inclusive education pay special consideration to curriculum and curricular practices (Thomas *et al.,* 1998; Rose 2007; Sapon-Shevin 2007). So many concerns are raised in this view: What is it that all students learn in mainstream classes? What is it that they learn in self-contained classes, that is, in special classes within mainstream universities? What are the curricular guidelines for inclusive university? How accessible is the general curriculum and to whom? Should it be core curriculum or special curriculum for all learners? To what extent do individual educational plans 'correspond' with the general, mainstream curriculum? (Shevlin *et al.,* 2002; Smith and Thomas 2006; Rose 2007; Wyer *et al.,* 2007; Ainscow and Miles 2008).

3.4.3.2 Curricular and instructional modifications

The policy on inclusive education is achieved through the process of giving curricular instruction within the classroom. Information is passed through the curriculum from the institution and is received by the students concerning the values held by the university (Thomas *et al.,* 1998). The importance of curriculum and instruction have been obvious, in view of the fact that efficient teaching is regarded as a continuous process of decision making and problem solving process which is concerned with what to teach (curriculum) and how to teach (instruction) (West and Idol 1993).

Making available effective instruction within the framework of integrated educational arrangements is a main concern for all students. Coutinho and Repp (1999) pointed out that the curriculum has a key role in deciding how all students will thrive in general

classrooms. Sapon-Shevin, (1996) pointed out that one of the major problems in mainstreaming students with the ongoing curriculum in general education is that the progress towards an inclusive curriculum needs adjustments to the existing curriculum, and to the instruction methods and training used to execute it. Ashman & Elkins (1997) also specified that a major component of successful integration is that the normal university curriculum should comprise all students. Inclusive curriculum is required to stress the adequate flexibility to fit the characteristics of all students involved.

However, while ordinary education settings regularly become accustomed to the curriculum as regards to the requirements of students in the mainstream class, it is often expected that the students need to become accustomed to the curriculum. Some of the major challenges that the educational instructor has to deal with have been: the question, should every student learn with the same curriculum? Whether some students should be allowed to learn with a different curriculum or a moderate curriculum? The extent which instructors should diversify between students in the use of methods and materials? Finally how to guarantee the availability of adequate resources?

A wide variety of curricular provision has to be established by universities bearing in mind the requisite for access and differentiation. Walters (1994) expressed the need for some students to be given a more diverse curriculum within the requirements of the National Curriculum. However, the ability to diversify curricula and instruction has been the major challenge to educational instructors; most resistance to inclusive education from the side of educational instructors has been as a result of the failure to create effective differentiation.

Hence, curricular adaptations consist of adjustments with synonymous characters plainly for instruction or contained in a curriculum in broad-spectrum environments. Villa, *et al.*, (1996), described curriculum adaptation as any alteration in an environment, instruction, or materials used in teaching that helps to develop a student's performance, giving the opportunity for a basic contribution to the activities.

Teachers successfully admit students effectively deal with situations where they are meant to make decisions on the method of teaching that will suit their curriculum and instruction. It is necessary to combine the students' learning ability and the method of teaching by the teacher.

There are differences in the instructional adaptation, ranging from the simple alteration of performance criteria or mastery standards by the classroom teacher in a general classroom, to the use of an instructional program or curriculum that is completely different and varied in its intends and purposes from that explained in the classroom (West and Idol 1993). Mentioning some generally accepted alternatives of curricular and instructional arrangements: the format, sequence, content and materials for the curriculum, design, large- and small- group instruction, one-to-one instruction, peer tutoring, and collaborative co-operative teaching.

Shifting from conventional large-group or whole-class teachings into small group or collaborative teaching in the move towards achieving inclusion, education co-operative teaching has proved to be successful. Furthermore, class organisation is to be included in the instructional strategies, owing to the fact that conduct problems are displayed mostly by regular class students and special students in all age brackets and grade levels. Lewis and Doorlag (1995) pointed out that normal education instructors thinks that the problem with behavioural conduct of disabled students may affect the function of the classroom, which may hamper the academic performance of the special students', which may result in a negative effect on their relationship with others. Though there are diverse view among education instructors with regard to tolerable or wrong behaviours in classrooms (Lewis and Doorlag 1995), generally it is believed that suitable discipline constantly relates positively with proficient classroom organisation and effective teaching, and the main strategy to successful classroom organisation is a positive relationship between teachers and students.

3.4.3.3 Accessible Curricula

Cesar and Oliveira (2005) and Rose (2001) pointed out that researches carried out in the United States and the European Union verified that curricula used generally in all

educational systems function as meditational instruments for inclusive education. Inclusion attracts attention to the kind of curriculum that all students follow. Strategies through which all students can approach a curriculum, partake in it, and profit from it (Thomas *et al.,* 1998; Karger and Hitchcock 2003) are also evolving themes in discussions about characteristics of inclusive universities and classrooms. The involvement of all students in reachable general education curricula gives the motivation for increased professional responsibility for deciding the teaching system and learning performance of students (Nolet and McLaughlin 2005; Browder *et al.,* 2007).

Inclusive education proposed the enrolment of all students to the same curriculum that offers the vast range of learning experiences (McLaughlin *et al.,* 1999). Thomas *et al.,* (1998) caution that the involvement of students in different curricula owing to their abilities results in questions about their status and personality.

With this in mind, there is an interconnectivity with the main general education curriculum which is the curriculum created for students without disability. Considering the age with high emphasis on reforming the standards of university (Mitchell 2005) , there are high influences of academic content standards and achievement standards on the general education curriculum (Nolet and McLaughlin 2005).

In the United States for example, the broad-spectrum education curriculum was backed by the U.S. No Child Left Behind Act (2001); this was the reauthorisation of the Elementary and Secondary Education Act (1965). In Great Britain, the relationship between standards and the core curriculum is apparent in the government's Green Paper Excellence for All Children (United Kingdom) ([U.K.] Department of Education and Employment, 1997) and the most recent development initiative in university, Improving the Quality of Education for All (Ainscow 2007). In Malta, the government's pledge for quality education is expressed through the National Minimum Curriculum (Malta Ministry of Education, 1999), a set of flexible values that define

more of the results required by students and less of the content of teaching at the national level.

Rose (2001) pointed out that the problem professionals face with inclusive settings is that they do not consider the curriculum as an end in itself but as a platform which assists instructors in providing a means for learning. The philosophy of the professionals with regard to the curriculum provides a guided plan for instruction. The main aim is to provide a direction as regards the instructional activities and make available regular expectations, content, methods, and outcomes (Hitchcock *et al.,* 2002). Karger and Hitchcock (2003) in their explanation pointed out that these whole views about the curriculum provide answers to the problems concerning students and how they can partake in a general education curriculum, participate in it and get the benefits.

Reachable curricula are integrally known as providing chances for differentiation and individualisation (Rose 2007). Fisher and Frey (2001) explained that for the last two decades there has been ongoing research trying to find ways to identify, define, and implement curricular adaptations to create curricula that are easily accessible for students with high-incidence and low-incidence disabilities. Beattie, et al. (2006) explained that curricular adaptations are created to offer every student, including students with disabilities, the same opportunity to be both taught and evaluated in the universities.

In this study the literature identified two categories of auricular adaptations: accommodations and modifications. Fuchs and Fuchs, (2001). explained that accommodations are modifications carried out in the instructional and assessment by which teachers level the playing field, which gets rid of impediment in performance resulting from various problems including students with disabilities. The setting, scheduling, and presentation of instruction or assessment, and also the response system and any additional technology or material that is required, are explained by the accommodations (Hitchcock and Stahl 2003; Beattie *et al.,* 2006).

Fisher and Frey (2001) explained modifications as alterations to the expected performance or content. According to Beattie *et al.,* (2006), the professionally designs more assessable curricula are mindful of the danger in reducing the instruction efficiency and the outcome when modifications are applied. Extreme care is applied when planning to modify assessments and instruction (e.g., the level of student involvement) with the main focus being on minimising learning barriers among students. Previous research on various kinds of curricula adaptation and their uses identified two categories, which include typical/routine and substantial/specialised (Scott *et al.,* 1998). To give an example, a standard instructional adaptation would involve both solid classroom demonstrations and monitoring of class-wide understanding. Significant instructional modification will involve the adjustment of the instructional pace as regards the prerequisites of the students, differentiated feedback regarding student work, and the use of multiple instructional modalities. Accommodations may be categorised as typical/routine adaptations, while modifications would be linked with substantial/specialised adaptations. The two classified systems have no one-to-one correspondence between them.

Nolet and McLaughlin (2005) were committed to identifying the connection between provision of service for students taking part in education programmes and variety of accessible curricula adaptations. From their research they suggested that all service provision should begin with expecting the education curriculum and the support that will assist students in getting access to the curriculum. Education programmes could support the general education programmes by making available instructions in precise curricular areas or the area of skill that is not treated in the general education curriculum, such as the social and behavioural areas or other more functional daily living skills (Nolet and McLaughlin 2005). The accessible curricular adaptations vary from (a) no accommodations or modifications, (b) accommodations, (c) modifications, and (d) alternate curricula, bridge the general education curriculum and additional, individualised knowledge and skills.

There is need for modifiable instructional methods for accessible curricula. General and special education teachers are conscious of typical/routine and substantial/specialised

instructional methods in inclusive education programmes. They combine their expertise to come out with informed and joint decisions so as to meet students' individual and group requirements in the specific learning context. They deliberate and carry out both routine and specialised adaptations to create group-based and individually tailored changes. Undifferentiated, large-group teaching is majored on routine and comparatively minor adaptations have no place in inclusive classrooms (Scott *et al.,* 1998). Every differentiation of expectations, content, methods, and outcomes, in the context of designing reachable curricula, should be carried out in a manner that does not reduce the chances for inclusion.

Rose (2001) pointed out that differentiation may turn out to be discriminatory and stigmatising for disabled students. This occurs in cases where differentiation reinforces the impression that certain students' patterns of learning are as a result of inborn inabilities. As a result of this the principles of Universal Design for Learning (UDL) made available an adequate response for discrimination resulting from differentiation. UDL is inclusive at its conceptualisation. These models take the fact that adaptations in content, instruction, and assessment are inbuilt or are readily accessible and are not results of reactive tactics (Bremer *et al.,* 2002). A curriculum created in respect to UDL principles is obtainable by students.

3.4.3.4 Strategies for universal design of curriculum

This section addresses some of the problems which are considered to be important in methods of designing a universal curriculum (Rose *et al.,* 2005) or designing a curriculum to highlight what students are ultimately required to understand, as well as know and be able to do (Wiggins and McTighe 2005), aimed at making the curriculum available to a wide variety of students by virtue of the diversity that has been designed into what students will learn. Methods such as project- and problem-based curriculum design and incorporating different subjects into study of a broader problem, theme or project (e.g, Lake 2001) are some of the strategies used to certify that the subsequent curriculum is interesting, engaging and meaningful to students, when these curriculum design methods are joined with differentiated instruction (Willis and Mann 2000;

Tomlinson 2003), individual students learning can be "personalised" to students' current abilities as well as their interests. Planning for differentiation involves thinking about various ways that any lesson or learning project might be altered to better meet students' requirements.

Teachers can distinguish content (what exactly each student learns), processes (how each student learns) and products (what the student produces as evidence of learning). Furthermore, teachers could take into consideration and distinguish in regards to students' present abilities, their interests and the methods they learn best – i.e., learning method or intellects that are stronger for a student – or even take into consideration what we are learning about brain function (Gardner 1985; Sternberg 1998). When principles of differentiation are joined with meaningful curriculum design, classrooms become active (and yes, sometimes noisier), productive work environments which are focused on learning and outcome (Tomlinson and McTighe 2006).The curriculum is considered as a factor that hinders the rate of learning and development in the classroom. "The curriculum is seen as the main anchor for the education and framing system. It mirrors the values and principles of our democratic society. It may thus be seen as the engine that should drive the values and principles espoused by our society". Therefore there is a need to create a flexible curriculum that will accommodate every student in the classroom so as not to cause learning breakdown.

It is important to reconsider the task of improving inclusive teachers from a curricular point of view. This kind of idea will lead to the consideration of curricular content, process and result, along with curricular design and management. The compound connections between curricula and the achievement of both equity and quality have been specifically recognised (Moreno 2008). According to UNESCO (2009) the inclusive curriculum has been noted as the major route in which principles of inclusion could be set into motion in an education system and as an effective method for accepting cultural, religious, gender, and other differences. Owing to this point of view, the curriculum should be acknowledged as an effective tool and mirror of the complex boundaries of society, politics and education, giving, for instance, inside the

political and policy deliberations, treaties and developmental policies within different stakeholders (Braslavsky 1999). In the next section will be discussed the practices of inclusive teachers as one of the most important factors affecting the application and implementation of inclusive education and one of the objectives of this study.

3.4.3.5 Teachers as co-developers of an inclusive curriculum

The positive approach of teachers regarding inclusive education and the variations reduces the confident of teachers in the ability of each student to be educated, notwithstanding their origin or characteristics; this is one of the major components of an inclusive curriculum, and the main considerations for the development of an inclusive teacher in the context of an inclusive curriculum to meet the needs of all learners, by outlining several key areas for political discussion that must be addressed if inclusive educational reforms are to be sustained (Opertti and Brady 2011)

On the present report by (OECD 2010), they emphasise the necessity of identifying diversity as a benefit both for educators and societies at large, not as an issue that requires resolving. The manner in which society and teachers understands learning disabilities and of the nature of ability and knowledge achievement, as well as the teaching and learning processes: the way they understand this reflects on how they will perceive, assess, and instruct students and assess the ideological and structural aspects for schooling systems in general (Jordan, Schwartz et al. 2009; Peters and Reid 2009).

Teachers' experiences, ideas and approaches towards inclusion and diversity should be taken into consideration; reform involves redefining mindsets, existing positions, identities, and boundaries on different stages. Indeed, many factors may influence attitudes towards diversity; for example teachers may not be fully aware that learning disability, or any learning difference, is a constructed category that shifts over time and across cultures and contexts. Equally, teachers may simply be imitating their own teachers and not be aware of long-standing discriminatory habits. Teachers with a strong disciplinary ethos may prioritize learning curricular content over understanding and responding to the expectations and needs of learners (Avramidis and Norwich

2002). Meijer (2005) pointed out that this is the situation in secondary education where instructors channel their attention to teaching subjects and ignore supporting the diversity of students.

3.4.4 Teaching and inclusive education in higher education

The progress movement towards inclusive education is distinguished by a paradigm shift in education systems both internationally and in Libya. As Engelbrecht (2006) and Sebba and Ainscow (1996) explain, inclusive education involves the reformation of the education system in our learning institutions so as to accommodate the learning requirements of individual students. Libyan universities are characterised by enormous diversity in physical structure (university buildings), infrastructure and distribution of learning resources. For that reason restructuring is essentially required in universities to meet the requirements of inclusive education, especially curriculum design and teaching methods.

Maruyama and Moreno (2000) pointed out that even though there has been increased acceptance and positive beliefs toward inclusive education, there are still issues as to whether faculty at these institutions have also effected the values which their institutions endorse.

Though studies have revealed that faculties are more liable to adopt the idea of inclusive teaching, their teaching behaviours indicate that they are more likely to reflect the lower levels of Banks'(2001) methods of inclusive education. Mayhew & Grunwald believe that, "nowhere should an institution's commitment to diversity be more evident than in the curriculum"; however for some reason faculty still appear to be uncertain as regards to incorporating diversity materials (Kowalski 2000; Maruyama and Moreno 2000).

Sue (2004) believes it is because faculty, "are, in essence, trapped in a Euro American worldview that only allows them to see the world from one perspective". Other possible reasons for such disconnect could be professors' perceived norms and support of inclusive teaching, their attitudes and evaluations of inclusive teaching, as well as

their ability to teach inclusively. However, it should be noted that most research has focused on faculty attitudes and evaluations toward inclusive teaching.

Rix (2005) mentioned the benefit of an education system which involves communication between students that has to do with thinking with others, drawing from others and the creation of meaning with others within inclusive education. This concept highlights the importance for alliance between instructors and learners. Teachers that indulge in interactive method of teaching which involves thinking with others guarantee utmost involvement in the formation and use of learning materials, starting with team teaching and working with assets available within the inclusive classroom.

3.4.4.1 Teachers' Perspectives and, towards of inclusive education

Studies have revealed various obstacles facing instructors in the process of adopting inclusive practice (Avramidis *et al.,* 2000; Burke and Sutherland 2004; Lopes *et al.,* 2004; Bradshaw and Mundia 2006; Bruns and Mogharreban 2007; Cook *et al.,* 2007; Silverman 2007; Damore and Murray 2009). Also, studies have revealed the positive approach in regards to the perception of inclusion though this doesn't reflect in their approach towards and perception in their ability to teach in inclusive classrooms (McCann 2008; Stubbs 2009). Edwards *et al.,* (2006) pointed out another area of concern which is the attitude of instructors with regard to instructional programming.

In all there have been several studies carried out concerning teachers and their approach towards inclusive education and the supposed profits and setbacks in teaching all students in a general class (Bradshaw and Mundia 2006; Subban and Sharma 2006). According to Bradshaw and Mundia (2006) this has revealed the views of education teachers that inclusive education affects their adoption of the concept, though teachers who are trained are exposed to inclusive education and the practice of inclusion established an enhanced approach with regard to inclusive learners. The quantitative field study of 166 randomly picked student teachers, noted that even after one course in special education, teacher attitudes improved. Though the proof was backed by related quantitative studies (McCann 2008; Stubbs 2009), it is not

reasonable to draw conclusions based on the fact that if instructors are given basic training it will change their perceptions and abilities and cause them to improve in inclusive learner success.

The study carried out by 2010 OECD proposed that lots of trained instructors are not adequately prepared to teach different students in the classroom and almost 50% of the teachers surveyed requested for additional training to be able to handle students, diverse socio-cultural upbringing and the need for multicultural education. In some countries like Malaysia, and Brazil, between 70% and 75% of teachers acknowledged the necessity for additional professional improvement to teach in varied multicultural settings. In Spain, Iceland, Ireland, Mexico, and Malta, between 50% and 60% of teachers requested for additional training on varied multicultural settings, while in Denmark, Poland, Australia and Belgium, the percentage alternated between 20% and 30%.

Avramidis *et al.,* (2000) carried out a quantitative research which involved 81 primary and secondary instructors; this study measured teacher approaches as regards to inclusion of individual differences of students in classrooms It revealed that experienced teachers handling individual differences of students exhibited a more positive attitude than those without experience, though both groups had been observed to have a very low approach to handling students with reasonable to severe learning problems. Cook (2002) in his studies of 181 pre-service instructors, found that there is more positive attention given to students with learning deficiency than those with mental retardation, behaviour disorders, or behavioural problems. Cook's analysis of the perceived strengths and weaknesses of pre-service instructors concludes that partaker's abilities are dependent on their individual dispositions and skill in engaging students though the inability is based on experience, training, and instructional knowledge. This conclusion corresponded with that of McDonnell *et al.,* (2001), which emphasized the hindrances faced by instructors in the process of enrolling students with high special requirements. McDonnell *et al.* (2001) discovered that if adequate training and opportunities are given to instructors to experience working with students with moderate to severe special requirements, it results in a more positive

attitude in their ability to manage inclusion. The involvement of a variety of students in the same classroom tends to be easier when teachers are equipped with adequate skills that give them the ability to manage diverse curriculums and different accommodation. Edwards *et al.,* (2006) explained that reducing the challenges faced by instructors could be achieved through changing their training from a one-size-fits-all approach to a model that reflected diversity within the classroom.

Silverman (2007) pointed out the variation between the approach and ideology of general education and inclusive education teachers, in a study of epistemological beliefs and their approach to inclusive education. This research was not only based on teachers approach as regards the idea of inclusion, but went on to carry out analysis on how teachers' perception of knowledge and learning affects their experiences. In a study involving 71 general and special teachers, he specified that higher epistemological belief of teachers increases their positive approach towards inclusive education. This study corresponded with the findings of Woolfson *et al.,* (2007) after quantitative research carried out using 99 elementary teachers from one geographical region in the UK, which shows that general education instructors and special education instructors characteristics were affected by their idea of inclusion and students with special requirements.

Podell and Tournaki (2007) carried out further studies on instructors' approach with regards to their epistemological beliefs and student success. This research was conducted using 384 general educators and 384 special educators; the study observed how instructors predicted student success using the following factors: a) gender, b) social behaviour, c) attentiveness, and d) reading achievement. They came out with a conclusion that shows that general educators made lesser assumptions than special educators for academic success based on students' reading levels. General and special educators perceived social behaviour and attentiveness otherwise in their assumption of academic success. Both general and special educators that are well experienced made a more positive assumption concerning student's success.

Cook *et al.,* (2007) also carried out a study on the approach of teachers regarding inclusive education; this study focused on the effect of instructors' responses and reaction to all students and its' effect on their approach towards inclusion. An earlier study was carried out connecting individual differences between students' and teachers' approach, which shows that the interest of teachers reduces and is detached from students with poor response to instruction, which results in teacher indifference towards these students. In the research carried out by Cook *et al.,* (2007), they conducted an interview for 50 teachers who taught in inclusive classrooms. They were required to give feedback on students with and without disabilities, recommending students and providing feedback related to the areas of attachment, concern, indifference, and rejection. After the collection and analysis of the data, it was concluded that teachers' approach varies in respect to students disability; it also revealed that indifference and disinterest towards included students were lower than assumed. They came out with the conclusion that a report of indifference by instructors could result in a probability of causing a negative learning environment for students who require a high level of assistance. Brownell *et al.,* (2006) pointed out some important factors that are required for a successful inclusive classroom and a positive approach with regard to inclusive education, which involves the adaptation to student requirements, training on new method of teaching, carrying out essential adjustments, and maintaining a strong sense of self-belief and purpose in teaching.

Garriott *et al.,* (2003) carried out an analysis on the perception of 239 teachers on the appropriateness of settings for students with individual differences. The result of the study showed an equal division of attitude between capabilities to teach and perceived achievements for students with individual differences. Practically half of the teachers who reported their ability to manage students with individual differences in classroom could offer positive experiences for student self- esteem and academic success, while the others expressed their inabilities as regards to inadequate preparation and the suitability of an inclusive classroom which involves meeting the requirements of varieties of students.

Elhoweris and Alsheikh, (2006) explained that from the findings, the approach of teachers towards inclusive education could be linked to their level of exposure in inclusive environments, though they also revealed that the approach of teachers varies in regard to the idea of enrolling students with individual differences in a classroom. Research was carried out on the perception of inclusive education involving ten-participant from teachers enrolled in a graduate college class; a questionnaire method was used to collect data from the participants. The respondents dealt with 39 statements related to their perceptions about inclusive education. The result of the study showed that most of the participants showed a positive perception of inclusive education, made reference to the civil rights of students in inclusive classrooms and specified that the general education classroom was an appropriate environment. Other teachers stated a more conservative interpretation, that educating students with special requirements, particularly those with individual differences, in the general education classroom was not an appropriate environment. Explicitly, the teachers were not excessively in support of inclusive education.

Burke and Sutherland (2004) carried out research aimed at the knowledge and experience of teachers in a private college in Brooklyn, New York. The numbers of teachers were arbitrarily picked to fill in a 12-item Likert scale survey to decide approaches relating to the knowledge of inclusive education, instructional practices, and preparation to teach inclusion, attitudes about individual differences between students, and the concept of inclusion. During the analysis of results, teachers admitted having poor knowledge of special education, though they also showed limited conviction in the positivity of inclusion for some students with special requirements. The study showed some components which correspond with earlier studies in relation to practicing teachers (Avramidis *et al.,* 2000; Elhoweris and Alsheikh 2006; Cook *et al.,* 2007).

Hills (2009) pointed out some of the factors influencing the approach of teachers regarding inclusion which include issues of planning time, limited or irrelevant support, and the need for greater collaboration. Hills (2009) used the Scale of Teacher Attitudes towards Inclusive Classrooms (STATIC) along with teacher interviews to

determine the approach of general educators linked to instructional capabilities and behaviour management in inclusive classrooms. Out of 68 correspondents the results showed that majority of instructors had a positive approach with regard to inclusion, but indicated their inability to teach inclusively. Some of the objectives pointed out in the cause of the research were related to lack of instructors' assurance in their capability of handling students with individual differences , insufficient resources and materials, poor quality or limited planning time, and lack of support from university personnel. Bradshaw and Mundia (2006) pointing out that these factors are a hindrance in designing a successful inclusive learning environment and in building a positive approach towards inclusive education.

Friend (2008) explained that the problem of collaborative relationships between educators was difficult due to the fact that their roles were previously distinct. From his explanation this created a tradition of separate goals. Though, in the era of inclusive education, there is a need for the corporation of teachers to redefine their duties so as to sustain a successful learning environment for every student (Giangreco and Doyle 2007). Gut et al. (2003) pointed out that the study of the relationship among educators should be carried out in the process of teacher training, during which instructors are given the chance to interrelate to appreciate what effective teamwork could achieve.

Earlier the duties of teachers was considered differently; subsequently it was perceived that the involvement of each of these roles could be confusing, particularly when they are joined together for a collective practice (Robinson and Buly 2007). Owing to the fact that there has not been a proper investigation of the instructors with regard to collective practice in an inclusive classroom, research carried out by Damore and Murray (2009) revealed some of the variations in the perception of educators. In a study involving 118 educators from 20 urban universities, themes arose displaying that educators varied in their views around the factors/constructs vital for cooperation. Approaches towards instructing inclusion deliberated on various complex features and general educators' approaches toward cooperative practice also involved such intricacies. Brownwell *et al.*, (2006) opposed that approaches to alliance mirrored

separate reactions, not just about the kind of individual with whom they are in alliance, but also about the cooperative practice the individual is involved with. Although some of the instructors may be skillful, some others may not be effective in handling and integrating collaboration; this will affect their approach towards inclusion.

The OECD (2005) gave a recommendation that teachers should be 'active agents' in carrying out analysis on their performance and that of the learners' progress, should be analysing their own practices and their own students' progress and should be vigorously involved in framing policy. This ideas means that it is essential for inclusive teachers' needs to be identified engaged and empowered as instructors who will jointly design an inclusive curriculum. As such, their confidence, competencies, knowledge, and positive approaches can invaluably support the principles of inclusion and inclusive curricula. This is important if instructors are to improve a sense of value and ownership towards inclusion within their own indigenous, national, and regional context.

Brownell and Pajares (1999) pointed out that teachers' ideas and points of view have been earlier identified to be necessary in determining and predicting their inputs. The importance of noting the ideas of teachers as regards to inclusion and their willingness for inclusive education was acknowledged by researchers through time. Scruggs and Mastropieri (1996) carried out a meta-analysis survey involving 28 survey reports, which took place in 1985 through to 1995, came out with a conclusion that almost 10,000 surveyed teachers accepted the idea of inclusive education. They also revealed that below one third of the surveyed teachers are convinced that they are equipped with adequate time, skills, training and resources needed to achieve the requirements of students in inclusive classrooms.

Scruggs and Mastropieri (1996) created an authority in their findings which continuously created an effect on research both in the United States and Europe. The curiosity of researchers concerning instructors' ideas about inclusion and professional readiness incorporates the experienced instructors and those who are still undergoing professional formation in university settings.

Researchers who carried out studies on the view points of inclusive education and professional readiness in the mist of teachers sought deeper understandings. Brownell and Pajares (1999) researched on instructor's effectiveness in teaching students with learning and behavioural challenges. Path analysis on data collected via surveys identified the expression of success within teachers who took part in professional development programs and received backing from university administrators, as regards to their ability to meet the requirements of disabled students. Furthermore, these teachers experienced more shared communications with inclusive education instructors.

There have been dialogues about the role of teacher education in upholding or changing the way diverse group of students are treated in society (Apple 2001; Sleeter 2001; Barton 2003). Nieto (1999) questioned researchers to reflect on how "the way students are thought about and treated by society and consequently by the universities they attend and the educators who teach them is fundamental in creating academic success or failure". Serious viewpoints on teacher education have caused many to scrutinize how the initial teacher education programme prepares pre-service teachers to teach different students in a multicultural society (e.g., Cochran-Smith 2005; Darling-Hammond and Bransford 2005). Others (Jordan *et al.,* 2009) have revealed how teachers ideas in regard to their roles in teaching all students are reflected in their practice. Their duties have indicated that there is a link between the mindset of the instructors regarding the nature of the ability to learn and their willingness to take the responsibility for teaching all students.

Florian (2007) pointed out that advocates of inclusive education have been engaged in a series of arguments about how the assumptions, systems and procedures in schooling that are founded on the concept of 'most and some' students have to be substituted by new ways, thoughts and implementation that will be to the advantage of all.

Forlin (2010) and UNESCO (2008) pointed out a new developing international recognition that the restructuring of teacher education is necessary in this process. Some groups of educators and researchers (Gabel 2001; Brisk *et al.,* 2002; Swartz

2003) have made a call to teacher educators not only to examine their students' approach towards diversity and the accommodation of that diversity but also to participate in self-study and internal evaluations to better understand their capacity to infuse diversity issues throughout the curriculum (Brisk *et al.,* 2002).

Perhaps the most widely examined factor related to inclusive teaching is professors' attitudes and evaluations toward inclusive teaching. Overall, it would appear that faculty believe that diversity has a positive effect on campus and in the classroom. For example, Maruyama and Moreno (2000) found that 70% of the faculty they surveyed believed that diversity on campus gives students the opportunity to explore new perspectives. When asked about the effects of diversity in their classes, half of the faculty believed that diversity broadened the variety of experiences shared. Faculty were also more likely to report that diversity in the classroom allows students to confront stereotypes on social, political, racial, and ethnic issues and personal experiences. Other faculty have reported positive outcomes and reasons for teaching about diversity, such as to increase awareness, education, and tolerance for all humans (Simoni *et al.,* 1999).

However, much more attention has been given to professors' negative attitudes and evaluations of inclusive teaching.

Even though the majority of faculty believes that inclusive teaching is positive and important, many do not teach inclusively. A possible reason for this could be the number of negative attitudes and evaluations held by many faculties regarding inclusive teaching. Kowalski (2000) lists what she believes to be the six primary negative attitudes and evaluations faculty have about teaching inclusively.

The first is that adding diversity to the curriculum takes time away from core content, which also raises questions as to how much time should be given to diversity topics (Madden and Hyde 1998; Simoni *et al.,* 1999; Aveling 2002; Marshall *et al.*, 2002).

The Association of American Colleges and Universities reported that approximately 28% of college students are considered to belong to a minority group. Does this mean

that 28% of the curriculum, classroom time, etc. should be devoted to multicultural education? Some faculty believe that certain topics do not deal with education about people (e.g., maths) and so diversity issues are irrelevant and not worth the time (Simoni *et al.,* 1999; Banks 2001)

Other negative evaluations of inclusive teaching have to do with the way social statuses are covered and how coverage could offend students (Simoni *et al.,* 1999; Kowalski 2000). Professors often opt to mention only the one or two groups about which they know the most (Kowalski 2000) and teach the statuses as independent identities when in reality they interact (e.g., race and gender) (Madden and Hyde 1998)

Kowalski (2000) notes that this can be more harmful than not mentioning any groups due to the way the information about the minority group is often presented. Teaching about minority groups in a tokenistic and simplistic fashion, where differences are emphasised over similarities, fosters feelings of alienation from minority students and prejudice from majority students (Aboud and Fenwick 1999).This is also not to say that professors should cover every single minority group (Marshall 1995), but it is important to note that no coverage at all can signal to students prejudice toward these uncovered groups (Katz 2003). Furthermore, downplaying differences and emphasising sameness can also be potentially harmful. (Sue 2004) believes that denying groups of their differences "is really a denial of the unfair power imbalance that exists in society", which in turn, allows Whites to deny their unearned privilege and advantage in society.

These White privileges and unfair advantages are also most prevalent to minority students when they are denied (Sue 2004). Somewhere in between these extremes is a balance of adequate coverage of minority groups that allows for students and faculty to elaborate, process, and even apply the information. The goal is not to give every possible perspective, but rather a reasonable number of multiple perspectives (Marshall 1995).

Kowalski's (2000) last two negative evaluations of inclusive teaching deal with issues of resistance. Students who value a diversified education view inclusive professors as more knowledgeable, enthusiastic about the material, and open-minded; whereas students who do not value this education view their inclusive faculty as biased (Piland *et al.,* 2000). Many professors believe these students will resist coverage of diversity issues (Simoni *et al.,* 1999) in the form of silence, absenteeism, or verbal and written complaints (Higginbotham 1996). It is also worth noting that these behaviours are not limited to White, straight, upper class, able males as many might suspect (Higginbotham 1996).

Depending on how material is presented, it could create an impression to all students that the instructor is trying to push an agenda to which students quickly tune out (Piland *et al.,* 2000). This is especially the case for minority faculty who are often the ones teaching inclusively in the first place (Mayhew and Grunwald 2006). It may also be the case that when diversity topics are covered in a shallow manner, students may question the overall credibility of the instructor (Kowalski 2000). In addition, Aveling (2002) found that students began to feel, "uncomfortable when the 'natural' order of how much time [was] spent on what or who, became unbalanced". However, it should be noted that the curriculum was balanced so that an equal amount of time was given to majority and minority topics. Nevertheless, researchers have found that many majority students are sensitive to how minority topics are covered and often feel defensive and portrayed in a negative light during these discussions (Organista *et al.,* 2000), often leading to student resistance.

The other source of resistance faculty often face is themselves (Kowalski 2000). One of the first steps to becoming a multicultural educator is self-assessment of one's own biases and prejudices towards any number of social groups (Montgomery, 2001; Richards *et al.,* 2007). This can be the most difficult step for many professors. Should only sexism and racism be reflected upon by faculty because those are the only two minority groups covered in their courses; or should every minority group be included in the professors' assessments? This is an extremely important question, yet a difficult and complicated one to answer (Simoni *et al.,*1999). People can be reluctant to admit

prejudicial beliefs to others and even themselves (Paulhus, 1988), making it difficult to assess stereotypical and/or prejudicial beliefs accurately. “Often teachers are resistant to the notion that their values might reflect prejudices or even racism towards certain groups" (Richards *et al.,* 2007) Causey and colleagues’ (2000) work suggests that many White, middle-class professors' beliefs about other people are often resistant to change.

3.4.4.2 The tasks and different challenges of teachers to meet inclusive education

Among the different challenges linked to guaranteeing educational equity in the formation of ‘universities for all’ affects the groundwork of faculty members to meet the tasks of social and educational inclusion in increasingly different societies. Rouse (2008) explained that a reciprocal triangular relationship between three elements (knowing, believing and doing) could be used to convey the difficulties of professional development. Any two of the three elements of knowing, believing and doing are thought to impact the third. This implies that in cases where a faculty member have confidence in the rights-based philosophy of inclusion and is eager to try it out by including students that may have been in exclusion class, this has the ability to develop the faculty member’s knowledge concerning inclusive practice. Similarly, if another faculty member that has confidence in the principle of inclusion and may be reluctant in ‘doing’, handling a subject concerning inclusive education practice could improve the instructor’s knowledge which builds the self-assurance to participate in inclusive practice. Other faculty members may have the basic knowledge of inclusive practice but are still uncertain if they believe in it, participating in an institution that has adopted the inclusive ethos (doing), they now realise that practice can be effective.

These examples imply that it is not reasonable to wait for all the elements to be completed – faculty members could fall into various groups with regard to their knowledge, beliefs and practices. For that reason, the most vital question is the way instructors could assist in developing the knowledge, beliefs and practices that maintain inclusive education. There are three major theories for faculty members at the universities. First, faculty members and professional developers should take

consideration of accounts from the onset. One of the ways of achieving this is through rejection of the determinist opinions of capability that dominated the educational landscape during the twentieth century. According to developing literature, for example (Hart 1998; Hart *et al.,* 2004) who explained the issue of what might be used in place of determinist views, and this literature provided some proposals that could be useful in training in an initial teacher education. Peters and Reid (2009) in the USA have been gathering examples of events, called 'teacher practices', that teacher are emerging in the optimism of disrupting and challenging views regarding ideas like normalcy, so as to adopt the required modifications in thinking and practice.

Secondly, there is a need to correct the views of faculty members who believe that they are not qualified to manage disabled students or non-disabled students'. In my own view I will say they have the efficient knowledge and skills needed to handle all students, though they may lack the confidence to carry out the knowledge in assisting students who are going through difficulties in learning. Some of the literature on the concept of 'specialist pedagogy' for instance (Davis and Florian 2004; Lewis and Norwich 2005; Kavale and Florian 2007) and the important knowledge instructors require as regards to achieving education for all students, for example, (Kershner 2000) offers guidance to teacher educators concerning the use of teaching methods that can support all students.

A 'more rounded appreciation of how to deliver inclusive practice' starts with a clear knowledge that inclusive practice is more than differentiation. It has to do with a proper knowledge of the interactive socio-cultural factors that intermingle to create individual differences (biology, culture, family, university), instead of descriptions that stress a particular cause. Inclusive practice has to do with the understanding of ways to restructure the relative contribution of each of these factors in finding out the most effective way of responding in situations where students experience difficulty. Besides, it has to do with the fact that not all students will encounter problems even though they have been affected by such socio-cultural factors. Teachers could be a source of change. These are the basics of evidence-based practice, and it is the

groundwork of ‘specialist’ knowledge – understanding the time, reason and ways to react to difficulty may not be an easy situation of ‘what works’.

Finally, there is a need for faculty members to acquire new methods that enable them to work with and through others. If the idea of capability is substituted with an opinion of the learning problems experienced by students as difficulties of teaching for teachers to solve – and in this case faculty members are to be regarded as qualified to teach all students –how might the expertise of colleagues who specialise in learning difficulties and those from correlated fields be used to assist teaching and learning? Several different models of collaborative teaching are recommended in the literature (Nevin *et al.,* 2009). Trainee faculty members and individuals hoping to advance in educational practice require chances to involve in collaborative teaching as part of their professional development.

Supporting instructors and provision of professional training is considered as an important element for an inclusive curriculum, so as to accommodate all the different requirements of the students. Florian and Rouse (2009) pointed out a recommendation that initial teacher education should get the people ready to proceed for the professional stage and adopt a personal and collective obligation to develop the learning and involvement of all students.

The OECD (2005) pointed out improving our knowledge of teaching as a ‘‘knowledge-rich profession’’. Giving that for instance in Finland the quality teacher education programmes at universities, being sustained by the state, have resulted in the production of highly qualified and autonomous instructors and have also helped to powerfully professionalise the teaching profession and fortify the education system in general. Halinen and Jarvinen (2008) explained that well experienced instructors do have a better knowledge and appreciation of students’ varieties; they also have a respectful attitude towards their students, giving them personal assistance and pointing out objectives such as learning to learn, problem solving and analytical skills, as well as improving their intellect of responsibility and ability to co-operate.

The OECD went on to explain that the requirements of a professional instructor need to be derived from the purposes of the students and make available professional wide standards and collective knowledge of what is viewed as effective teaching. Opertti and Brady (2011) further explained that there is a need for a teacher's profile to include strong subjective matter knowledge, pedagogical skills, the ability to work effectively with a wide range of students and colleagues, to promote the university and the profession, and the ability to engage in continuous development.

Inclusive pedagogic practices and tools imply, amongst other things, a diversion from over-loading students with theoretical and formal academic knowledge towards a more attention on effective student involvement and learning. This means that instructors have the ability to create an effective flexible and significant range of goals, methods, media, activities, and assessment. It could involve cooperative teaching and learning, collaborative problem solving, mixed-ability groups, and individual education plans designed to correspond to the other curriculum, alongside cognitive instruction, self-regulated and memory learning, multi-level teaching, competency-based approaches, and interactive, digital teaching tools (Corbett 2001).

3.4.4.3 Teaching methods and inclusive education

The major problems of teachers that are willing to adopt inclusive in their practice is how to respect as well as respond to human variances in a manner that involves all students, instead of separating them from what is normally obtainable in the daily life of the classroom (Florian 2008). Though achieving these goals poses a high standard for inclusive practice in the sense that spreading what is normally available to every student is a complex pedagogical challenge. It involves an adjustment in method of teaching and learning from the method that works for most students currently alongside 'additional' or 'different' for those that encounter problems, in the direction of one that comprises the growth of a rich learning community categorised by learning opportunities that are adequately made accessible for every person, so as to give every student the opportunity to contribute in classroom life. Also, the methods that instructors create such environments are not simple to notice because:

● Teachers' feedback to personal variations happens while they are attending to other matters;

● Observers have shallow understanding regarding the comprehensive situation of instructors' actions supporting their decision (e.g. planning, prior knowledge and experience etc.); and

● If observers pay attention to instructors' feedback to variances between diverse groups of students, it becomes difficult for them to understand when instructors are spreading what is generally obtainable in classrooms (Florian and Black-Hawkins 2011).

Learning the strategies that teachers and faculty members improve and spread what is generally obtainable in a classroom lesson or activity creates a different view point on how to consider inclusive education, practice and pedagogy likened to more traditional methods to teaching all students, which is based on understanding personal requirements. This is due to the fact that these methods are founded on the argument that some of the students essentially need something 'different from' or 'additional to' that which is normally obtainable (Avramidis *et al.,* 2000; Marshall *et al.,* 2002; Campbell *et al.,* 2003; Lambert *et al.,* 2005; Lambe and Bones 2006; Sharma *et al.,* 2008).

Rouse, (2008) explained that considering the literature on inclusive methods of teaching as the avenue of increasing the understanding of the things that matter as indication of inclusive pedagogy. The term inclusive pedagogy was particularly used to express a focus on "the act of teaching and its attendant discourse (Alexander 2004) and to express the differences between inclusive pedagogy and the terms inclusive education and inclusive practice. Differentiating between inclusive pedagogy, inclusive education and inclusive practice is necessary but can be challenging due to the term 'inclusive' which is generally used in education having different connotation. It is considered as an educational system with no exact definition. Though there is a wide-ranging agreement and understanding that inclusive education involves the continuous involvement and reduction in exclusion from the culture, community and

curricula of mainstream universities (Ainscow *et al.*, 2006), this process could be presented in divers forms but not much is understood as regards to the detail of practice at the classroom level. As a result (Florian and Rouse 2009), explained that inclusive practice, the actions people carry out to provide meaning to the idea of inclusion, things that people do to give meaning to the concept of inclusion, has not been properly expressed. Inclusive practice is widely different from the very definite, for instance, enrolling disabled students in mainstream universities by repositioning specialist provision from special to mainstream universities; to a very wide-ranging concept of reacting to differences among students without alternatives to categorisation. Both the transfer of specialist provision and the neglect of methods established on categorical alterations between groups of students results in questioning what good practice is made of, the thing that indicates that practice and how it could be identified.

CHAPTER 4
Research Methodology

4.1 Introduction

This chapter provides a detailed description of the research design and methodology adapted for this thesis. The purpose of this study is to explore the inclusive education practices in Libyan universities. The chapter is organised in twelve sections following the introduction. The second section (4.2) Research aims, section (4.3) Methodological overview, section (4.4) Research paradigm and philosophy, section (4.5) Research methodology, the sixth section (4.6) Research design, section (4.7) Questionnaire design, section (4.8) Development of the research instrument, section (4.9) Data analysis methods, section (4.10) Factor analysis, section (4.11) Reliability and validity, section (4.12) Components of a structural model, and lastly, (4.13) Summary.

4.2 The purpose of the study

The purposes of the study to explore the inclusive education practice in Libyan universities; this study was designed to address the variables that influence inclusive education practice in Libyan universities. To accomplish this, the following research objectives will be pursued:

4.2.1 Aims of the study

1- To what extent are Libyan universities able to implement the policy of inclusive education?

2- To identify and understand curriculum design in Libyan universities in the context of inclusive education?

3- To explore the methods of teaching practice in Libyan universities in responding to the challenges of inclusive education.

4.2.2 Objectives of the study

Objective 1: To find out whether faculty members understand the concept of inclusive education, philosophy and the possible future changes in Libyan universities.

Objective 2: To identify the main challenges faced by Libyan universities with respect to adopting inclusive education practise.

Objective 3: Understand how curriculum design can support the implementation of successful inclusive education in the Libyan universities.

Objective 4: To obtain the factual information on teaching methods in Libyan universities in the context of inclusive education, and suitability for individual differences between all students.

4.3 Methodological overview

The summary of the research method used to provide answer to the research question in Chapter One is presented in this section. These steps are represented in Figure 4.1, showing the interrelation of the chapters and sections to each other in every stage. The quantitative method, which implies the use of a questionnaire, was used in this study for the collection of data about the underlying constructs proposed in the theoretical model. These constructs includes philosophy of inclusive education, policy of inclusive education, curriculum, methods of teaching, and teacher practices. These were designed with multi-item measures using 5-point Likert scales, and using items that have been implemented in previous tests to measure them.

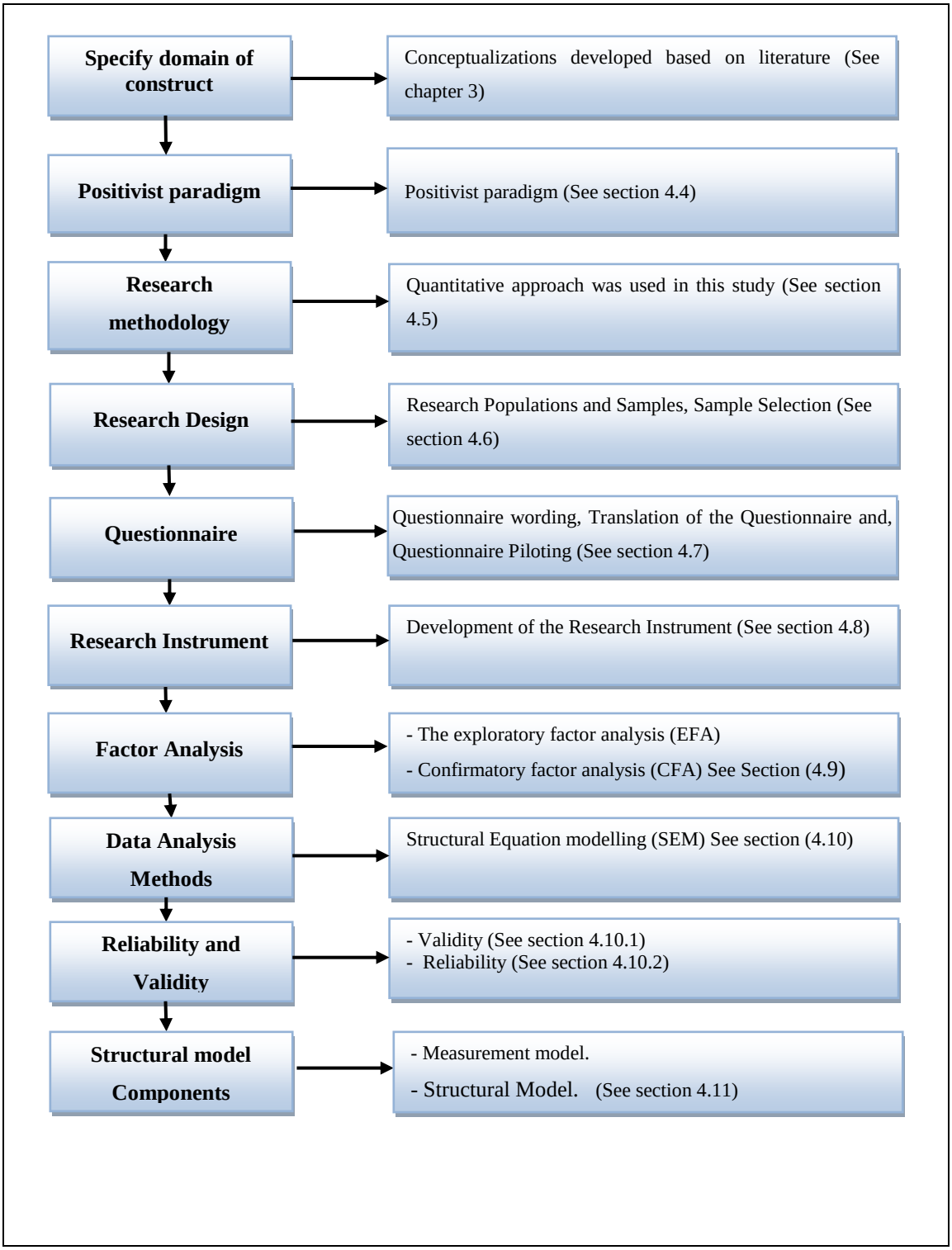
The collection of data for this study was by the use of a questionnaire separated into eight parts, including questions measuring the intended constructs and demographic questions. Because the targeted respondents are from a non-English-speaking region, a similar approach of back translation was conducted as recommended by cross-cultural methodological researchers (Brislin *et al.,* 1973; Malhotra *et al.,* 1996; Temple 1997). A pre-test was performed before carrying out the final survey; this was to ascertain

that the phrasings of the questionnaire were clear and comprehensible, and the letters of the instrument were achieved. A pre-test is needed to find out if there is any fault or issues with the instrument, and to find out the face validity of the measures.

Two statistical techniques were used in the analysis of the data. The preliminary data was analysed with the Statistical Package for the Social Sciences (SPSS) version 18, which gives descriptive analysis research samples such as means, standard deviations and frequencies. The measurement model was tested by the use of the Structural Equation Modelling (SEM using AMOS 17) using Confirmatory Factor Analysis (CFA). SEM was conducted using the two-stage approach recommended by Anderson and Gerbing (1988).

In the process of analysing the data, the researcher first accessed the measurement model, then proceeded in assessing the structural model. The first assessment was aimed at developing underlying measures through the use of CFA. In this study the measuring the model stage was carried out in two stages. This has to do with validating the underlying constructs. In the process of examining reliability, Cronbach's alpha and CFA were used in the assessment of the internal consistency of measures. Validity criterion, construct and external validity, which involves convergent and discriminator and external validity, were also assessed. With the completion of stage one, which involves the development of the scale.

Figure 4.1: Overview of Methodology



4.4 Research paradigm and philosophy

The literature reported that there are two opposing research philosophies; namely, positivism and phenomenology (interpositivism), and that neither of these two paradigms is considered better than the other (e.g. Hussey and Hussey, 1997; Easterby-Smith *et al.,* 2008; Collis and Hussey, 2009). However, choosing the right research philosophy is essential because it has important implications for the choice of research strategy and methods (Collis and Hussey, 2009). In short, a phenomenological research is characterised by a number of features: it focuses on the meaning rather than the measurement of social phenomena - what people are thinking and feeling. It is inductive, utilises qualitative data and uses small samples, is concerned with generating theories, and generalises from one setting to another (Collis and Hussey, 2009). By contrast, a positivistic research is also characterised by several features; it seeks to explain causal relationships between two or more variables, is concerned with hypothesis testing, and focuses on a specific existing theory. It is deductive, utilises quantitative data, uses large samples, generalises from sample to population, and its findings may either confirm the theory or result in the modification of the theory in the light of the findings (Saunders *et al.,* 2009; Hussey and Hussey, 1997).

Positivist researchers prefer precise quantitative data and often use experiments, surveys, and statistics. They test hypotheses by carefully analysing numerical results from their measurements. The main strengths of positivism are that it provides wide coverage of data, the collection of data is usually relatively fast and economical, and when large samples are used, they can serve as a basis for policy decisions. Critics of positivism claim that these methods are inflexible and not very effective in understanding processes and generating theories.

The phenomenological approach, on the other hand, arose as a result of criticisms of the positivistic approach application in social science and it stems from the view that reality is not objective and exterior, but socially constructed and given meaning by people. Thus, the act of investigating reality has an effect on that reality and considerable regard is paid to the subjective state of the individual. More specifically,

this approach to research stresses the subjective aspects of human activity by focusing on the meaning, rather than the measurement, of social phenomena (Saunders, *et al.,* 2007).

However, the major difference between the positivistic (quantitative) and the phenomenological (qualitative) paradigms of scientific inquiry can be illustrated through the overall approach followed by each of these paradigms, with regard to the generation of knowledge. On other hand, the most significant distinguishing feature between the two approaches is that adopting either approach leads the researcher to employ a specific research methodology. Adopting the positivistic approach requires a research methodology that is concerned with hypotheses testing by collecting and analyzing quantitative data in order to arrive at generalisable inferences which are often based on statistical analysis (Saunders *et al.,* 2007). Cross-sectional studies, longitudinal studies, experimental studies and factorial studies are considered as types of research that can be grouped together under the heading "positivistic methodology" (Saunders *et al.,* 2007). On the contrary, adopting the phenomological approach requires a research methodology that is concerned with generating theories by collecting and analysing qualitative data in order to describe and discuss a phenomenon in its context. Any type of case study such as descriptive, illustrative, experimental and explanatory falls into this category of research methodology (Saunders *et al.,* 2007). However, Hussey and Hussey (1997) summarise the features of two main approaches as shown in table 4.1.

Table 4.1 Features of the two main approaches

Positivism (quantitative) approach	**Phenomenology (qualitative) approach**
-Tends to produce quantitative data	- Tends to produce qualitative data
- Uses large sample	- Use small sample
- Concerned with hypothesis Testing	- Concerned with generating theories
- Data is highly specific and precise	- Data is reach and objective
- The location is artificial	- The location is natural
- Reliability is high	- Reliability is low
- Validity is low	- Validity is high
- Generalises from sample to population	- Generalises from one setting to another

(Hussey and Hussey, 1997, P.54)

Each of the two main methodologies has its advantages and disadvantages. Table 4.2 provides a summary of some strengths and weaknesses of the two approaches.

Table 4.2 Strengths and weaknesses of positivistic and phenomenological approaches

Approaches	Strengths	Weaknesses
Positivist	-They can provide wide coverage of the range of situations -They can be fast and economical -Where statistics are aggregated from large samples, they may be of considerable relevance to policy decision	-The methods used tend to be rather inflexible and artificial -They are not very effective in understanding process or the significance that people attach to action -They are not very helpful in generating theories -Because they focus on what is, or what has been recently, they make it hard for policy makers to infer what changes and actions should take place in the future
Phenomenological	-Data gathering methods are seen as natural rather than artificial -Ability to look at change process over time -Ability to understand people‟s meaning -Ability to adjust to new issues and ideas as they emerge -Contribute to theory generation	-Data collection can be tedious and require more resources -Analysis and interpretation of data may be more difficult -Harder to control the pace progress and end-points of the research process -Policy makers may give low credibility to result from qualitative approach

(Amaratunga et al., 2002, P.20)

On the other hand, research is classified in terms of the logic of the research into deductive and inductive paradigms. Deductive research encompasses the gathering of existing facts to confirm or reject the hypothesised relationship between variables that have been deduced from existing knowledge. Therefore, the deductive approach begins with the existing concepts, theories and literature, and develops hypotheses that are later examined with the help of empirical data. By contrast, inductive research refers to the process of observing facts on specific phenomenon to generate a theory, thereby it emphasises gaining an understanding of the meanings humans attach to

events, and has less concern with the need to generalise, a close understanding of the research context and the collection of qualitative data (Bryman, 2008; Saunders *et al.,* 2007; Sekaran and Bougie, 2010).

Based on the discussion above, it is apparent that adopting the positivistic paradigm encompasses employment of the deductive approach with specific research methodologies such as surveys and quantitative methods of data collection and analysis. The reason for adoption of a positivistic approach was to be able to realise the aims and make available the basis for generalising results for particular situations. Some of the reasons considered before choosing this approach include:

1. Saving time and effort: the use of cross-sectional survey methodology saves time, effort and necessary resources compared to other methodologies such as longitudinal and lab experiment (Creswell 2009);

2. According to the multivariate analysis carried out by Hair, Anderson, Tatham and Black, (2006) in this research there is need for a fairly large number of cases, which can only be achieved by the use of survey methodology;

3. Earlier studies made available the foundation for building a model and research constructs to use. It should be noted that there are different ways (e.g., experimental or interview) to carry out this study; but, given the aims of this study, the way adopted here is considered a good and an appropriate way to conduct this study;

4. It could be addressed to a delegated sample of faculty members, which is considerably large (Fowler 1993; Cohen *et al.,* 2007);

5. The use of the questionnaire creates the possibility to study the effect of certain factors on respondents' perceptions of the competencies and their importance, if need be;

6. According to Cohen *et al.,* (2007) the questionnaire is an instrument that is already pre-coded and, as a result, easy to analyse.

4.5 Research methods

A research methodology is “a model which entails theoretical principles as well as a framework that provides guidelines about how research is done in the context of a particular paradigm” (Sarantakos 1998) . There are three approaches of collecting that data in any research: a quantitative approach, a qualitative approach, and a mixed methods approach (Tashakkori and Teddlie 1998; Creswell and Clark 2007).

According to Creswell, (2002) quantitative research consists of questions that narrow when tested using the appropriate tool, leading to data that can be observed and measured with regard to these variables. Determining the effect that the independent variable (inclusive education) has on the dependent variables (the policy of inclusive education, curriculum, teaching) requires a quantitative study.

4.5.1 Quantitative approach

Creswell, (1994) defines a quantitative approach as an analysis into a social or human problem which fundamentally deals with examining a theory, gathered by diverse measures with numbers and analysed with statistical procedures, so as to find out if the predictive generalisations of the theory are factual. The main aim is to accurately measure the social world, to examine the hypotheses and to calculate and be in control of the human behaviour. Creswell (2002) points out that a quantitative approach is functional when trying to test a theory or describe or discover factors that influence results. It has to do with questions regarding how much? How many? How often? To what extent? (Yin 2003). The most regular quantitative methods include experiments, quasi-experiments and surveys. The advantage of a quantitative approach is that it can generate factual, reliable outcome data that is usually linked to some larger population (Denzin and Lincoln 2000; Patton 2002). the major constraint is that the outcome gives inadequate information on human attitudes and motivation (Gorard 2003).

The focus of quantitative research in this study was to ascertain the faculty members’ knowledge and attitudes as regards to inclusive education, their teaching experience, the factors they consider necessary to assist the inclusive policy, and the limitations to

the successes of inclusive education in universities. The main objective of this study is to verify the causes and effects relationship with regard to inclusive education. With the purpose of understanding the effectiveness of the faculty members' views as regards to inclusive education policy and their teaching experiences in the regular classroom, the researcher used a quantitative research technique, in the form of a questionnaire, using both closed and open questions. The information gathered was able to assist the researcher understand more on the depth of the faculty members' knowledge and experience of inclusion and inclusive education.

Quantitative research involves quantifying relationships between variables. The relationship between variables makes use of effect statistics, for instance correlations, relative frequencies, or relationships between means. The problem is finding out whether cause and effect existed between known variables does not explore unknown areas (Hopkins 2008). Qualitative design would be unsuitable for the research due to the fact that qualitative design explores unknown variables and patterns (Creswell 2003).

4.5.2 Justifications for research philosophy

Quantitative research approach

The quantitative approach has served educational research in many ways. Most of the knowledge we have about education resulted from its application (Borg and Gall, 1989). The following justifications support why quantitative approach has been selected for this research:

Most of the empirical investigations in inclusive education has been conducted by adopting a quantitative approach in their designs to explore expected relationships which might emerge from interaction between a set of given research variables. A quantitative descriptive research technique was chosen for the study due to the fact that it has been used in several studies examining teachers' attitudes toward inclusive education (Jobe *et al.,* 1996; Burke and Sutherland 2004; Dupoux *et al.,* 2006).

A quantitative research instrument focuses on individuals. The responses are then totaled, despite the respondents often not knowing each other.

Conducting SEM analysis techniques in this research, such as the factor analysis, necessitates numerous respondents; which can be predominately achieved by adopting the survey methodology (Malhotra and Birks 2003).

The quantitative approach provides the possibility of generalising the research results beyond the sample, whereas case study research does not enable generalisations to be made beyond the organisation studied (Hussay and Hussay, 1997; Easterby-Smith *et al.*, 2002).

4.6 Research design

This research is aimed at exploring the inclusive education practiced in Libyan Universities. It is designed in is a cross-sectional study. The structural equation model (SEM), which is an extension of the regression method, approach to research design and data analysis than other multivariate statistical model as used to examine relationships among the variables. The SEM is a more comprehensive and flexible statistics. Hoyle, (1995) explained that the SEM method assists in enhancing the explanatory power of the non-experimental data that are often collected in behavioural, social, and educational research.

4.6.1 Research populations and samples

The important factor to be considered in the study is to locate the appropriate population that will give considerable information to use in testing the hypothesis of the research or to answer the research questions. (Fraenkel and Wallen 1996; Gay 1996; Creswell 2005) defined the population as the group of individuals of interest to the researcher who share at least one distinguishing characteristic. It is impossible for a researcher to study the whole population due to factors such as time and cost (Gay 1996; Weisberg *et al.,* 1996; Bryman 2004), and it is normally more feasible to select a sample of the population from the group of individuals who are within reach to the

researcher, called the sampling frame or the accessible population (Fraenkel and Wallen 1996; Johnson 2000; Creswell 2005).

The research population for this study was defined as a faculty members working in the four Libyan public universities, this data were obtained from the university department in the Ministry of Higher Education.

4.6.2 Sampling Frame

Sampling is divided into two types: Probability sampling and non-probability sampling (Fraenkel and Wallen 1996; Bryman 2004; Creswell 2005). Probability sampling is to choose the participants on the basis of a belief that this sample fairly represents the population under study. Also, it is possible to use probability sampling if the purpose of the research is to draw conclusions or make predictions affecting the population as a whole. On the other hand, non-probability sampling means to pre-choose the participants of the survey based on specific characteristics (Saunders *et al.,* 2003).

The major feature of all probability sampling techniques is that the sample is chosen randomly. Participants are randomly selected where each participant within the population has an equal probability of being chosen. Probability sampling has different techniques such as Random Sample, Stratified Sample, Systematic Sample and Cluster Sample (Bryman, 2004). Random sampling means the participants are selected exactly on a random basis without any kind of consideration. Stratified sample means to choose the sample randomly but with the need to identify one or more of the participants' attributes. For example, if you want to ask 1000 faculty members in public universities but you need 40% of them to be Deans. Systematic sample means to select participants randomly from a chosen list at regular intervals. One clear example is to choose one school out of every 50 schools in the area starting from a random school. Finally, Cluster sampling is used when there is a population diffused across a wide geographic area. This technique lets the researcher split the population into clusters, such as counties, census tracts, or other boundaries, and then select participants randomly in those clusters.

To establish the sample frame, a list of faculty members was obtained from Ministry of Higher Education. Letters seeking permission were sent to get from four large universities in Libya (Omar Al-Mukhtar, Tripoli, Benghazi and Sirte) for the purpose of conducting the study in this universities and reasons of confidentiality. This choice was made in light of the following considerations:

- The four Libyan universities are the largest universities in the Libya with respect to population size.

- The availability of all colleges (Education, economy, law, science, medicine, engineering, etc.) in universities.

- There is a similarity in regulations, financial resources, numbers of students and teachers, scientific disciplines, language, cultural values in all Libyan universities. Table 4.3 summarised the Libyan universities numbers of students and faculty members.

As for the selection of the respondents in this study, the researcher has followed random sampling techniques. A systematic sampling process based on a random statistics part was used as the method for selecting the respondents; this method is a statistical method involving the selection of elements from an ordered sampling frame. The most common form of systematic sampling is an equal probability method, in which every skip element in the frame is selected, and the equation below explains the way in which the skip element can be selected (Babbie, 2007; Collis & Hussey, 2003):

K (sampling interval) = N/n

Where n is the sample size, and N is the population size

For example, if 40 faculty members are to be selected from a university of 200 faculty members, 200/40=5, so every 5rd faculty member is chosen after a random starting point between 1 and 5, to get the 40 faculty members.

Table 4.3: The number of students and the teaching staff at Libyan universities, (2009 - 2010)

Name of university	Number of teaching staff	Number of students
Tripoli	741	60912
Benghazi	619	50055
Sabah	368	10365
Naser	139	800
Omar El-Mukhtar	550	23835
AL-koums	289	7606
ALzowia	344	21633
Sert	416	21956
JableGharbi	226	14195
Asmarya	116	1427
Musrata	281	14195
Total	**4138**	**227043**

Source: Libyan higher education (2010)

4.6.3 Sample Size

Sample size Borg and Gall (1979, 1989) argued that the general rule of choosing the size of the sample is using the largest sample. Borg and Gall (1989); Munn and Drever (1990); Gorard (2001) and Balnaves and Caputi (2001) argued that the size of the sample should be large enough to satisfy the needs of the study and researcher can, to some extent, be confident to generalise the results. In the same context, Cohen and Manion (1985, 1994) and Cohen *et al.,* (2000) reasoned that selecting the sample size depends on the heterogeneity of the population; the greater the heterogeneity, the larger the sample must be selected as well as on the nature of the population and the purpose of research, otherwise there is no clear-cut answer. Cohen and Manion (1985, 1994) and Cohen *et al.,* (2000) mentioned that a sample size of 30 should be the minimum if a researcher is planning to use statistical analysis.

According to Hair et al., (1998) to be able to obtain a reliable and meaningful parameter estimates a large sample size is needed to run the SEM, though there is no estimate on how large the sample size required to carry out the SEM (Hair *et al.,*

1998). Anderson and Gerbing (1988) suggested a sample size for carrying out SEM to be between 100 and 150 as the minimum.

Kline, (1998) in agreement with the theory, explained that a sample size below 100 may be considerably small; he suggested a sample size between 100 and 200 cases as medium size and samples that exceed 200 cases could be considered as large. A model with considerably wider parameters requires more samples. Hair *et al.,* (1998) suggested a minimum sample size to be at least greater than the number of free parameters. Mueller (1997) pointed out that the ratio of the number of cases to the number of observed variables is recommended to be at least 10:1. In this study the sample size used meets the recommended size. The sample size is 247, which is obviously greater than 200 cases. Therefore, the SEM analysis could be conducted without further problems. This is constant with Borg and Gall (1979, 1989); Munn and Drever (1990) and Gorard (2001), who stress the importance of choosing a large sample size to ensure the necessary confidence with the data.

The sample selected for this study involved 247 faculty members in Libyan universities. Structural Equation Modelling (SEM) is founded on large sample distribution theory, due to the fact that inferential tests of SEM are more reliable with a large sample. Even though in many past researches, the selection of large sample has been proven unrealistic, impractical, or even impossible, (Raykov and Widaman 1995) have pointed out that empirical ratio of subjects to number of free parameters consisting of at least 5:1 with normally distributed data, or at least 10:1 with non-normal data, can be linked with the practical relevance of the asymptotic theory underlying SEM. The reason for selecting a large sample was to obtain a sufficient response rate and to ensure a representative sample.

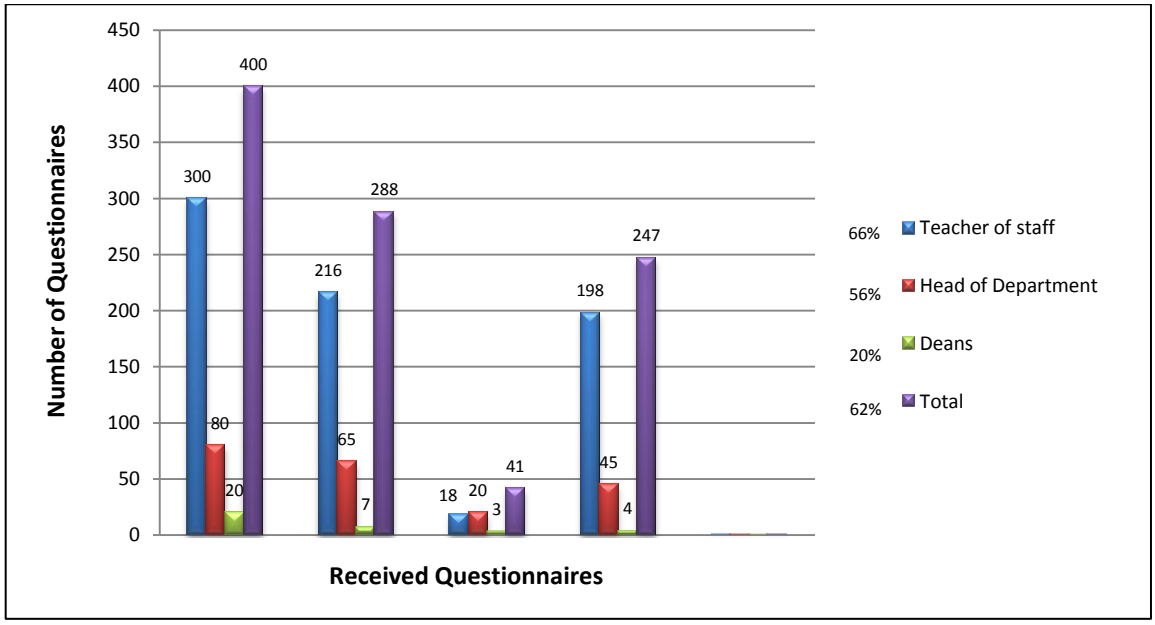
4.6.4 Characteristics of the sample members

The questionnaire was distributed to 400 respondents in the universities of Omar Al-Mukhtar, Tripoli, Benghazi and Sirte, where 288 questionnaires were received back with a response rate of 62%; however, 41 of the questionnaires received were excluded and 247 were processed for analysis (See Table 4.4).

Table 4.4: The questionnaire distribution and response rate

Groups	Distributed Questionnaires	Received Questionnaires	Excluded Questionnaires	Usable Questionnaires	Response Rate (%)
Teacher of staff	300	216	18	198	66%
Head of Department	80	65	20	45	56%
Deans	20	7	3	4	20%
Total	**400**	**288**	**41**	**247**	**62%**

Figure 4.2: The questionnaire distribution and response rate



The researcher has been distributed 400 questionnaires to four universities including his own university in which it operates and allocated 100 questionnaires to each university and the responses were different where the highest percentage of responses from his own university in which it operates (See Table 4.5) the reason is probably because it was a personal request and The researcher was known most of the faculty members, and people were happy to help.

Table 4.5: The questionnaire distribution and response rate (Four Universities)

Groups	Distributed Questionnaires	Received Questionnaires	Excluded Questionnaires	Usable Questionnaires	Response Rate (%)
Omar-Almuktar (my own university)	100	96	8	88	88%
Bangazi University	100	70	13	57	57%
Tripoli University	100	62	11	51	51%
Sirte University	100	60	9	51	51%
Total	**400**	**288**	**41**	**247**	**62%**

4.6.5 Reduce the possibility of bias in this study

Bias is a form of systematic error that can affect scientific investigations and distort the measurement process. A biased study loses validity in relation to the degree of the bias. While some study designs are more prone to bias, its presence is universal. It is difficult or even impossible to completely eliminate bias. In the process of attempting to do so, new bias may be introduced or a study may be rendered less generalisable. Therefore, the goals are to minimize bias and for both investigators and readers to comprehend its residual effects, limiting misinterpretation and misuse of data.

Bias is any trend in the collection, analysis, interpretation, publication or review of data that can lead to conclusions that are systematically different from the truth. Also deviation of results or interference's from the truth, or processes leading to such deviation are bias.

Bias can occur during any stage of a study:

- During the literature review of the study question
- During the selection of the study sample
- During the measurement of exposure and outcome
- During the analysis of data

- During the interpretation of the analysis

In this study the researcher took some measures to reduce of bias as of the following:

1) The researcher used open-ended questions in the questionnaire to reduce bias. It is free of bias of the researcher. There is evidence that different researchers obtain different answers because of different ways of asking questions (Kothari, 2004; Gray, 2004).

2) the researcher used a group of respondents for the purpose of detecting problems in the questionnaire instructions or design, whether the respondents had any difficulty in understanding the questionnaire or whether here were any ambiguous or biased questions (Van Teijlingen and Hundley, 2001; Pressor *et al.*, 2004; Kripanont, 2007). According to Kripanont (2007), pre-testing should administered to a sample that is expected to respond similarly to samples on which the scale will eventually be applied. Quantitative research, which assumes objectivity, is usually evaluated considering some agreed and defined criteria, such as validity and reliability. It also focuses on eliminating researcher bias.

The questionnaire used in this study went through piloting and pre-testing before it was used to collect data. Piloting determines if the research design and questionnaire are able to accomplish their objectives. Such measures have the ability to advance validity testing of the questionnaire, and reduce the possibility of bias in this study; I made use of faculty sample that I know personally. They represent areas such as: education, sociology, literature, history, psychology, biology, law, business, and chemistry. They are present members of faculties at colleges and universities from the east coast to the west coast of Libya. In total, requests for participation totalled 30 people. 21 (67%) responded; maybe due to the fact that it was a personal request, people were willing to help. Obviously, the fact that I knew many of the respondents could cause a bias in their answers, and their comments were also taken into consideration and were helpful in finalising the necessary changes in the survey instrument for data collection. But due to financial and time constraints, a sample was

appropriate for the pilot study. Questionnaire piloting is considered an important issue in research (Saunders *et al.,* 2009).

3) The researcher used a large sample to reduce the bias. In this study the sample was 247 faculty members in Libyan universities. All the above such measures have the ability to reduce the bias in this study.

4.7 Questionnaire

Fraenkel and Wallen (1996); Bryman (2004); Creswell (2005) described a questionnaire as a research technique which involves list of questions; it is one of the research instruments that provides opportunity for the gathering of information on correspondents attitude, beliefs and opinions on the variables of interest to the researcher. It is one of the most regular methods for data collection (Oppenheim 1992; Easterby-Smith *et al.,* 2002; Sekaran 2003). In addition, reviewing the literature revealed that questionnaires were commonly used as a data collection method in research on inclusive education (e.g. Jobe *et al.,* 1996; Burke and Sutherland 2004; Dupoux, et al. 2006). Also, a questionnaire is usually not appropriate for exploratory research but could be used for descriptive or explanatory research (Saunders *et al.,* 2007).

Questionnaires can be classified into three main types: unstructured, semi-structured and structured (Saunders *et al.,* 2009). *Structured questionnaires* consist of closed or prompted questions with predefined answers. The researcher has to anticipate all possible answers with pre-coded responses. They are used in large interview programmes (anything over 30 interviews and more likely over 200 interviews in number). *Unstructured questionnaires* are made up of questions that elicit free responses. These are guided conversations rather than structured interviews and would often be referred to as a "topic guide". The topic guide is made up of a list of questions with an apparent order but is not so rigid that the interviewer has to slavishly follow it in every detail. The interviewer can probe or even construct new questions which have not been scripted. This type of questionnaire is used in qualitative research for depth interviewing (face-to-face, depth telephone interviews) and they form the basis of

many studies. *Semi-structured questionnaires* comprise a mixture of closed and open questions. They are commonly used in educational studies where there is a need to accommodate a large range of different responses from responses. The use of semi-structured questionnaires enables a mix of qualitative and quantitative information to be gathered. They can be administered; on-line questionnaire, post/mail questionnaire; telephone questionnaire, and individual distribution/self-administered questionnaire.

In this study, the semi-structured questionnaire was chosen over other types of questionnaire.

4.7.1 The type of questioning questionnaire

The type of question and format are another issue that should be considered when designing the questionnaire. Two types of questions can be used in constructing a questionnaire, closed and open questions. While open questions allow the participants to be free in providing the related answer using their own words and terms, closed questions offer the participants a choice of alternative answer to choose from. Each has its own advantages and disadvantage.

Peterson (2000) claims that the advantages of open questions are usually the disadvantages of closed questions and vice versa. Open questions' advantages include that the researcher does not impact the participants' answers excessively and the questions are easy to ask and give the researcher more information. However, open questions have significant disadvantages including being demanding and time consuming for participants, which may result in incomplete answers or partially completed questionnaire; the response rate can be very low, requiring more paperwork and making the questionnaire seem longer; and difficulties in coding and analysing the answers. With respect to closed questions, the main issue related to them is that they can produce false judgments, either by giving a limited range of options from which to choose, or by prompting the study participants with 'acceptable' answers (De Vaus, 2002). However, well developed closed questions can result in a number of advantages. This approach is useful when the questionnaire is long or the participants' motivation to answer the questions is not high (Cooper and Schindler, 2008; De Vaus,

2002; Hair, 2003). Additionally they are useful in obtaining information and attitudes if they are designed well. The choice of open or closed questions depends on several factors and there is no right or wrong choice; these factors include the questions content, participants' motivation, methods of administration, type of participants, and the amount of time available to develop a set of unbiased answers (De Vaus, 2002).

Depending to the above discussion and the comprehensive nature of the questionnaire and its length to collect reliable and valid data on variables posited in the literature to be associated with inclusive education practices, it was decided to adopt closed questions and open questions in questionnaire.

Four open questions were used in part 5, 6, 7, and 8; these open questions required the participant to articulate their view regarding other inclusive education issues that might not be mentioned in the questionnaire and these would be provided in short answers. This helps overcome the restrictive nature of a purely closed question. Mangione (1995) recommended to use such questions (open questions) in situations where questions required short and specific answers, or list of possible answers is too many. Several types of closed question exist. Saunders *et al.,* (2007) suggested five types of closed questions: 1) list question, which offer the participants a list of answers to choose from; 2) category question, which is designed in a way where each participant's answer appropriates to only one category; 3) ranking questions, which ask participants to place things in rank order; 4) rating questions, which are usually used to obtain participants' opinions (Likert-scale); and 5) quantity questions, in which the participants are required to provide a number, giving the amount of features on behaviour or attribute.

In this study, one type of closed questions were used to achieve its aims. the main question type adopted was the rating question in the form of Likert-scale, which has been widely used in inclusive education studies, since it is easy and quick to answer, does not need much space, and enables a variety of statistical techniques (Easterby-Smith *et al.,* 2002; Oppenheim, 2003; Sekaran, 2003). Elmore and Beggs (1975) indicated that a five point scale is just as good as, and that an increase from five to

seven or nine points on a rating scale does not improve the reliability of the ratings (cited in: Sekaran, 2003, p. 199). Thus, a five point Likert scale was used in measuring some of the study's variables specifically questions within part 2, 3, and 4; for these questions, participants were asked to tick or circle one of five choices on a sliding scale of agreement [from (1) 'strongly disagree' to (5) 'strongly agree'], and scale of importance [from (1) 'Not at all' to (5) 'To a great extent ']. Accordingly, the five above scales were used to identify the respondents` attitude towards the issues related to the present study.

4.7.2 Questionnaire wording

In designing a questionnaire the wording is regarded as an important issue. Based on guidelines suggested by Oppenheim, (1992), Easterby-Smith *et al.*, (2002), Malhotra and Birks (2003) and Sekaran (2003), the following issues must be taken into account when wording the questions:

1. The use of simple, direct and familiar language in designing the questions is important, avoiding jargon, abbreviations and technical terms.

2. Keeping the questions short and comprehensible so as not to affect the content, aim and meaning of each question.

3. Keep away from double-barrelled questions and double-negative questions.

Moreover, there are vital roles that are used in designing a questionnaire, which are considered depending on if it is open or close ended. Dillman (2000) explained two methods regarding questionnaire design, which are open-ended (unstructured) and closed-ended (structured) questions. Table 4:5 below shows the advantages and disadvantages of using open-ended and closed-ended questions. Open-ended questions give the respondents the opportunity for full expression when responding to the question. It consumes the time of the respondents, though, and requires more effort, while the advantages of closed-ended questions are that they save time and the responses are easier to compare as they have been predetermined. However, these

kinds of question do not give the correspondent opportunity to fully express his/her ideas.

In this study the researcher dedicated a lot of time and effort in designing the questionnaire, which went through many drafts and a thorough assessment and pre-testing before arriving at the final version. The recommendation given previously was taken into consideration in the study. Some of the examples include: the cover page of the questionnaire was designed with the University logo which was meant to motivate the respondents to participate, confirming its' academic purpose; guaranteeing the respondents confidentiality; attaching a letter from the University of Huddersfield, UK, where this research was conducted, the University of Omer Al-Mukhtar, Libya, where the researcher works, and the Libyan Embassy, London, which sponsored the researcher to conduct this research in the UK, showing their support for the research; a clear explanation of the research purpose to the respondents; direct and familiar language were used in designing the questionnaire to make it simpler and quicker for the correspondents to respond, the questionnaire was designed avoiding any kind of terminology, double-barrelled, leading, loading, and double negative questions; finally a pre-test was carried out to confirm the clarity of the questionnaire and to avoid any sort of misunderstanding (see section 4.7.3 below).

Table 4.5 Advantages and disadvantages of open-ended and closed-ended questions

Advantages	Disadvantages
Open-ended questions	
Option to answer freely and opportunity to probe responses	Time-consuming and demand more effort from respondents
Closed –ended questions	
Require little time Responses are easier to compare as responses have been predetermined	Do not allow probing responses

Source: Outlined from Oppenheim (2000) and Saunders et al. (2007).

4.7.3 Translation of the questionnaire

Considering the targeted population, which has Arabic as their official language and in which the participants are native speakers of Arabic, the questionnaire, which was initially designed in English language, was translated to into Arabic to enable and to make it easy and quick for the respondents to participate. Appropriate precautions were taken to avoid any problems and difficulties that may occur during the process of developing the Arabic draft of the questionnaire used in this study.

The questionnaire translation was carried out through the following process. Firstly, after discussing the final English draft of the questionnaire with the supervisor, the questionnaire was then translated by the researcher into Arabic (the researcher is a native Arabic speaker). In the second stage, the two versions (English and Arabic) were sent to two Arabic academics, one of whom is a lecturer at the University of Omer Al-Mukhtar. The first has a doctorate degree in English language with more than 15 years' experience teaching English language; the second has a doctorate degree in psychology and is fluent in English with experience of more than 15 years of teaching. After receiving the questionnaire from the translators, all their comments and suggestions were examined and discussed when necessary with them by phone to clarify any possible modification and amendments. Accordingly, a final draft of the questionnaire was produced after several adjustments were made. The final translated questionnaire was sent to an Arabic teacher with more than 20 years' experience to confirm the clarity of the grammar and wordings of the final draft. Accordingly, the final draft of the Arabic questionnaire was produced (see Appendix B)

4.7.4 Questionnaire piloting

In such a research like this, it is important to carry out a pilot study. The pilot study assists the researcher in discovering the dimensions of the study, strengthens the rationale of the study and facilitates the design of instruments. Moreover, results gathered from the pilot study could serve as a primary result of the study.

(Oppenheim 2000) pointed out that the first stage of the pilot work should be exploratory, which should fundamentally involve the conceptualisation of the research question. This may include long unstructured interviews, talks with major points or build-up of write ups concerning the topic of the enquiry. Prior to the main study a pilot study was conducted; this was to determine the clarity of the questions, to avoid difficulties or ambiguities in wording, and to estimate the length of time a participant would take to complete the questionnaires (Cohen *et al.,* 2007).

The pilot study carried out in this study was in two stages; the first was with the fully drafted questionnaire in Arabic which was sent by email to 10 Libyan PhD students in different universities in the UK (University of Huddersfield, University of Gloucestershire, Sheffield Hallam University, and Leeds Metropolitan University); three of them are studying psychology and the remaining two study social sciences subjects (mostly education management). Important comments and several suggestions regarding the wording, presentation and format were obtained. In the second stage of the pilot study, I used a sample of faculty members whom I know personally from around the country. They represent fields such as: education, sociology, literature, history, psychology, biology, law, business, and chemistry. They are current faculty members at colleges and universities from the east coast to the west coast of Libya. In total, requests for participation totalled 30 people. 21 (67%) responded, possibly because it was a personal request and people were willing to help. Obviously, the fact that the researcher is familiar with the respondents may result in a biased response, but their answers were taken into consideration and were helpful in finalising the important adjustments in the questionnaire. Due to financial and time constraints, a sample was used for the pilot study. Questionnaire piloting is considered an important issue in research (Saunders *et al.,* 2009).

4.8 Development of the research instrument

In developing the research instrument for this study, important sources of input which were used in the process of constructing the research instrument were derived from a variety of important issues related to the topic, that were reflected in the literature. The

literature also served a great purpose in creating items that the questionnaire needed to analyse the research questions for the study. The following provides a brief description of the survey instrument and strategies undertaken to secure validity and reliability of the instrument.

The final draft of the questionnaire (see Appendix A) is made up of eight parts. The survey tool was designed with the aim of collecting data from the faculty members. These data collected was used in answering the research questions. The last version of the questionnaire was arranged into eight parts, which include:

Part 1: Demographic factors

This part of the questionnaire features ten items to ask the survey participants to provide some personal and professional factors such as gender, position within the University (Dean of Faculty, Head of Department and, faculty member), years of teaching experience, and years of administrative experience, and age of universities.

Part 2.A: Philosophy for inclusive education

This part consists of ten multiple-choice items, designed to determine the perceptions of faculty members regarding whether the extent of a certain philosophy of education does not exclude anyone within their universities. It will be measured on their perceptions of each item on the basis of a Likert-type scale of 1 for "Strongly Disagree", 2 for "Disagree", 3 for “Neutral", 4 for "Agree", and 5 for "Strongly Agree" (see Appendix C Part, 2 A).

Part 2.B: policy of inclusive education

This part consists of seven multiple-choice items, designed to determine the perceptions of faculty members on specific policies for inclusive education within their universities. It will be measured on their perceptions of each item on the basis of a Likert-type scale of 1 for "Strongly Disagree", 2 for "Disagree", 3 for "Neutral ", 4 for "Agree", and 5 for "Strongly Agree" (see Appendix C, Part 2 B).

Part 3: Content Design. (Curriculum)

This part of the questionnaire consists of 18 units of multiple-choice, and aims to determine the perceptions of faculty regarding the curriculum of these institutions, and the content is determined on the basis of the principles of inclusive education. It will be measured on their perceptions of each item on the basis of a Likert-type scale of 1 for "Not at all", 2 for "Hardly at all", 3 for "A little bit", 4 for "More than a little bit", and 5 for "To a great extent" (see appendix C part 3)

Part 4: The Methods of Teaching, Teaching Practices

This part is made up of sixteen multiple option items and is constructed to establish the perceptions of faculty members concerning the teaching methods, participation of teachers in Libyan universities in response to the challenges of inclusive education. Their perceptions concerning each item will be considered based on a Likert-type scale of 1 for "Strongly Disagree", 2 for "Disagree", 3 for "Neutral", 4 for "Agree", and 5 for "Strongly Agree" (see appendix C part 4)

Part 5: The University and Support for Inclusive Education

This area of the survey involves open-ended questions with the objective of getting the faculty members' perceptions concerning the support of inclusive education in Libyan universities.

Part 6: The effectiveness of the policies from Ministry of Education towards inclusive education

In this part, an open-ended survey is used to gather the faculty members' opinions concerning the efficiency of the policies from the Ministry of Education with regard to inclusive education.

Part 7: The experiences and observations on teaching styles

In this section of the survey open-ended questions were used to get the perception of the faculty members in relation to the experience and observation on the teaching

pattern and the way it supports inclusion and quality for students e.g. gender, ethnicity, identity, and disability.

Part 8: Curriculum Designs and Inclusive Education

At the last part of the survey, an open-ended question was used to determine the opinion of faculty members concerning how the curriculum design supports inclusion and quality for students. The construction of the questionnaire was based on the literature review.

4.9 Data analysis methods

The section will comprehensively detail the analysis of the data collected for the purpose of this study. The analysis of the data will be shown in the main features of the respondents and would cover the trends of their opinions obtained from their answers, shown in percentages. Also, inferential analysis will be carried out using the Structural Equation Model (SEM), applying Exploratory Factor Analysis in the first stage to pinpoint the model that contains the factors that have the most substantial impact on inclusive education using SPSS. In the second stage, the fitness of the model was tested using confirmatory factor Analysis, AMOS. The data will be tested for regularity and uniformity, in order to make certain of its validity for the analysis before implementing the SEM.

The purpose of the statistical procedures is to assist in developing the plausibility of the theoretical model and to estimate the degree to which the various explanatory variables appear to be affecting the dependent variable. Hence, this study uses Statistical Package for Social Sciences (SPSS) version 18 to analyse the initial data, and Structural Equation Modelling (SEM) using confirmatory factor analysis to test the hypothesized model. As shown in Figure 4.2., this section illustrates and validates the use of these statistical methods.

4.9.1 Factor Analysis

Factor analysis is described as providing the "tools for analysing the structure of the interrelationships (correlations) among a large number of variables (e.g., test scores, test items, questionnaire responses) by defining sets of variables that are highly interrelated, known as factors" (Hair 2006). Factors, which each concede a number of variables that are highly related to one another, are perceived to represent the core dimensions within large numbers of variables (Hair 2006; Field 2009). Factor analysis may be considered to be specifically suitable for inspections in which a considerable amount of questionnaire elements are presented to the research participants to measure a smaller number of paradigms.

Hair (2006) pointed out that an underlying structure is searched for, among a set of variables regularly without any prior limitations on the approximation of factors or the numbers of factors to excerpt from the variables in the approach of the exploratory factor analysis (EFA).

Whereas in the approach of the confirmatory factor analysis (CFA), a test is undertaken on the statistical importance of a hypothesised factor composition, which indicates both the number of factors that will exist within a set of variables, and the factor tallying to each variable (Schumacker and Lomax 2004; Hair 2006). Confirmatory factor analysis is a necessary procedure for structural equation modelling analysis.

4.9.2 Structural Equation modelling

Structural Equation modelling (SEM) is a process for multivariate co-relational analysis. In accordance with Schumacker and Lomax (2004) this method is the most suitable for the analysis and is used for the quantitative analysis in this research, due to the fact that SEM could be used in the analysis and testing of theoretical models. Given that there is a need for testing the theoretical model of this research, SEM is therefore required to be used for the quantitative. Some other factors contributed to the

preference of SEM over all other statistical approaches such as multiple regression or path analysis:

1) SEM analysis gives room for problems related to prediction as well as measurement (Kelloway 1998).

2) In using SEM, various variables observed could be analysed, unlike other statistical methods that are limited to few variables (Schumacker and Lomax 2004).

3) Using SEM, errors that occur during measurement are taken into consideration (Schumacker and Lomax 2004).

4) Unlike other methods of analysis, SEM is considered more powerful and produces measurements that are trustworthy and more reliable.

5) SEM methods do have more than one dependent variable where one variable can be both dependent and independent, compared to multiple regression (Norman and Streiner 2003) considering this research which has a natural setting in which its variables are not manipulated or controlled, this will be the most suitable method of analysis.

6) Raykov and Marcoulides (2006) explain that with the use of SEM analysis, both "direct" and "indirect" effects of the variables can be scrutinized.
7) Norman and Streiner, (2003) pointed out SEM analysis possess latent variables that are theoretical constructs compared to Path analysis which are directly observed.

To carry out Structural Equation Modelling, a theoretical model with latent variables and observed variables is required. The Exploratory Factor Analysis (EFA) was firstly carried out to determine the latent constructs, the group of measured variables based on the data. The Confirmatory Factor Analysis (CFA), which is another form of SEM

analysis, was carried out after EFA for setting up the "construct validity" of the factors (Brown 2006) and as a priori stage for SEM analysis. Brown (2006) has said:

"The results of CFA can provide compelling evidence of the convergent and discriminates validity of theoretical constructs. Convergent validity is indicated by evidence that different indicators of theoretically similar or overlapping constructs are strongly interrelated.... Discriminates validity is indicated by results showing that indicators of theoretically distinct constructs are not highly inter-correlated".

Subsequent to these analyses, based on the interim model, a hypothetical model was developed by specifying the interaction between the factors resulted from EFA. Afterwards, this model was analysed using SEM analysis to "determine the extent to which the theoretical model is supported by sample data"(Schumacker and Lomax 2004). The hypothetical model was tailored a number of times; but the tailored models were never very different from the hypothetical model. All through this process, the significance values and fit indexes were observed, and some of the factors were dropped from the model in view of their weak alliance with other factors. A tailored model with pleasing indexes and significant associations between its constructs was identified.

Schumacker and Lomax, (2004) defined model fit as follows: "model fit determines the degree to which the sample variance covariance data fit the structural equation model". One standard to inspect for model fit is "the statistical significance of individual parameter estimates for the paths in the model," which is regularly evaluated with .05 level of significance (Schumacker and Lomax 2004). Some other standards to think about are the fit indexes. Though there is no specified and agreed list of fit indexes to be analysed and standards to attain in assessing the model fit (Hu and Bentler 1999), the researchers regularly consider the following conventional fit indexes: Chi-square ($\chi 2$), Comparative Fit Index (CFI), Tucker Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA).

The cut-off standards for fit-indexes vary in diverse publications. Hu and Bentler (1999) stated that "...it is difficult to designate a specific cut-off value for each fit

index because it does not work equally well with various conditions" . Similarly Schumacker and Lomax (2004) stated "…there has been much controversy and discussion on their subjective interpretation and appropriateness under specific modelling conditions. The conventional criteria consider any model with a fit index above .9 as acceptable" (Hu and Bentler 1999). Hu and Bentler recommended cut-off criteria for fit indexes as .95 (see Table 4.3). For chi-square standard a non-significant value is recommended (Schumacker and Lomax 2004). Nevertheless there is a pre warning that this value is influenced by sample size. In cases where sample size is more than 200, it tends to result in major values. Substitute standard is recommended by Hatcher (1994) . Regarding RMSEA index, Browne and Cudeck (1993) recommended the cut-off values presented in Table 4.6.

Table 4.6 Criteria for Model Fit

Model fit	Description	Suggested criteria
Chi-square ($\chi 2$)	"The $\chi 2$ goodness-of-fit statistic assesses the magnitude of discrepancy between the sample and fitted covariance matrices, and it is the product of the sample size minus one and the minimum fitting function" (Hu and Bentler, 1999, p. 2). Note: This statistic is affected by sample size. When sample size is more than 200, $\chi 2$ tends to result in a significant value. Therefore conclusions based on this value may be erroneous (Schumacker and Lomax, 2004).	a. degrees of freedom (df) ratio ≤ 2 (Hatcher 1994) b. Non-significant value of $\chi 2$ (Schumacker and Lomax, 2004)
Comparative Fit Index (CFI)	"The CFI is defined as the ratio of improvement in Non-centrality (moving from the null to the proposed model) to the non-centrality of the null model" (Raykov and Marcoulides, 2000, p. 41)	CFI $\geq .95$ (Hu and Bentler, 1999)
Tucker Lewis Index (TLI)	"The measure can be used to compare alternative models or a proposed model against a null model" (Schumacker and Lomax, 2004, p. 103	TLI $\geq .95$ (Hu and Bentler, 1999)
Root Mean Square Error Of Approximation (RMSEA)	"The RMSEA is a population-based index that relies on the non-central $\chi 2$ distribution, which is the distribution of the fitting function...when the fit of the model is not perfect....The RMSEA is an 'error of approximation' index because it assesses the extent to which a model fits reasonably well in the population (as opposed to testing whether the model holds exactly in the population; cf. $\chi 2$)" (Brown, 2006, p. 83).	a. RMSEA $\leq .06$ (Hu and Bentler, 1999) b. RMSEA $\leq .05$: Close fit $.05 \leq$ RMSEA $\leq .08$: Fair fit RMSEA $\geq .10$: Poor fit (Browne and Cudeck, 1993)

4.10 Reliability and Validity

An important process in a research is to carry out critical assessment and investigation of the sources or medium of data collection; this is to make sure that the measures used are effective and appropriate. Some of the most popular measures of accessing academic research are through validity and reliability. These are the fundamental standards for assessing the accuracy of quantitative research. Reliability is a necessary factor as regards issues of regularity of measures, while validity has to do with the concept measure, to determine if it accurately measures that concept or not (Bryman and Bell 2007) . As a result, there should be a consistency in the measurement across time and items used, so that if for any reason there is a repetition of the measurement on the same object, the result should be the same (Sekaran 2003).

4.10.1 Reliability

The reliability of a measure means the degree at which a particular measurement is trusted which is proofed by its consistency over time and across different items in the instrument (Sekaran 2003). Reliability of an instrument is normally calculated using various formulas which are based on the content of the instrument. According to Norusis (2004) reliable instruments produce the same result (i.e., the measuring instrument yields similar results when different people administer it, when alternative forms are used, or when conditions for making the measurement change). DeVellis (1991) proposed a guideline use to find out the satisfactory level of reliability for a measuring instrument when there is a sample selection representing an entire population. Going by his proposed guideline, in finding out the reliability of a measuring instrument, when there is more than 100 samples, the level of reliability can be deduced based on the following; (a) above 0.90 is considered as strongly reliable, (b) between 0.80 and 0.90 is considered as highly acceptable, (c) between 0.70 and 0.80 is considered as acceptable, (d) between 0.65 and 0.70 is considered as minimally acceptable, (e) between 0.60 and 0.65 is considered as undesirable, and (f) below 0.60 is considered as unacceptable.

The Cronbach's Alpha Formula utilizing the SPSS package was used as a measure of reliability coefficient for the research questionnaire developed in this study, because it is one of the most commonly used reliability coefficient available in determining the internal consistency of various measuring instruments. the reliability of the measuring items related to Philosophy for inclusive education and, policy inclusive education (Part 2 A / B of the questionnaire) was 0.71, for the measuring items related to the curriculum of these institutions was content designed on the basis of the principles of inclusive education (Part 3 of the questionnaire) was 0.90, for the measuring items related methods teaching, teacher practices in Libyan universities to response the challenge in the inclusive education. (Part 4 of the questionnaire) was 0.72. As shown in Table 4.7

Table 4.7: Reliability of the Survey Instrument

Scalable Parts of the Survey Instrument	Reliability	Significant
Philosophy and, policy of inclusive education.	0.71	0.000*
Curriculum of inclusive education.	0.90	0.000**
The methods of teaching, teacher practices of inclusive education.	0.72	0.000*

Note: An asterisk denotes a statistically significant reliability scale (n =247).

4.10.2 Validity

According to Bryman& Bell (2007) validity is regarded as one of the most vital standards of research. In a quantitative method, validity is dependent on cautious instrumental construction, which ascertains that the instrument takes the required measurement. It is therefore important for the measuring instrument to be effectively designed and administered The measuring instrument must, therefore, be constructed and administered in a suitable, standardized, and regular manner according to recommended procedures. Validity in qualitative methods mostly depends on the skill, capability and rigidity of the person carrying out the field work. Norusis (2004) argues that, for the reason that qualitative and quantitative methods involve differing strengths and weaknesses, they are made up with different strategies which are not commonly restricted for research.

In positivism, the dependability of the research instrument used in data collection is important (Knight 2002); to determine if the data collection method/s measures what it is meant to measure, which requires the method/s to be examined.(Saunders, Lewis et al. 2000). Knight (2002) and Black (1999) argued that there are different aspects of validity. Those which usually relate to many researchers include: content validity and construct validity. Content validity according to Knight (2002) depends on the postulation that there is an obvious specification of the issue being studied and that the instrument being used in the study (i.e. the questionnaire in this research) possesses the required potential to offer sufficient treatment of the investigative question guiding the study. Construct validity has to do with how accurately a measure represents a concept i.e. if the numerical illustration in a quantitative level used in the questionnaire has the ability to correctly correspond to levels of that concept (Black 1999). According to Knight (2002) various procedures was carried out in this study to attain requirements of validity. At the outset, the researcher undertook a broad review of literature which involved reviewing and examining different sources of information so as to recognise and discuss all the aspects associated with the research issue (See Appendix C).

Secondly, the questionnaire used in this study went through piloting and pre-testing before it was used to collect data. Piloting determines if the research design and questionnaire are able to accomplish their objectives. Such measures have the ability to advance validity testing of the questionnaire; I made use of faculty sample that I know personally. They represent areas such as: education, sociology, literature, history, psychology, biology, law, business, and chemistry. They are present members of faculties at colleges and universities from the east coast to the west coast of Libya. In total, requests for participation totalled 30 people. 21 (67%) responded; maybe due to the fact that it was a personal request, people were willing to help. Obviously, the fact that I knew many of the respondents could cause a bias in their answers, and their comments were also taken into consideration and were helpful in finalising the necessary changes in the survey instrument for data collection. But due to financial

and time constraints, a sample was appropriate for the pilot study. Questionnaire piloting is considered an important issue in research (Saunders *et al.*, 2009).

The other aspect of validity which has to do with designing research is referred to as external validity (Saunders *et al.*, 2000). Generalised ability means the level at which the research finding could be used in the application of other research. Bryman and Cramer (2001) argued over the uncertainty of researchers in regards to the ability of expert application of the characteristics discovered from the samples, to the population from which the sample was taken, although some level of assurance in the research findings could be assured if the sample is representative. Ghauri and Gronhaug (2005) explained the representative sample as a sample which could be regarded to some extent as applicable for the entire population. For that reason, in this research, the sample was 247 faculty members in Libyan universities. Structural Equation Modelling (SEM) is dependent on large sample distribution theory, because inferential tests of SEM are more dependable with a large sample.

Lastly, convergent validity and discriminate validity were assessed using the exploratory factor analysis (EFA), whereby all factor loadings were of sufficient extent to verify the scope of the concepts, and also through the use of confirmatory factor analysis (CFA) in which quality of the measurement model is adequate using SEM as the criterion. All results of both exploratory and confirmatory factor analysis are presented in Chapter 5.

4.11 Ethics in research

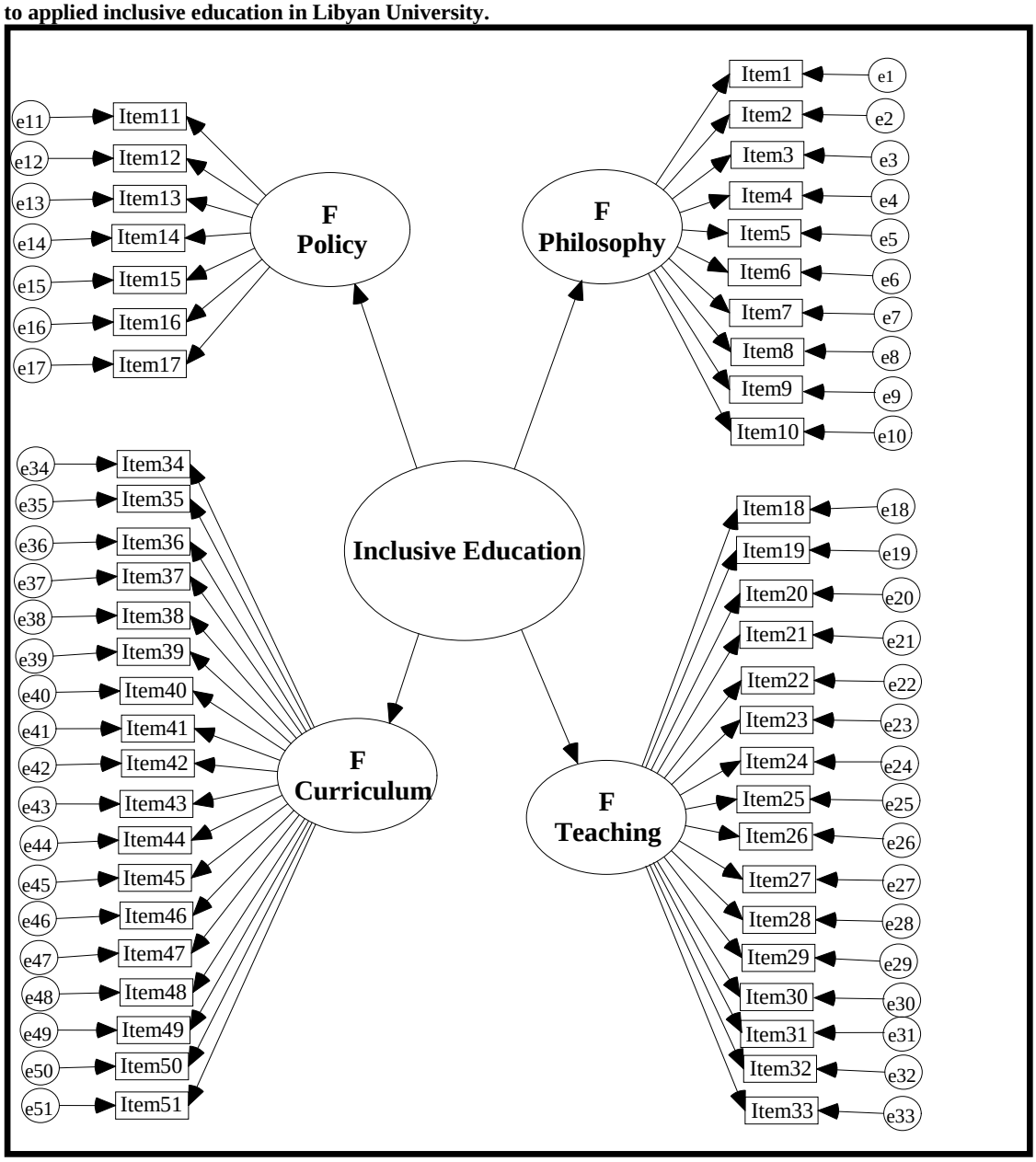
Social research needs to pay attention to the main ethical issues of informed consent, intrusiveness, confidentiality and anonymity. As a consequence, a researcher needs to have high standards of personal and professional integrity. It is necessary to be concerned about the state of the research site and the welfare of individual participants. Ethical permission for the study was given from the Libyan embassy in London (see appendix H). The researcher also received permission to collect data from Ministry of higher Education, Libya. The researcher requested and obtained formal approval from the responsible vice chancellors of the four universities involved in the

study before starting data collection. The objectives and purpose of the study were explained to all the respondents. The researcher is obligated to protect participants rights in two ways: by informing the participant of their role in the study and by maintaining confidentiality and anonymity during the research process.

4.12 Components of a structural model

The data analysis was carried out from two major concepts of a structural equation model: the measurement model and the structural model. The measurement model refers particularly to how far a collection of linked variables was noted in regards to the fundamental factors behind. In this research, the measurement model explains the degree to which all the 51 observed variables were connected to one of the four sub-latent constructs/factors: Philosophy of inclusive education, Policy of inclusive education, Curriculum of inclusive education, and Teaching methods. The structural model refers to the degree to which the sub-latent constructs are connected to a bigger latent construct: in this case, the inclusive educations practice in Libyan universities. Generally, this could be referred to as a full model, considering the inclusion of both a measurement model and a structural model (Byrne 2010); it is depicted in Figure 4.3.

Figure 4.3 Basis for the structural equation model of this study, measuring four sub-latent of preparedness to applied inclusive education in Libyan University.



4.12.1 Measurement model

The measurement components of the analysis verify the observed variables to establish the level where there are fundamental factors that describe the variables, if there are any. In other words, the purpose of the analysis is to find out if the items in the survey essentially evaluate the thoughts they were meant to evaluate. Although a

confirmatory factor analysis is normally used to determine the parameters of a model in developing quantitative scales (Noar 2003) in consideration of the parameters and the observations recognised in the planned structural model, the sample size was seen to be large enough to perform a more robust design to authenticate the survey instrument (Kline 2010). Explicitly, a split-sample exploratory factor analysis and confirmatory factor analysis was conducted.

On the other hand, an exploratory factor analysis can authenticate if the underlying constructs will be able to describe a group of observed variables, and to what extent, a confirmatory factor analysis is carried out when the definite underlying latent constructs are assumed (Byrne 2010). For that reason, in the current research, separating the sample and first carrying out an exploratory and then a confirmatory factor analysis, gives an opportunity for the testing and possible verification of the underlying factors extracted from the exploratory factor analysis. Reliability statistics (Chronbach's alphas) can further illustrate the internal consistency of each of the factors in the survey instrument.

4.12.2 Structural Modelling

Due to the fact that the conceptual model of this study involves a latent construct (i.e. to explore the inclusive education practices in Libyan universities) consisting of sub-latent constructs, it was considered necessary to examine the model with the use of Structural Equation Modelling (SEM) (Kline 1998; Bostic *et al.*, 2000; Noar 2003; Schumacker and Lomax 2004; Byrne 2010) . Once more, the structural equation model is explained in Figure 3.2.

The primary latent construct measured was inclusive education in Libyan universities. The model proposed that the sub-constructs of inclusive education are: Philosophy of inclusive education, Policy of inclusive education, Curriculum of inclusive education, and Teaching methods. The four factors were each made up of items that were on a five-point Likert scale (strongly disagree - strongly agree). The first factor (F1), Philosophy of inclusive education, was made up of ten items. The second factor (F2), Policy of inclusive education, included seven items. The third factor (F3), Curriculum

of inclusive education, was comprised of eighteen items that were on a five-point Likert scale (Not at all - To a great extent), as was the fourth factor (F4), Teaching methods, which was made up of sixteen items.(See section 4.8)

Summary

This chapter begins with the explanation of the philosophical debate of methodology and an outline of the adopted approach of the research. A positivistic cross-sectional approach was chosen for this study to accomplish the target by achieving the objectives and aims so as to make available a foundation for generalising its results. Every part of the study, such as the population and sample, which involves faculty members in Libyan universities, was described. A questionnaire with four open-ended questions was the main method used in data collection from a relatively large number of faculty members who work at four Libyan universities, and data treatment was described in detail. The procedures needed to obtain and analyse data from the designated instruments were provided, as were the forms of statistical treatment used in this study. Issues related to the reliability and validity of the variables measurement was discussed.

In the following Chapter Five, data screening and preliminary data analysis, including descriptive statistics and sample characteristics, are discussed. The hypothesised model of relationships in inclusive education is then tested through examining the association between Philosophy and policy inclusive education, Curriculum and Teaching Methods, and Teaching Practices. This includes two stages: 1) testing the measurement model and 2) testing the structural model.

CHAPTER 5
RESEARCH RESULTS

5.1 Introduction

This chapter presents the analysis of the data collected for the purpose of this study. The analysis includes two parts: First, descriptive analysis will be presented, starting with the main characteristics of the respondents and covering the trends of their opinions obtained from their answers and presented in percentages. Second, inferential analysis will be conducted using the Structural Equation Model (SEM), applying Exploratory Factor Analysis in the first stage to identify the model that contains the factors that have the most significant impact on Inclusive Education using SPSS, and in the second stage the fitness of the model will be tested though Confirmatory Factor Analysis using AMOS. Before implementing the SEM, the data will be tested for normality and consistency, in order to ensure its validity for the analysis.

5.2 Demographic data about the respondents

The members of the sample are relatively young and middle agers where 73% of the sample members are 50 years old or less, with 37% are 30-40 years old. The majority of those respondents where males (81%).while 19% are females and this may reflect the domination of men on the all aspects of life and all sectors in Libya due to the local culture and norms that reflects the prevalence of mail preference.

About 55% are Libyan while about 45% are from other nationalities, with 56% of those respondents hold masters degree and 44% hold doctorate degree, indicating high qualifications among the staff of whom 45% are working as assistant lecturers, 31% are lecturers, 10% are senior lecturers, 7% are associate professors and 7% are professors. About 36% of the respondents are working in the College of Education while about 64% work in other colleges, the majority of whom (80%) are teaching staff, 18% Head of departments and 20% are Dean of faculty. By the end of this year about 51% of the respondents will have been teaching for 5 years or less, 14% will have been teaching for a period between 6 to 10 years and the rest will have been

teaching for a period ranging between 11 years to 35 years. With 81% will have been working as managers for 5 years or less and the rest will have been working as managers for 8 to 20 years. Those who are working in the university for more than 30 years are about 35% while 29% are working for 20 to 30 years, 32% are work for 10 to less than 20 years ad 4%are working for 10 years or less (See Table 5.1).

Table 5.1: Demographic data about the respondents

Variables	Category	Results	
		Respondents (*n*)	**Percentage**
Age :	Less than 30 years	33	13.4%
	30-<40	92	37.2%
	40-50	56	22.7%
	More than 50 years	66	26.7%
Gender:	Male	199	80.6%
	Female	48	19.4%
Nationality:	Libyan	135	54.7%
	Other	112	45.3%
Qualification:	Master	138	55.9%
	Doctorate	109	44.1%
Degree:	Assistant Lecturer	111	44.9%
	Lecturer	76	30.8%
	Senior Lecturer	25	10.1%
	Associate Professor	17	6.9%
	Professor	18	7.3%
In which college do you currently work?	Education of College	88	35.6%
	Other	159	64.4%
Position within the College:	Teaching of Staff	198	80.2%
	Head of department	45	18.2%
	Dean of Faculty	4	1.6%
By the end of this year, for how many years will you have been teaching?	Less than 5years	125	50.6%
	6--10	38	15.4%
	11 – 35 years	84	34.0%
By the end of this year, for how many years will you have been manager?	5 years or less	202	81.8
	8 to 20 years	45	18.2
Age of university	10 or less	10	4.0%
	10-<20	79	32.0%
	20-30	71	28.7%
	more than 30	87	35.2%

5.3 Descriptive analysis

The factors that were expected to have an impact on inclusive education were classified into four groups: the first group includes the factors relating to the philosophy of inclusive education, the second group include the factors relating to the policy and implementation of inclusive education, the third group include the factors relating to the curriculum and content design, and the last group comprises the factors relating to teaching. The questionnaire also included four open-ended questions which gave the respondents the opportunity to raise issues not covered by the scales of the questionnaire. The data merged analysis of the responses and the key points raised by the respondents are presented below. The respondents expressed their views and their degrees of agreement with the statements as follows:

5.3.1 Factor: Philosophy of inclusive education

In this section, the respondents were investigated about their level of agreement with ten statements that relate to the philosophy of inclusive education. The first statement was concerning the respondents believed in and support of the philosophy of inclusive education. Where about 9% were strongly disagree with this statement, 19% disagree, 35% agree and 8% strongly disagree, while 30% were neutral, as the response distributed in almost similar or close percentages, a clear opinion could not be extracted at this stage, however, the later stage of factor analysis may provide a clear image of the effect of this variable and other coming similar variables.

The respondents were then investigated about their feeling regarding the inclusion of all learners in the inclusive education policy, where their responses show that 8% strongly disagree, 37% disagree, 19% agree and 6% strongly agree, while about 30% were neutral. Regarding the financial support and for inclusive education and its resource and whether it is adequate and enable appropriate delivery, the responses shows that 13% were strongly disagree with this idea, 34% disagree, 18% agree and 5% were strongly agree, while 30% were neutral. The support was also investigated with regard to the curriculum material supports for inclusive education e.g., modified and adapted materials and whether they are adequate, where 9% show strong

disagreement with the statement, 26% disagree, about 41% agree and 24% showed neutral response, and as well, support has further being investigated in terms of its level of availability from the Department of Education for improving programmes and services, as 6% were strongly disagree with the statement, 16% were disagree, however half of the respondents agree with this idea with a few of them strongly agree while the rest of the respondents were neutral. Furthermore, the respondent's views were explored regarding inclusive education and if it is more beneficial than it is detrimental, where the vast majority agree with this statement (81%) with a large number of them showed strong agreement while only about 5% disagree and the rest were neutral. The survey has then addressed the integration of learners experiencing barriers to learning affects and if it has the capacity to meet the needs of other learners in the class, where 45% were either disagree or strongly disagree with this view, 28% agree and only 5% strongly agree, with the rest of the respondents showed neutral response.

The professional qualification was also investigated where the respondents were asked whether they feel professionally prepared to work with learners experiencing barriers to learning, the statement was disagreed by 6%, while 17% were neutral and the remaining majority were agree or strongly agree. The next statement was concerning working with teacher support teams to implement inclusive education and if the respondents feel positive about, where nearly 88% agree with the statement with some of them strongly agree, 8% were neutral, while a minority showed disagreement. The last statement in this section emphasized issue of inclusive education implementation and if the members of faculty have experience on, where nearly 47% of the respondents were either disagree or strongly disagree with the statement, around 27% agree or strongly agree while 26% were neutral. The results shown above is similar to inclusive education issues reported by (Avramidis *et al.,* 2000; Agbenyega 2007). This reflects the need for professional development opportunities to be made available to faculty members in the course of their career. Also, faculty members preparation programs in Libya will need to be realigned to inculcate in prospective the knowledge

and skills that will enable them to adequately perform in varied classroom situations (See Table 5.2).

Table 5.2: Factor 1 (Philosophy of inclusive education)

Items	Strongly agree		Agree		Neutral		Disagree		Strongly disagree	
	f	%	f	%	f	%	f	%	f	%
I believe in and support the philosophy of inclusive education.	19	7.7	86	34.8	75	30.4	46	18.6	21	8.5
Do you feel all learners are included in the inclusive education policy?	11	4.5	45	18.2	74	30.0	85	34.4	32	13.0
Resource/financial supports for inclusive education are adequate and enable appropriate delivery.	3	1.2	100	40.5	58	23.5	65	26.3	21	8.5
Curriculum material supports for inclusive education (e.g., modified and adapted materials) are adequate.	17	6.9	106	42.9	70	28.3	70	28.3	15	6.1
There is the level of support is available from the Department of Education for improving programs and services.	84	34.0	115	46.6	36	14.6	7	2.8	5	2.0
Inclusive education is more beneficial than it is detrimental	22	8.9	47	19.0	63	25.5	96	38.9	19	7.7
Integration of learners experiencing barriers to learning affects my capacity to meet the needs of other learners in the class.	75	30.4	141	57.1	19	7.7	9	3.6	3	1.2
Do you feel professionally prepared to work with learners experiencing barriers to learning?	44	17.8	44	17.8	42	17.0	39	15.8	0.0	0.0
I am positive about working with teacher support teams to implement inclusive education.	75	30.4	141	57.1	19	7.7	9	3.6	3	1.2
Members of faculty have experience on issue of implementing inclusive education.	22	8.9	47	19.0	63	25.5	96	38.9	19	7.7

5.3.2 Factor: Implementation and policy of inclusive education

In this section, the respondents were investigated about their level of agreement with statements that relate to the policy of inclusive education. First the respondents were investigated if their country or Ministry of Education have a policy on Inclusive Education, where 45% of the respondents gave neutral response to this statement, while those who agree were 31%, with 5% strongly agree and around 18% with a minority of 1% strongly disagree.

The survey has then addressed the universities' goals and policies and if they are clearly articulated for the inclusive education, where 24% disagree with the statement,

7% strongly disagree, 26% agree and only 2% were strongly disagree, with about 41% provided neutral responses. With regard to the national curriculum and if it contains policies for implementing inclusive education, 26% of the respondents disagree with this statement, 4% strongly disagree, 23% agree and 6% strongly agree, with 42% showed neutral response. The next statement was concerning different groups of students and whether they are not disadvantaged as a result of their socio-cultural background, where the responses reveal that 19% disagree with the statement, 6% strongly disagree, 46% agree and about 9% strongly agree, while 21% were neutral.

The fifth statement was stating that the students given the opportunity to be educated in the colleges, where 12% disagree with the statement, 6% strongly disagree. While the majority of about 71% agree with the statement with nearly half of them strongly agree while around 11% showed a neutral response. Then the institutions' policies towards inclusive in terms of the financial issues was emphasized and appear to be the major criteria when considering the practice of inclusive education, where the majority agree with this statement (68%) with more than half of them strongly agree, while 17% neutral and the rest where either disagree or strongly disagree. The last statement in this section was concerning the lack of teachers with special training and if it is the most serious problem in Libya with regard to the practice of inclusive education, where a vast majority of more than 75% agree with this view, with nearly two thirds strongly agree, while those who are disagreeing with the statement were about 13% where 10% provided neutral response (See Table 5.3).

The open-ended questions were posed to the participants immediately after the main questions of the questionnaire and they were requested to provide their opinions regarding what would have been needed in order to make improve the implementation of inclusive education in the Libyan universities. The following issues were reported by the participants:

- Support: according to some respondents, inclusive education support is an important necessity and there should be a general policy for such kind of education through the

experiences and best practices of other countries in implementing the inclusive education policies.

Where the opinions obtained from the respondents concerning their believe and support of the philosophy of inclusive education shows that nearly 43% of the respondents believe in and support the philosophy of inclusive education with showed 30% neutral response, while similar responses were obtained regarding the financial support for inclusive education and its resource and whether it is adequate and enable appropriate delivery and the support with regard to the curriculum material for inclusive education e.g., modified and adapted materials and whether they are adequate, while the level of support availability from the Department of Education for improving programmes and services was satisfactory for most of the respondents.

- Ability: The inability of some universities was manifested in the inability of regular classroom teachers to meet the needs of the majority of students currently in their classrooms. This situation implies that inclusive education is a future challenge for Libyan Universities as for mainstream in present-day for which the society is still not ready.

Most of the respondents attributed the inability of the Libyan universities to implement inclusive education to the following reasons:

• The lack of awareness among the teaching staff with regard to the concept of inclusive education, in addition to the limited financial resources, as well as the lack of the teaching expertise and the inadequacy of the education curricula of the universities.

• The lack of the education materials such as the technological equipment, which in turn affects the implementation of inclusive education.

• The ambiguous policies of higher education in Libya, particularly with regard to inclusive education, which is unstable and unclear to the extent that it is difficult to depend on.

Most of the respondents were in consent regarding immaturity of the experience of inclusive education in the Libyan university, and attributed its challenges to the needs for government support through policies and finance, lack of expertise and the need for training and qualifications for the staff, educational material and equipment, and above all building the capacities of the universities in order to be able to implement such an important sort of education. Therefore, a large number of the respondents believe that the Libyan universities are still in the early stage of establishment and maturity regarding the curriculum and teaching staff as well as the departments and specialisations. Such findings are not unique to studies on inclusive education in Libyan universities.

An examination of the international literature on inclusive education suggests that the concept of inclusive education is elusive and has different meanings in different contexts (Florian 1998; Kavale and Forness 2000; Dyson 2003; Hodkinson 2005; Singal 2006; Friend and Bursuck 2011). In other words, inclusive education is not a fixed concept, but a social construct that is dependent on the context and the needs to be addressed in that context (Darling-Hammond, 1990). Theorists of change also argue that implementers are not passive recipients of policy: Individuals construct their own meanings of what constitutes desirable change (Bowe *et al.*, 1992; Clark *et* al., 1999). Bowe *et al.*,(1992) argue that policy is not just received and implemented in any context but is subject to interpretation and recreation. This could be attributed to the perception that participants did not have a clear sense of what needs to be done. This perception seems to support the view of a top-down approach that assumes that clear and unambiguous policy directives would lead to more effective to policies implementation inclusive education.

Table 5.3: Factor 2 (Policy of inclusive education)

Items	Strongly agree		Agree		Neutral		Disagree		Strongly disagree	
	f	%	f	%	f	%	f	%	f	%
Your country/Ministry of Education has a policy on Inclusive Education?	13	5.3	76	30.8	111	44.9	45	18.2	2	0.8
The university has clearly articulated goals and policies for the inclusive education?	5	2.0	64	25.9	102	41.3	58	23.5	18	7.3
The national curriculum contain policies implementation the inclusive education	14	5.7	56	22.7	103	41.7	65	26.3	9	3.6
Those different groups of students are not disadvantaged as a result of their sociocultural background	21	8.5	114	46.2	51	20.6	47	19.0	14	5.7
Give all students the opportunity to be educated in the colleges	79	32.0	98	39.7	26	10.5	30	12.1	14	5.7
The financial issues of the institution have to be the major criteria when considering the practice of inclusive education.	91	36.8	77	31.2	42	17.0	26	10.5	11	4.5
The most serious problem in Libyan as far as the practice of inclusive education is lack of teachers with special training	105	42.5	85	34.4	25	10.1	23	9.3	9	3.6

5.3.3 Factor: Curriculum and inclusive education

In this section, the respondents were investigated about their level of agreement with statements that relate to the curriculum of inclusive education. First the respondents were questioned about the extent to which the curriculum intended to support equity and inclusion at colleges, with regard to their experiences in their colleges, where about 40% believe that the curriculum is hardly intended to support inclusion at colleges at all, 17% believe that it is intended a little bit, 27% confirm that it is more than a little bit, while 19% think that it is intended to a great extent. This result is similar to inclusive education issues reported by Rose and Meyer, (2002) asserting the use of the inclusive curriculum to meet the needs of all students in the class and intended to support equity and inclusion.

The curriculum sensitivity to ethnicity has also been investigated where more than half of the respondents disagree with this point, as about 48% believe that it is not sensitive at all to ethnicity and 19% think that it is hardly at all sensitive, while on the other hand about 33% acknowledged this point, with their views ranged between ‘a little bit sensitive’ and ‘to a great extent’. This result is comparable to inclusive curriculum problems reported by (Chan 2007), He mentioned curriculum sensitivity to ethnicity

and gender. To facilitate changes in students' beliefs about social identity in general - and about gender in particular - there is a vital need for a gender-inclusive curriculum.

The sensitivity of the curriculum has further been investigated in relation to gender, where about 60% deny this statement with most of them thinking that the curriculum is not at all sensitive to gender, while the rest acknowledged the idea with only 7% admitting that it is sensitive to a great extent to gender. It was clear from the literature that the curriculum is affected by gender (Dasgupta and Asgari 2004; Killeen *et al.,* 2006). Moreover, the sensitivity of the curriculum has been emphasised with regard to disability where a majority of about 68% of the respondents deny this idea, with 41% of the respondents thinking that it is not at all sensitive and 27% perceive its sensitivity to disability as 'hardly at all', where among those who admit the idea only 5% believe that the curriculum is to a great extent sensitive to disability.

The majority of the literature is consistent with the findings in this study which suggest that the sensitivity of the curriculum has been emphasised with regard to disability (Tomlinson 1999; Smith *et al.,* 2001). As well, the sensitivity of the curriculum has been considered with regard to identity where about 61% deny this relation, with their views divided equally between not at all sensitive and that it is hardly at all sensitive, with the rest acknowledging the relation to different degrees ranged between 'a little bit' sensitive and 'to a great extent'. This finding is consistent with other research findings on the curriculum with regard to identity (Marshall 1995).

Curriculum development efforts were emphasised, as the respondents were asked if they observe a coherent theoretical framework operating in curriculum development efforts. This notion found an objection from37% of the respondents, the majority of whom believe that it is not operating at all, while the rest expressed various views with most of them (36% of the total sample) thinking that such framework is operating to a great extent. Further emphasis was put on curriculum development efforts at the college level and whether these efforts emphasised basic principles of inclusive education. Where 35% denied the idea at all, half of the respondents accepted it to a small degree, and 15% accepted it to a great extent.

The curriculum was then addressed with regard to its attempt to meet the needs of all students; the majority of the respondents admitted this notion to a range of degrees as about 77% of the respondents admitted it to a little bit or more than a little bit and 21% of the total respondents acknowledged the notion to a great extent, while the rest either believe that it is not at all true or it is hardly at all.

The curriculum was further highlighted and the curriculum of various disciplines was investigated with regard to its inclusion to relevant learning experiences that accommodate differences in individual student ability and motivation. Those who oppose this idea constitute 42%, while the rest acknowledged it to various extents. The respondents has also been asked about the extent to which the curriculum incorporated attitudes, values, and cultural diversity, where 37% denied this statement 28% acknowledged it and the rest were divided between acknowledging it to a little bit and to a great extent.

A criterion involving students cultures and disciplines was also emphasised with regard to the extent to which such criteria are used as a basis for curriculum development, where the notion was opposed by 35% of the respondents, 30% accepted it more than a little bit, and the other respondents agreed the notion to a little bit and to a large extent.

The emphasis was then on the extent to which a flexible curriculum promoted equality in education, and the analysis shows that 30% were opposing this, while a majority of 70% admitted the statement to a variety of degrees ranging from a little bit for 16%, more than a little bit for 30% and to a great extent for 24%. In the literature, it has been found that curriculums have developed through establishing clear and comprehensive objectives and setting criteria involving students, cultures, and disciplines and using it as a basis for curriculum development (Cole and Johnson 1981). It is important for the curriculum development units in Libyan universities to consult the instructors, especially those faculty members that have handled all students. The involvement of faculty members that have experience in handling all

students in the curriculum development is important due to the fact that they have the understanding of the requirements and capabilities of disabled students.

The focus was then on the extent to which the curriculum is relevant to the needs and future of all students, where 28% deny such relevance, while 11% acknowledged it to a small extent, 36% to more than a small extent and 25% to a great extent. Further attention was paid by the survey to the extent to which curriculum development efforts, responding to technological development, where this notion is not at all true for 7% of the respondents and hardly at all for about 22%, while it was a little bit true for 13%, more than a little bit to true for 22% and it was true to a great extent for 37%.

The respondents were also asked their views about the extent to which the role of collaboration between teachers supported curriculum development and their practical application in educational practice, where 33% disagreed with this fact with a few of them believing that such a role of collaboration does not support curriculum development and their practical application in educational practice at all; on the other hand a majority agree with this notion with various levels of agreement, with 29% of the total respondents acknowledging the notion.

The analysis at this stage has shifted to address the extent to which national goals for education need to link with national assessment, where 20% opposed the statement, and the vast majority admitted the idea to a range of degrees varying from a little bit (17%), more than a little bit (29%) and to a great extent (34%). National goals for education are well emphasised in relation to the extent to which they need to be linked with pupils' learning outcomes, related university curriculum, and teacher training curricula; this conclusion was not acceptable for 24% of the respondents, while it was a little bit acceptable for 13%, more than a little bit acceptable for 31% and it was acceptable to a great extent for 32% of the respondents (See Table 5.4).

Table 5.4 Factor 3 (Curriculum)

Items	Not at all		Hardly at all		A little bit		More than a little bit		To a great extent	
	f	%	f	%	f	%	f	%	f	%
-From your experience in your college, to what extent has curriculum intended to support equity and inclusion at colleges?	11	4.5	81	32.8	42	17.0	66	26.7	47	19.0
-From your experience in your college, to what extent has curriculum sensitive to ethnicity?	118	47.8	47	19.0	59	23.9	21	8.5	2	.8
-From your experience in your college, to what extent has curriculum sensitive to gender?	113	45.7	34	13.8	39	15.8	42	17.0	19	7.7
-From your experience in your college, to what extent has curriculum sensitive to disability?	100	40.5	66	26.7	39	15.8	31	12.6	11	4.5
-From your experience in your college, to what extent has curriculum sensitive to cultural identity?	72	29.1	78	31.6	49	19.8	24	9.7	24	9.7
-From your experience in your college, to what extent do you observe a coherent theoretical framework operating in curriculum development efforts at the college level?	19	7.7	72	29.1	28	11.3	38	15.4	90	36.4
-From your experience in your college, to what extent have curriculum development efforts at the college level emphasized basic principles of inclusive education?	37	15.0	49	19.8	55	22.3	70	28.3	36	14.6
-From your experience in your college, to what extent do you believe the college curriculum has attempted to meet the needs of all students?	23	9.3	34	13.8	53	21.5	86	34.8	51	20.6
-From your experience in your college, to what extent have relevant learning experiences that accommodate differences in individual student ability and motivation been incorporated within the curriculum of various disciplines in the college?	38	15.4	65	26.3	59	23.9	54	21.9	31	12.6
-From your experience in your college, to what extent have clear and comprehensive objectives been established within the curriculum of various disciplines in the college?	28	11.3	45	18.2	29	11.7	71	28.7	74	30.0
-From your experience in your college, to what extent has the college curriculum incorporated knowledge's, attitudes, values, and skills of cultural relevancy?	36	14.6	55	22.3	42	17.0	71	28.7	43	17.4
-From your experience in your college, to what extent has a set of criteria involving students, cultures, and disciplines been used as a basis for curriculum development colleges?	28	11.3	45	18.2	29	11.7	71	28.7	74	30.0
-From your experience in your college, to what extent has flexible curriculum promotes human rights in education?	31	12.6	44	17.8	39	15.8	75	30.4	58	23.5
-From your experience in your college, to what extent has curriculum relevant to the needs and future of all students?	17	6.9	51	20.6	28	11.3	88	35.6	63	25.5
-From your experience in your college, to what extent do you observe the college, in curriculum development efforts, responding to technological and scientific advancements?	17	6.9	53	21.5	31	12.6	54	21.9	92	37.2
-From your experience in your college, to what extent have rule of communication with other in all curricula and their practical application in educational activates.	16	6.5	66	26.7	27	10.9	67	27.1	71	28.7
-From your experience in your college, to what extent has got the student acquainted with self-learning skills.	26	10.5	24	9.7	41	16.6	72	29.1	84	38.0
-From your experience in your college, to what extent have national goals for education to need linked with national assessment, pupils' learning outcomes, related school curriculum, and teacher training curricula?	23	9.3	36	14.6	33	13.4	76	30.8	79	32.0

5.3.4 Factor: Teaching and inclusive education

This section includes the respondents' views and levels of agreement towards the effect of teaching on inclusive education. Inclusive education itself has first been emphasised: the respondents were questioned as to whether it is a good idea and whether, in time, it will solve the problems that exist in the education of all students. This notion was agreed with by the majority (88% of the respondents) with nearly half of them strongly agreeing, while 7% showed a neutral response and only about 6% disagreed with the notion. However, the responses to the following related question regarding the ability of the respondents' university's ability to include any students with special needs contradicts this high level of agreement, as about 35% disagree, with third of them strongly disagree; it was agreeable to 45%, where 20% of the respondents were neutral.

The inability of some universities to include students with special needs could be explained by the responses to the statement regarding the inability of regular classroom teachers to meet the needs of the majority of students currently in their classrooms. Nearly 71% agree with this justification while a minority of about 17% opposed the idea and 12% stand neutral. This situation raised the rational question of whether inclusive education is a challenge for the future in Libyan universities as for mainstream in the present day, where society is not ready for it yet; this was agreed with by 63% of the respondents while the rest were divided between disagreeing and neutral responses. The situation also raised the enquiry about whether inclusive education offers mixed group interactions which foster understanding and acceptance of individual differences; about 63% agreed with this statement, and only 11% opposed it, while the remaining 26% were neutral.

This section has also emphasised the challenges of practicing inclusive education. The respondents were questioned about the serious problems of practicing inclusive education in Libya and if the practice of inclusive education is dependent on teachers; about 60% agree with this assumption, 21% disagree and 19% expressed neutral views. The challenges of inclusive education have also been investigated with regard

to teaching materials, curricula, textbooks, classrooms and facilities, etc., where the respondents views were nearly equally distributed between the agreement, disagreement and neutral response. Moreover, the attitude of teachers concerning inclusive education has also been emphasised as a problem of practicing inclusive education in Libya, where this statement was opposed by 40% of the respondents in addition to 8% who strongly disagreed while it was agreeable for about 32%, while 20% were neutral. The problems of practicing inclusive education in Libya have further suggested that they are concerned with the poor working conditions of education management; about 37% of the respondents disagreed with this suggestion, while it was agreed by about 42%, with the remaining respondents standing in neutral position.

One more investigated view regarding inclusive education challenges is related to the main responsibility in the education of all students in their classrooms, as this responsibility is taken only by the faculty members; this view was opposed by 43% of the respondents, while it was agreeable for 30%, strongly agreed by 13%, and the rest of the respondents showed a neutral response. The analysis in this section has then tackled the recommendation of some methods and policies towards an appropriate practice of inclusive education. The survey suggested the adaptation of teaching methods to make it appropriate and suitable for individual abilities and needs of all students, where the vast majority of 83% agreed with this policy while only 11% denied the idea and 6% were neutral. Another suggestion is to use one basic method of teaching because it is likely that most students have a similar style of learning; this suggestion was denied by about 63% of the respondents while it is only acceptable to 20% and the rest showed a neutral view.

A further suggestion was to adopt teaching methods that work to develop effective social communication skills and stay away from the method of memorization, which is agreeable to about 72% of the respondents, of whom a large number are in strong agreement while the rest were nearly equally distributed between those who disagree and those who were neutral. This result concurs with the study of McLeskey and Waldron (2007) . The solution may also be in adopting methods of teaching to play

roles and provide a generation capable of playing a leadership role in the community; this idea agreed by 70% of the respondents while it was only disagreed by about 14% and the rest stand neutral. Another solution could be in adopting teaching methods that link the material theory and the reality of the environment surrounding the theory of the entrance to the social awareness, which was strongly agreed by 70% of the respondents, while those who disagreed constituted about 11% and those who showed neutral response constituted 19%. A final suggestion was to adopt teaching methods that work on the development of scientific thinking skills and problem-solving method, which was agreed by most of the respondents (79%) with those who strongly agree constituting 37% of the total respondents, while 13% disagreed with this idea and 8% were neutral (See Table 5.5).

In the open ended questions, a vast majority of nearly 75% of the respondents raised the challenge concerning the lack of teachers with special training as one of the most serious problems facing the implementation of inclusive education in Libya: they feel that more training is needed on raising the awareness of the faculty members aiming to enhance their recognition and consideration to the importance of inclusive education, and implementing it. Also a large number -76 of the respondents - confirmed that the faculty members adopt adequate teaching methods in their classes, also that they treat the students humanly without any tendency to inequality with regard to sex, race, culture, and other characteristics.

In this regard, a vast majority of 83% of the respondents suggested the adaptation of teaching methods to make it appropriate and suit individual abilities and needs of all students; another suggestion was to adopt teaching methods that work to develop effective social communication skills and stay away from the method of memorization, which is agreeable to about 72% of the respondents. Many of the respondents also believe that the solution may be in adopting methods of teaching to play roles and provide a generation capable of playing a leadership role in the community. Another agreeable solution was the adoption of teaching methods that link the material theory and the reality of the environment surrounding the theory of the entrance to social awareness, and a final suggestion was to adopt teaching methods

that work on the development of scientific thinking skills and problem-solving methods, while a large number of the respondents were not satisfied with the suggestion of using one basic method of teaching because it is unlikely that most students have a similar style of learning. The results shown above are similar to inclusive education issues reported by (Hunt *et al.*, 2003; Frattura and Capper 2006; Idol 2006; McLeskey and Waldron 2007; Todd 2007).

Table 5.5 Factor 4 (Teaching)

Items	Strongly agree		Agree		Neutral		Disagree		Strongly disagree	
	f	%	f	%	f	%	f	%	f	%
Is Inclusive education a good idea and in time it will solve the problems that exist in the education of all students.	8	3.2	6	2.4	18	7.3	116	47.0	99	40.1
Is your university able to include any students with special needs eg? Types special needs?	27	10.9	60	24.3	50	20.2	96	38.9	14	5.7
Regular classroom teachers are unable to meet the needs of the majority of students currently in their classrooms.	10	4.0	31	12.6	30	12.1	115	46.6	61	24.7
For Libyan Universities inclusive education is a challenge the future, as for mainstream present-day society is not ready for it yet.	46	18.6	46	18.6	113	45.7	42	17.0	00	0.0
Inclusive education offers mixed group interactions which foster understanding and acceptance of individual differences.	27	10.9	65	26.3	117	47.4	38	15.4	00	0.0
A serious problem in Libyan as far as the practice of inclusive education is dependent on teachers.	19	7.7	34	13.8	48	19.4	83	33.6	63	25.5
A serious problem in Libyan as far as the practice of inclusive education is teaching materials, curricula, textbooks, etc classrooms and facilities.	10	4.0	73	29.6	83	33.6	60	24.3	21	8.5
A serious problem in Libyan as far as the practice of inclusive education is attitude of teachers concerning inclusive education.	20	8.1	99	40.1	50	20.2	48	19.4	30	12.1
A serious problem in Libyan as far as the practice of inclusive education is Poor working conditions education management.	17	6.9	75	30.4	50	20.2	60	24.3	45	18.2
The main responsibility in the education of all students in their classrooms to faculty members.	22	8.9	85	34.4	34	13.8	74	30.0	32	13.0
Must be appropriate and adapt teaching methods to suit individual abilities and needs of all students.	6	2.4	21	8.5	15	6.1	105	42.5	100	40.5
Do you use one basic method of teaching because you found that most students have a similar style of learning?	35	14.2	121	49.0	40	16.2	34	13.8	17	6.9
There are any adopt teaching methods that work to develop effective social communication skills and stay away from the method of memorization.	5	2.0	32	13.0	31	12.6	102	41.3	77	31.2
Encourages the adoption of methods of teaching to play roles and provide a generation capable of playing a leadership role in the community.	7	2.8	29	11.7	37	15.0	96	38.9	78	31.6
To adopt teaching methods that links the material theory and the reality of the environment surrounding the theory of the entrance to the social awareness.	9	3.6	9	3.6	48	19.4	94	38.1	79	32.0
To adopt teaching methods that work on the development of scientific thinking skills and problem-solving method.	16	6.5	15	6.1	20	8.1	104	42.1	92	37.2

5.4 Factor Analysis

In this section, Factor analysis is adopted to detect the effects of the factors of the four dimensions expected to influence inclusive education, which were identified earlier as inclusive education philosophy, policy, teaching and curriculum. Accordingly Exploratory Factor Analysis (EFA) has been applied in the first phase to explore the most effective factors on inclusive education and their scales, and in a later stage Confirmatory Factor Analysis (CFA) is applied to test the fitness of the model identified by EFA. Before starting the factor analysis, a reliability test was done, where the value of the Cronbach's Alpha test was .83 as table (5.6) shows, which indicates high internal consistency of data and its validity for factor analysis.

Table 5.6 Reliability Statistics

Cronbach's Alpha	N of Items
.827	51

The data validity and sampling consistency were tested further by using the Kaiser-Meyer-Olkin (KMO) and Bartlett's test. This test is used for measuring the adequacy of the sampling where its value must be more than 0.5 in order to proceed with an adequate factor analysis (Hair *et al.*, 1998). As table (5.7) below shows the KMO test value is 0.608 and the value of the Bartlett's Test of Sphericity is .00, which is highly significant, this indicates that its probability is less than 0.05 which implies that the correlation matrix produced by this data is not an identity matrix and therefore it is appropriate for factor analysis.

Table 5.7 KMO and Bartlett's Test

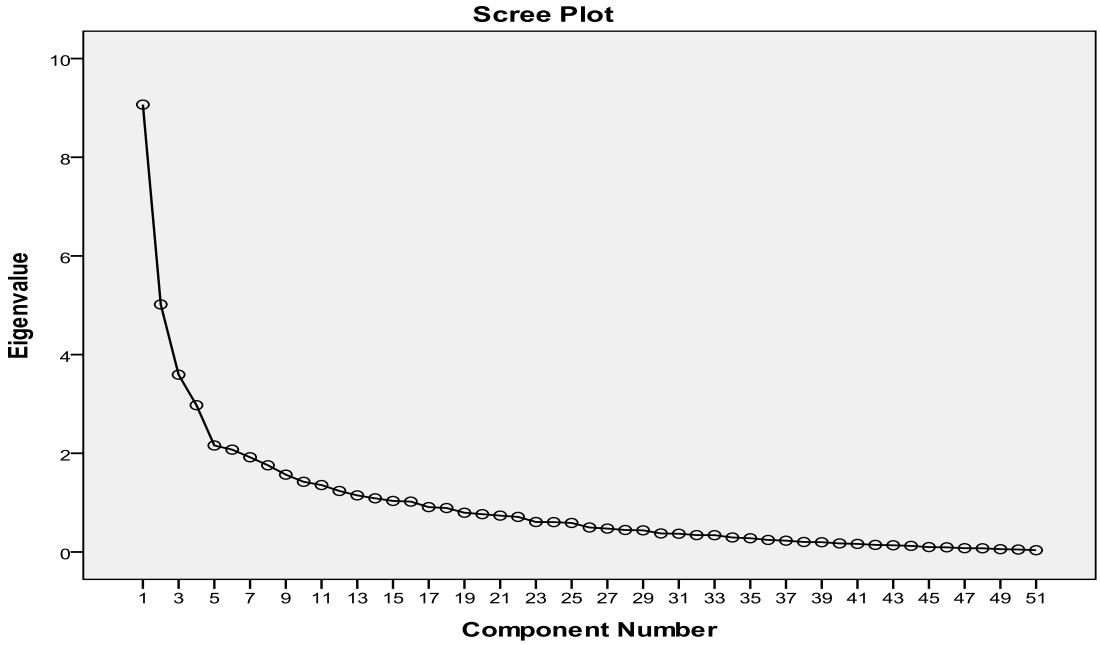
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.608
Bartlett's Test of Sphericity	Approx. Chi-Square	8248.792
	Df	1275
	Sig.	.000

5.4.1 Exploratory Factor Analysis

EFA is used to reduce the number of factors influencing inclusive education, and to group the factors that have the same characteristics together in order to identify which factors have the most impact and remain in the model, and which factors have little or no impact so can be eliminated from the model, and accordingly obtain a model of the most effective factors (Henson and Roberts 2006). The first output of the factor analysis was the correlation matrix (See appendix D). The figures in the correlation matrix show the correlation coefficients between variables, where the correlation coefficient of the variable with itself equals 1, therefore we can observe in the correlation matrix (See appendix E) the diagonal of the matrix is one and the coefficients below and above the diagonal are similar.

The correlation coefficients above and below the principal diagonal are the same. The analysis has also produced a communalities table as in the appendix which shows how much the extracted factors account for the variability in the observed variable, which is inclusive education. This step, along with the next step, shows the factors that can be extracted with their eigenvalues and the percentage of variance that each factor explains, in addition to the cumulative variance of all the extractable factors. The first round of the factor analysis produced 17 factors that can be extracted as in the appendix, which is a large number of factors and still needs to be reduced. However, the scree plot in figure (5.1) shows that only 6 of these factors could have the most impact on Inclusive Education and therefore they should be extracted.

Figure (5.1): Scree plot of the factors.



As table (5.8) shows these 6 factors explain 71% of the variability in inclusive education, with the first factor explaining 25.7%, the second factor explaining 12.8% and the third factor explaining 10%.

Table 5.8 Rotated Correlation Matrix for the first model

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.020	30.521	30.521	5.914	25.713	25.713
2	3.113	13.537	44.058	2.943	12.795	38.507
3	2.164	9.410	53.468	2.325	10.109	48.616
4	1.740	7.563	61.031	2.203	9.579	58.195
5	1.207	5.250	66.281	1.687	7.334	65.529
6	1.067	4.640	70.921	1.240	5.392	70.921
7	.809	3.517	74.439			
8	.705	3.064	77.502			
9	.668	2.905	80.407			
10	.602	2.620	83.027			

However if I look at the table of the rotated components matrix in the appendix, I still find some factors with low impact which indicate that a further extraction process

could yield less factors with more loadings and thus more influence on inclusive education. As table (5.9) shows, the new process extracted four factors with higher loadings and thus more impact.

Table 5.9 Rotated Correlation Matrix for the second model

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.385	31.924	31.924	5.833	29.166	29.166
2	3.056	15.278	47.203	2.908	14.540	43.706
3	2.126	10.629	57.832	2.335	11.677	55.384
4	1.703	8.513	66.345	2.192	10.961	66.345
5	.917	4.587	70.932			
6	.769	3.845	74.777			
7	.675	3.377	78.154			

The rotated component matrix above shows that the first one of these four factors is composed of the variables relates to the curriculum and it explains 29% of the variability in inclusive education, therefore it is the most effective factor. The significant components or individual variables that form this factor are related to the following:

- The extent to which a coherent theoretical framework has been operating in curriculum development efforts at the college level.
- The extent to which curriculum development efforts at the college level have emphasised basic principles of inclusive education.
- The extent to which the college curriculum has attempted to meet the needs of all students.
- The extent to which clear and comprehensive objectives have been established within the curriculum of various disciplines in the college.
- The extent to which the college curriculum has been incorporated attitudes, values, and cultural diversity.

- The extent to which a set of criteria involving students, cultures, and disciplines has been used as a basis for curriculum development in colleges.
- The extent to which flexible curriculum has been promoted equally in education.
- The extent to which the curriculum has been relevant to the needs and future of all students.
- The extent to which the college implements curriculum development efforts and responds to technology.
- The extent of the role of collaboration between teachers supporting curriculum development and their practical application in educational practice.

The second factor is composed of variables relating to the methods of teaching which explains 14.5% of the variability of Inclusive Education, The significant components that constitute this factor is related to the following:

- Teaching methods adopted to develop effective social communication skills and stay away from the method of memorization.
- Encouraging the adoption of methods of teaching to play roles and provide a generation capable of playing a leadership role in the community.
- Adopting teaching methods that relate to the surrounding environment and social awareness.
- Adopting teaching methods that work on the development of scientific thinking skills and problem-solving methods.

The third factor relates to inclusive education practice and explains 11.7% of the variability of inclusive education. The significant components that form this factor are related to the following:

- Teaching materials, curricula, textbooks, classrooms and facilities, etc.
- The attitude of teachers concerning inclusive education.
- Poor working conditions in education management.

The fourth factor relates to the inclusive education policy and explains 11% of the variability of inclusive education; the significant components that comprise this factor are related to the following:

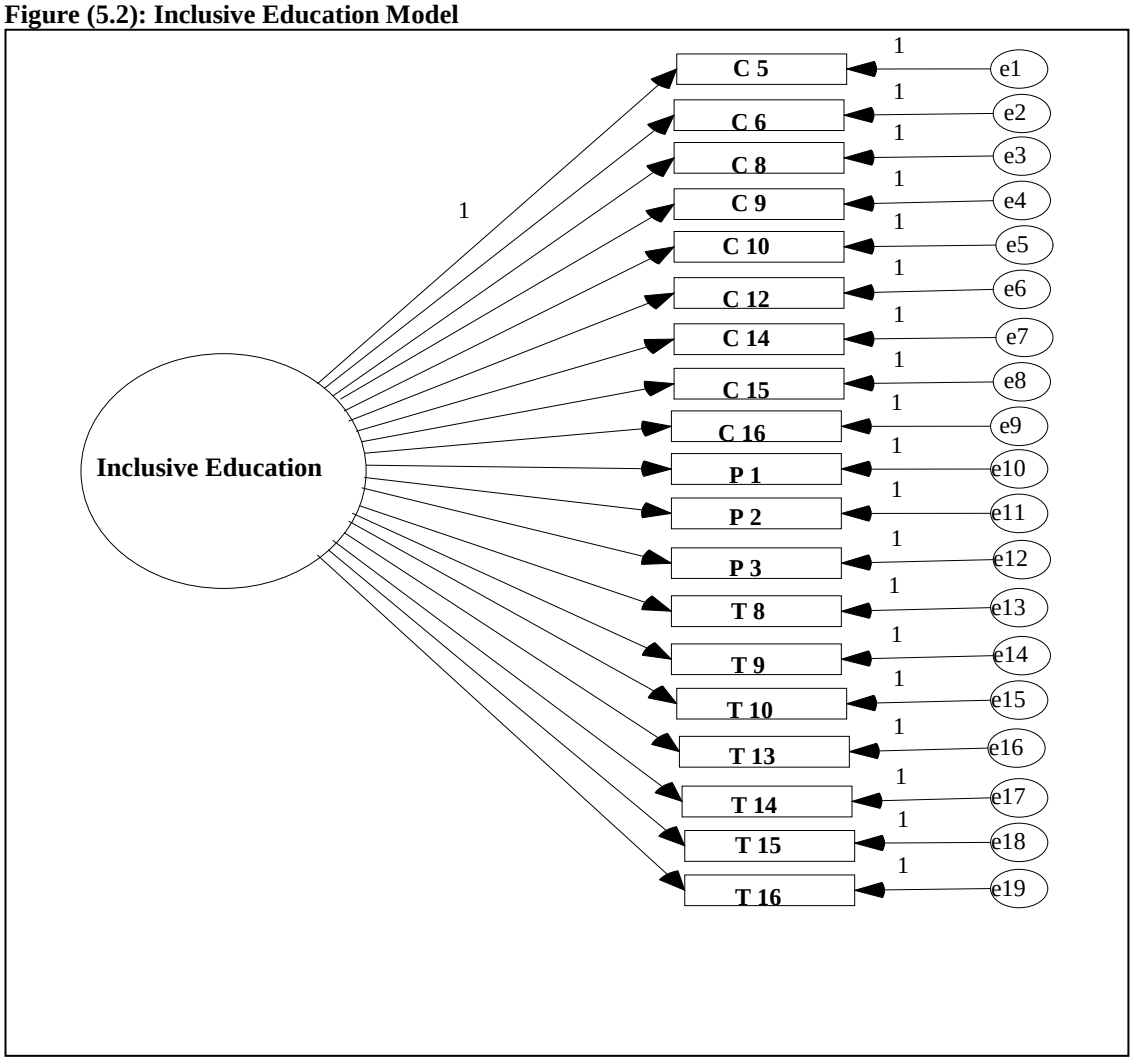
- The country/Ministry of Education implementation of a policy on inclusive education.
- The university articulation of goals and policies for the inclusive education.
- The national curriculum inclusion of policies and implementation of inclusive education.

Accordingly a model can be identified at this stage which includes the most influencing factors relating to inclusive education, where this model consist of these four factors. However, this model could not be accepted unless its fitness is tested using CFA. It is worth noting that the role of EFA has been fulfilled at this stage, by identifying the factors and their most significant components that constitute the model; thus, the four factors mentioned above with their significant components will be subject to further investigation at the next stage in order to test the fitness of the model using CFA, where the model could only be significant if it satisfies some statistical conditions where the value of the Random Mean Squire Error (RMSEA) of the model should not be significant (≤ 0.05) and the P-value of the Chi-squire must be significant (> 0.05). The following section is devoted to this investigation.

5.4.2 Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) was conducted to test the fitness of the obtained model. It examines the measurement model that supposes each item is only loaded on its expected latent variable (Thompson 2004). In this study, the analysis started with testing a model of one factor (Inclusive Education) and unobserved variables (see the figure 5.2).

Figure (5.2): Inclusive Education Model



C6= curriculum development efforts at the college level, C7= Curriculum principles of inclusive education, C8= Curriculum attempted to meet the needs of all students ,C9=curriculum and differences in individual students ,C10 = Clear and comprehensive objectives within curriculum Clear and comprehensive objectives within curriculum, C12 = curriculum development, C14= The curriculum relevant to the needs and future of all students,C15=Curriculum development , responding to technology ,C16= Teachers supported the curriculum ,P1=Policy of Inclusive Education ,P2= policies for inclusive education, P3= The national curriculum,T8=Teaching materials, curricula, textbooks ,T9= Attitude of teachers concerning inclusive education ,T10= Practice of inclusive education management,T13=Teaching methods that work to develop effective social communication skills , T14= Adoption of methods of teaching, T15= Adoption teaching methods that relate to the surrounding environment and the social awareness, T16= Development of teaching methods

As table (5.10) shows the value of chi-square for this model is 1336.157 which is very high to be accepted and its P-value is significant, moreover, the value of the Comparative Fit Index (CFI) is .468 as table (5.11) shows, which is far less than the minimum required value for CFI $\geq$ .95. These values are in addition to the value of the Random Mean Squired Error RMSEA (.178) shown by table (5.12), where the

RMSEA value should be less than .05 for the model fit to be accepted, which indicate that the null hypothesis of the good fit of the model to data could be easily rejected.

Table 5.10Model Fit Summary

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	38	1336.157	152	.000	8.791
Saturated model	190	.000	0		
Independence model	19	2398.230	171	.000	14.025

Table 5.11 Comparative Fit Index (CFI)

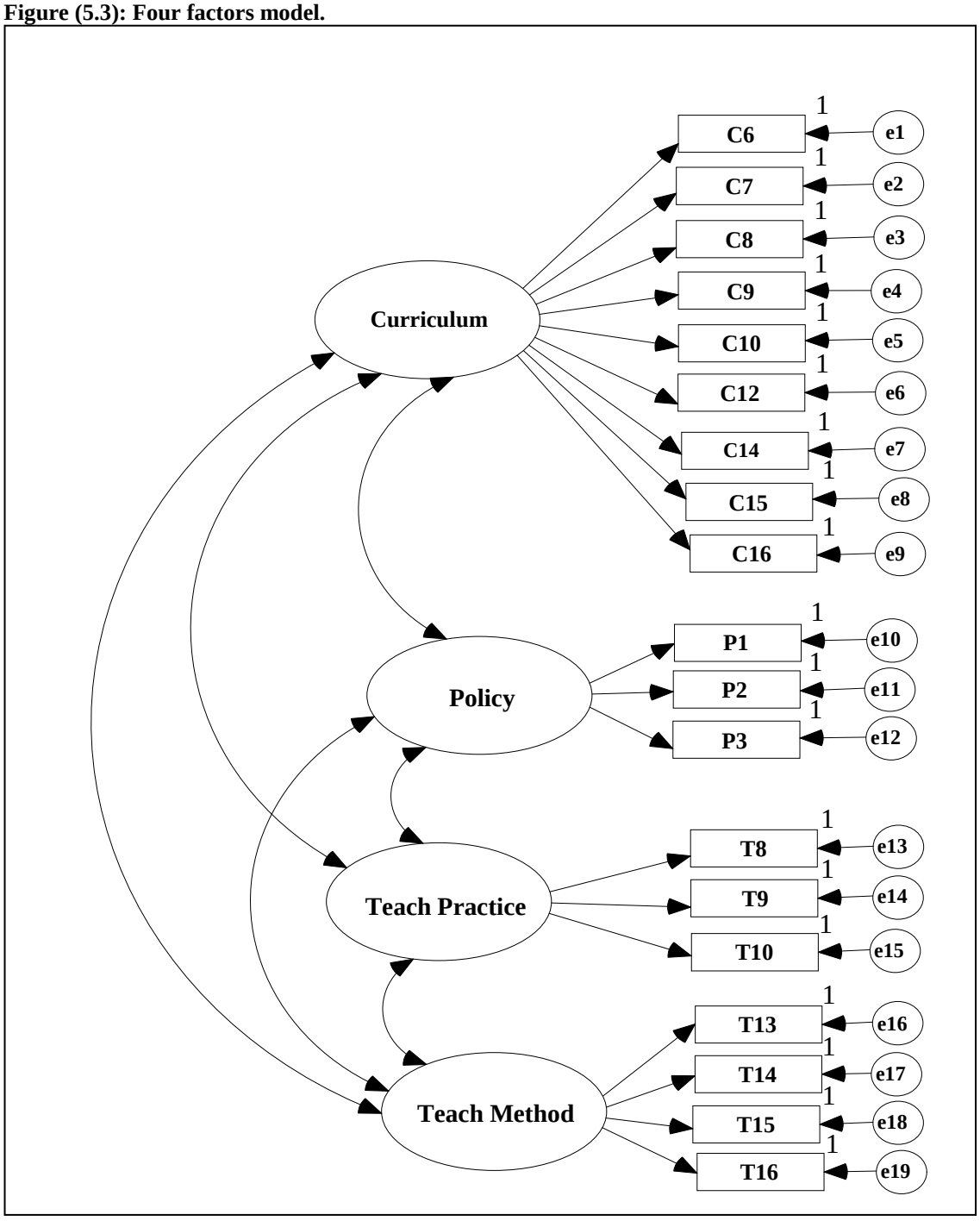
Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.443	.373	.473	.402	.468
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Table 5.12 RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.178	.169	.187	.000
Independence model	.230	.222	.238	.000

Looking at the output of the EFA and its rotated components matrix, the rotation eliminated the factors of philosophy and showed that the factors of teaching, curriculum and policy are the most effective and can be extracted. Accordingly the analysis is more likely to test a model of these four factors (see Figure 5.3)

Figure (5.3): Four factors model.



C6= curriculum development efforts at the college level, C7= Curriculum principles of inclusive education, C8=Curriculum attempted to meet the needs of all students ,C9=curriculum and differences in individual students ,C10 = Clear and comprehensive objectives within curriculum Clear and comprehensive objectives within curriculum, C12 = curriculum development, C14= The curriculum relevant to the needs and future of all students,C15=Curriculum development , responding to technological ,C16= Teachers supported the curriculum ,P1=Policy of Inclusive Education,P2= policies for inclusive education, P3= The national curriculum,T8=Teaching materials, curricula, textbooks ,T9= Attitude of teachers concerning inclusive education ,T10= Practice of inclusive education management,T13=Teaching methods that work to develop effective social communication skills , T14= Adoption of methods of teaching, T15= Adoption teaching methods that relate to the surrounding environment and the social awareness, T16= Development of teaching methods.

The CFA for this model resulted in a very large value of Chi-square equal to 566.301 as in table (5.13) with a significant P-value, and a CFI value of .825 as table (5.14) shows, along with the RMSEA value of .108 showed by table (5.15) which implies that the null hypothesis of good fit of this model is rejected as well.

Table 5.15 Model Fit Summary

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	44	566.301	146	.000	3.879
Saturated model	190	.000	0		
Independence model	19	2577.550	171	.000	15.073

Table 5.14 Comparative Fit Index (CFI)

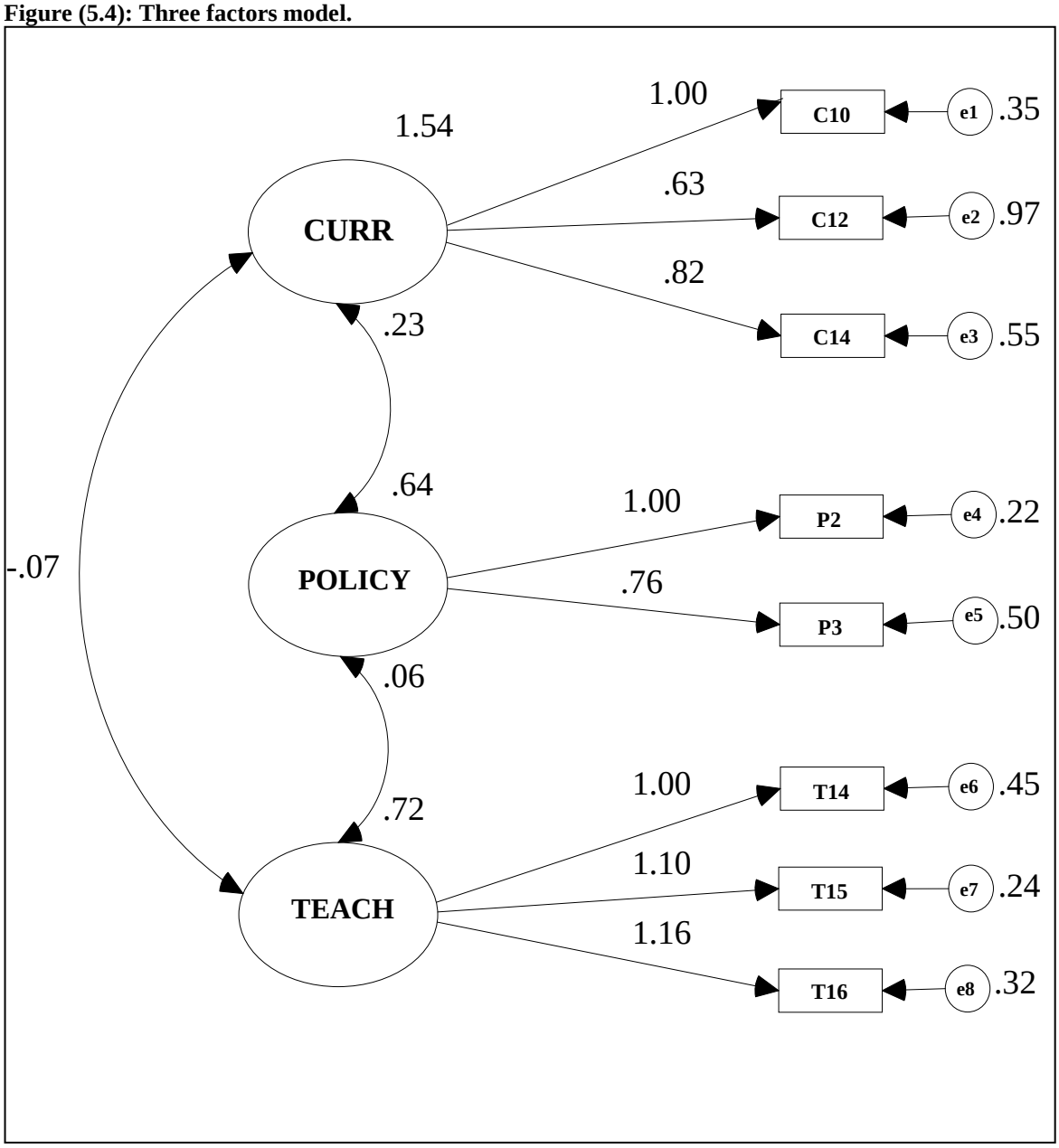
Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.780	.743	.827	.795	.825
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Table 5.15 RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.108	.099	.118	.000
Independence model	.239	.231	.247	.000

A three factor model as figure (5.4) shows has then been tested in, which education is considered as one factor in addition to the other two factors of curriculum and policy.

Figure (5.4): Three factors model.



C10 = Clear and comprehensive objectives within curriculum, C12 = curriculum development, C14= The curriculum relevant to the needs and future of all students, P2= policies for inclusive education, P3= The national curriculum, T14= Adoption of methods of teaching, T15= Adoption teaching methods that relate to the surrounding environment and the social awareness, T16= Development of teaching methods.

As table (5.16) shows, the test yielded a much better value of Chi-square equal to 53.387 with degrees of freedom 17 with the P-value of Chi-square significant and an acceptable value of CFI shown by table (5.17), however, this means that the null hypothesis of good fit of the model to the data is still rejected, the rejection of the

model fitness can be supported by the value of the Random Mean Squared Error RMSEA of .093 as table (5.18) shows.

Table 5.16 Model Fit Summary

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	19	53.387	17	.000	3.140
Saturated model	36	.000	0		
Independence model	8	849.601	28	.000	30.343

Table 5.17 Comparative Fit Index (CFI)

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.937	.897	.956	.927	.956
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Table 5.18 RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.093	.066	.122	.006
Independence model	.345	.326	.366	.000

The analysis has then shifted a further step by considering the components of the factors that have the most high loads and thus have the most impact on the observed variable which is Inclusive Education, where the components of factors with low loads are excluded, and also the two factors of teaching included in one factor as figure (5.4) shows.

Although this model is more likely to fit the data to a far better degree than the previous models, it is possible to apply the modification indices suggested by AMOS options to improve the model fit. These modification indices suggest to get rid of some

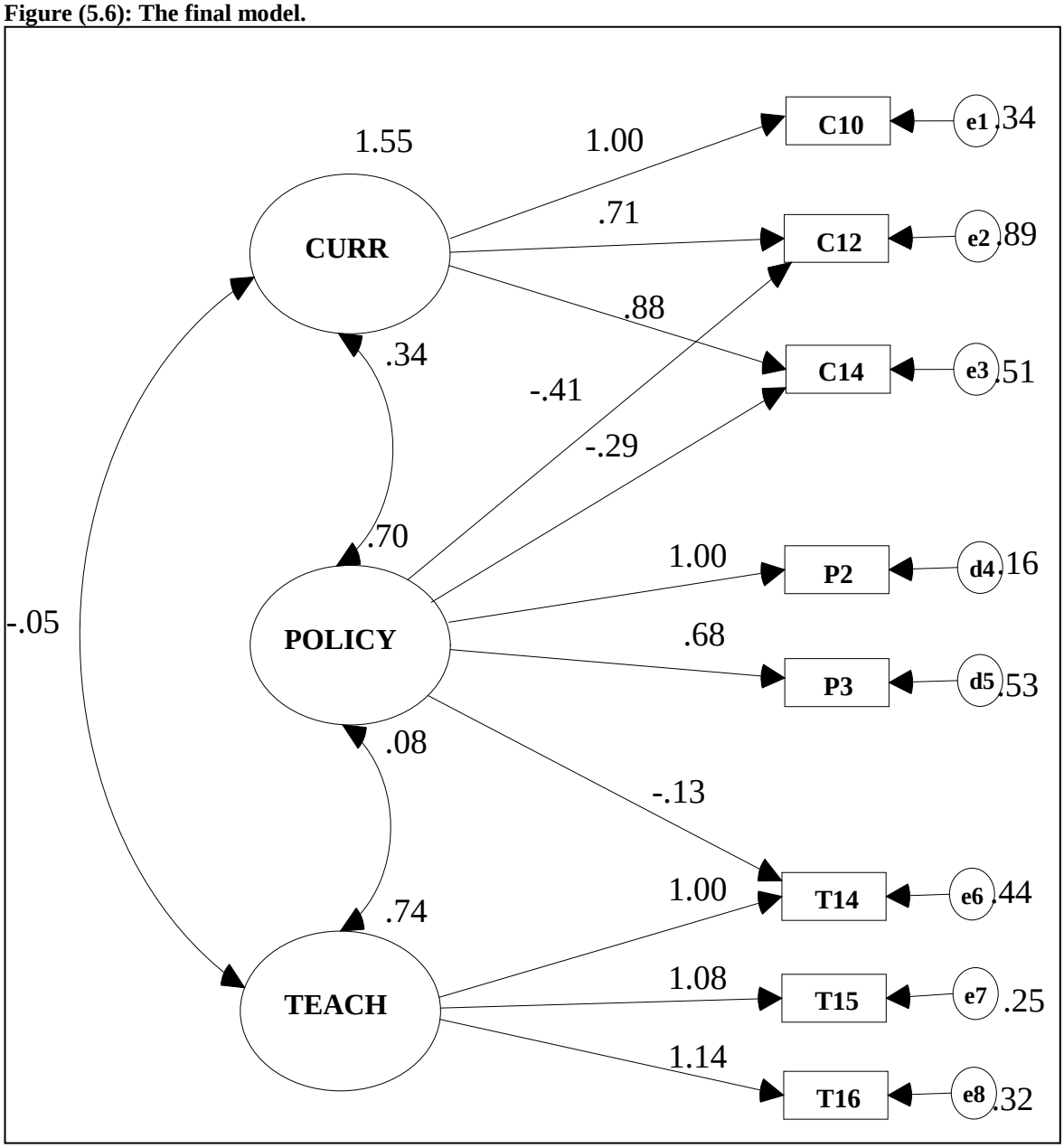
restrictions on some parameters of the model, so as to improve its overall fit. The modification indices suggested by AMOS to improve the model can be seen in table (5.19), where the arrows between variables in the left column indicates the correlation that is suggested by AMOS to improve the model fit and values in the left column shows the change that this modification causes in the model parameters.

Table 5.19 Modification Indices

			M.I.	Par Change
TEACH14	<---	POLICY	13.057	-.255
TEACH14	<---	CURR10	6.345	-.086
TEACH16	<---	CURR12	5.511	-.082
POLI2	<---	CURR12	4.361	-.080
CURR10	<---	POLICY	17.070	.435
CURR10	<---	POLI2	18.325	.260
CURR10	<---	POLI3	6.020	.149
CURR12	<---	POLICY	11.934	-.423
CURR12	<---	TEACH16	6.133	-.143
CURR12	<---	POLI2	13.057	-.255
CURR14	<---	POLICY	6.856	-.264
CURR14	<---	POLI2	6.794	-.152

As figure (5.5) shows, the modification indices suggested by AMOS were applied to the model. However, applying the modifications suggested correlations between the factor policy; some factors relating to teaching and curriculum yielded the acceptable model, and as such the CFA achieved the best model with the minimum modification indices

Figure (5.6): The final model.



C10 = Clear and comprehensive objectives within curriculum, C12 = curriculum development, C14 = the curriculum relevant to the needs and future of all students, P2 = policies for inclusive education, P3=the national curriculum, T14= Adoption of methods of teaching, T15= Adoption teaching methods that relate to the surrounding environment and the social awareness, T16=Development of teaching methods.

As table (5.20) shows, the value of Chi-square for this model is 21.9 with P-value .080 which is not significant, with the value of CFI shown by table (5.21) equals to .99, and as table (5.22) shows RMSEA value is .048 which is less than .05 and therefore the null hypothesis of good fit of the model to data cannot be rejected and this model

could is accepted (Hair, Anderson et al. 2006). Based on the above results, the convergent validity regarding these kinds of constructs is approved.

Table 5.20 Model Fit Summary final Model

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	22	21.919	14	.080	1.566
Saturated model	36	.000	0		
Independence model	8	849.601	28	.000	30.343

Table 5.21 Comparative Fit Index (CFI)

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.048	.000	.085	.492
Independence model	.345	.326	.366	.000

Table 5.22 RMSEA

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.973	.954	.990	.982	.990
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

5.1 Model interpretation

As figure (5.6) shows the appropriate model for the factors that influence inclusive education in Libya and that fit the data of this study include some factors relating to Curriculum, Teaching and Policy. We can express the model in an equation form as follows:

IC = S + Cn + Tn+ Pn

Where:
IC= Inclusive Education, **S=** current status of **IC**, **C=** Curriculum dimension, **T=** teaching dimension, **P=** policy dimension, **n=** the variable order in the dimension.

Then the model can be formed as:

IC = S+ C10+ C12+ C14+ P2+ P3+ T14+ T15+ T16+ PT14+ PC10+ PC14

Where: PT= correlation between policy and teaching, PC= correlation between policy and curriculum.

To trace the components of the model as expressed in the questionnaire:

C10: From your experience in your college, to what extent have clear and comprehensive objectives been established within the curriculum of various disciplines in the college?

C12: From your experience in your college, to what extent has a set of criteria involving students, cultures, and disciplines been used as a basis for curriculum development in colleges?

C14: From your experience in your college, to what extent has curriculum relevant to the needs and future of all students?

P2: The University has clearly articulated goals and policies for the inclusive education.

P3: The national curriculum contains policies for implementation of the inclusive education.

T14: Encouraging the adoption of methods of teaching to play roles and provide a generation capable of playing a leadership role in the community.

T15: To adopt teaching methods that relate to the surrounding environment and the social awareness.

T16: To adopt teaching methods that work on the development of scientific thinking skills and problem-solving method.

Accordingly, inclusive education is mostly affected and thus can best be reformed through some factors related to the dimensions of curriculum, policy, and teaching.

Regarding the dimension of the curriculum, the model suggest that inclusive education is mostly affected and can best be reformed by addressing the curriculum through establishing clear and comprehensive objectives within the curriculum of various disciplines in the colleges, setting criteria involving students, cultures, and disciplines and using it as a basis for curriculum development in colleges and to ensure that the curriculum is relevant to the needs and future of all students. This finding is consistent with other research findings within the literature; it has been found that curriculum development through establishing clear and comprehensive objectives and setting criteria involving students, cultures, and disciplines and using it as a basis for curriculum development (Cole and Johnson 1981). The findings in this study is consistent with the majority of the literature, which suggest that the curriculum relevant to the needs and future of all students (Thomas *et al.,* 1998; Karger and Hitchcock 2003). Students' involvement in bringing normal education curricula motivates amplified professional accountability for instructional decisions and students' learning outcomes (Nolet and McLaughlin 2005; Browder *et al.,* 2007).

With regard to the dimension of policy, inclusive education is mostly affected through articulating clear goals and policies for inclusive education by the universities, as well as including and implementing policies in the national curriculum of inclusive education. This finding concurs with the study of (Tomlinson 2001; Hitchcock *et al.,* 2005; Frattura and Capper 2006; Stanford and Reeves 2009).

In conclusion, the key variables acknowledged in studies focusing on the implementation of inclusive education in various contexts can be summarised as follows: Firstly the issue of dedication to the policy of inclusion, where it is expected that all the educational processes should conform to the ideals as provided under

inclusive education and learning; the content of the syllabus, which should strictly cover all the inclusivity of education for all without any hindrance due to gender, sex, race, poverty, culture, and other characteristics; the attitudes towards inclusion, which will see to ensuring that the process is not faced with any form of sabotage by forces within and external alike; and the ability to address the various needs of learners, meaning that all peculiar requirements of the pupils are taken into cognisance for the purpose of equality in learning. The support of learners and teachers in establishing inclusion should be viewed with importance in that there will be quality dissemination of knowledge to all the learning parties and their tutors; as well as the implementation framework, which ensures conforming to the set out guidelines; and the existence of cooperation between the various departments involved in the process of inclusive education (Bowe *et al.*, 1992; Clark *et al.*, 1999).

Regarding the dimension of teaching, inclusive education can be addressed through encouraging the adoption of methods of teaching to play roles and provide a generation capable of playing a leadership role in the community, adopting teaching methods that concern the surrounding environment and social awareness and adopting teaching methods that work on the development of scientific thinking skills and problem-solving methods. These findings are also consistent with previous studies conducted by (Smith and Smith 2000; Burstein *et al.*, 2004; Idol 2006).

The results of the SEM indicates that teaching strategies adopted by higher education institutions in Libya are still restricted to the traditional teaching methods such as the traditional lecture, where often the method of dialogue and discussion are not used and there is a need to correct the views of faculty members who believe that they are not qualified to manage all students. In my own view I will say they have the efficient knowledge and skills needed to handle all students, though they may lack the confidence to carry out the knowledge in assisting students who are going through difficulties in learning. This finding is related to findings of studies by (Davis and Florian 2004; Lewis and Norwich 2005; Kavale and Florian 2007) and the important

knowledge instructors require as regards to archiving education for all students, for example, (Kershner 2000) offers guidance to teacher educators concerning the use of teaching methods that can support all students.

The model suggests some correlations to complement these factors and work together to influence inclusive education; correlations are suggested to be implemented regarding the dimension of policies and some factors that relate to curriculum and teaching, this means that the when policy factors are designed they should be linked to the factors of curriculum and teaching, as the interaction of these factors could be considered as a new dimension.

Summary

This chapter provided the results of this research, which examined faculty members' perspectives about the inclusive education practice in Libyan universities. Participants' perspectives on the optimal time for inclusion and the curriculum to be used in universities were also presented. Several factors that influenced teachers' perspectives and attitudes towards inclusive education were identified in this research. Factors such as the severity and type of development curriculum, lack of resources and equipment, lack of support faculty members and specialist staff in universities for inclusive education as well as inadequate government funding and limited commitment and support from the Ministry of Higher Education in Libya were identified by the participants. The following chapter discusses the findings of this research with reference to the literature reviewed in Chapter Three of this thesis.

CHAPTER 6

Discussion, Conclusions and Recommendations

6.1 Introduction

The purpose of my research study was to explore the inclusive education practices in Libyan universities, as mentioned early in Chapter One. A quantitative approach was used and data were collected in one stage from 247 faculty members in four Libyan universities. In the quantitative stage, a) The data were analysed by using basic statistical analyses to describe the participants' responses to different questions in the questionnaire; b) Exploratory and Confirmatory Factor Analyses and Structural Equation Modelling were used to explore the factors and their effects in inclusive education practices.

The aim of this chapter is to discuss and interpret the results concerning these aims. The chapter is organised in three sections. The first section is devoted to discussing the results related to the philosophy of inclusive education, policy and implementation of inclusive education, curriculum and teaching methods in Libyan universities, discussing the results of the open-ended questions, and discussing the structural equation modelling related to research aims. Section three is conclusions, implications and limitations. General recommendations and recommendations for future research are presented in this section.

6.2 Discussion of the findings

In an effort to realise the objectives of the survey, a wide spread evaluation of the important theoretical and empirical literature was carried out (see Chapter Three). Different variables have been hypothesised, and some identified to have diverse stages of relationship with the inclusive education practices. Along with identifying the factors' effect on inclusive education, the literature of inclusive education has come to a conclusion that there are several factors that can be grouped into three main

categories of variables (Philosophy of inclusive education, Policy and implementation of inclusive education, Curriculum, teaching methods) which have different types and levels of relationship with inclusive education (see Chapter Three). A questionnaire including four open-ended questions was developed and distributed to participants for data collection to achieve the aims of the study (see Chapter Four). The study used descriptive analysis (Frequency and percentages) and advanced statistical techniques (e.g., Structural Equation Modelling) to analyse the data collected (Chapter Five). A summary and discussion of the major results emerging from the analysis in Chapter Five is presented in the following five sections.

6.2.1 Research aim one: Philosophy, policy and implementation towards inclusive education in Libyan universities

One of the aims of this study was to find out what kind of policies and implementations of the inclusive education existed within the Libyan universities' context. The respondents were questioned about their level of agreement with seventeen statements that relate to the philosophy of inclusive education and, policies implementation in inclusive education. They indicated that some of these inclusive education issues are quite often found at their workplace. The following issues of inclusive education were highlighted:

- The most serious problem in Libya, as far as the practice of inclusive education is concerned, is a lack of teachers with special training.

- Integration of learners experiencing barriers to learning affects teachers' capacity to meet the needs of other learners in the class.

In this study a vast majority of nearly 75% of the respondents raised the challenge concerning the lack of teachers with special training as one of the most serious problems facing the implementation of inclusive education in Libya. More training on raising the awareness of the faculty members aiming to enhance their recognition and consideration to the importance of inclusive education, and implementing it. This might be related to the findings by Donald and Hlongwane (1989) who report that

most educators do not have adequate training to provide such support; and the effective implementation of inclusive education.

In general, the results indicating that the most serious problem in Libya as far as the practice of inclusive education goes is lack of teachers with special training do not differ from those which have been found in the other studies. For example, the first point shown above is similar to inclusive education issues reported by (Walker *et al.*,1995; Silberg 1998; Sethosa 2001; Yuen and Westwood 2001). The information gathered revealed that inadequate required knowledge, skills and expertise of instructors to comprehend and give adequate support to students, results in frustration, demoralisation and severe feelings of insufficiency which interrupt active teaching and inclusive education.

It has been an inspiring discovery that many involved in the survey have expressed their ideas of acquiring more training in inclusive education. These findings corresponded with the findings of the research carried out earlier, that revealed instructors' opinion of their necessity of additional training in different areas (Leung and Mak ; Avramidis *et al.,* 2000; Florian and Rouse 2009; Leung and Mak 2010). The idea that instructors give more attention in improving classroom management abilities and teaching techniques more than building their understanding and acquiring knowledge of how to assist students has been considered not impressive.

Loreman *et al.,* (2005) pointed out the necessity of teaching instructors skills that will assist them in adjusting curricula to accommodate every student in an inclusive classroom. This idea was supported by (Smith *et al.,* 2004). They pointed out the need for teacher training programmes for instructors. The teacher training programme should be aimed at supporting pre-service instructors to acquire skills that will enable them to manage students with diverse capabilities in inclusive settings. (Bennett *et al.*,1997) explained that giving teachers adequate training will enable instructors to eliminate some negative approach from them with regard to inclusion, which could be avoided at the early stage of carrying it out.

Hodkinson (2005) argued that training instructors on inclusive education will be majorly based on their personal perception and idea of inclusive education. Notwithstanding the argument it was pointed out that giving instructors training on inclusion and inclusive practices is very important due to the fact that it is vital in assuring successful inclusive education in schools (Bennett *et al.,* 1997; Smith *et al.,* 2004; Loreman *et al.,* 2005; Foreman 2007). With regard to this, to ensure the success of inclusive education, pre-service instructors, educators and all the personnel responsible for children and student requirements have to be effectively trained.

Another challenge experienced by faculty members in Libyan universities was that combining students facing difficulties in studies affects their ability to accomplish the requirements of other students in the class. Those involved in this survey never mentioned any problems they observed as regards to inclusive education. It was pointed out that the problems facing the participants in Libyan universities are limited time frame for inclusion; they are not yet equipped for the enrolment of students with difficulty in learning in their classes; absence of sufficient resources, expertise, and training for inclusion; and lack of confidence in teaching students with learning difficulties in the general classroom. The correspondents pointed out their negative approach towards students with learning difficulties; this is as a result of their experiences, due to that fact they consider themselves not yet ready for inclusive education. This observation corresponded with that of (Avramidis *et al.,* 2000; Dupoux *et al.,* 2006) who explained that it seems challenging for conventional instructors to meet up with the requirements of combining students with learning difficulties to the highest level applicable in ordinary settings; they see themselves as lacking the ability and consider it as an added workload to them. In the present study, the participants believe that Libyan universities are still in the early stage of establishment and maturity with regard to the curriculum and teaching staff as well as the departments and specialisations. Therefore, the expected support at this stage would be very limited and this process needs considerable integrated efforts in all aspects and all specialisations, and most important of all is the government support for such a process.

On the other hand, the faculty members believe that the adoption of clear policies in an accurate manner from the ministry of education will allow all students to achieve high quality education with no risk for them to be isolated from education. It was also confirmed by several of the respondents that the Ministry of Education launched some of the initiatives that have obvious impact on the education process with regard to the skills development of the staff members and providing opportunities to study overseas and obtain higher degrees of Masters and Doctorate, which will reflect greatly on the development on higher education in general and inclusive education in particular. Moreover, the respondents suggested that the universities and Ministry of Education should launch a programme of awareness raising and improving the knowledge of staff members about the importance of inclusive education, and this programme should be monitored, and furthermore the college of education and the departments of education and psychological sciences should be encouraged to graduate trained teachers who have adequate acquaintance with and concern for inclusive education issues. For instance the policy of inclusive education could be supported through the following:

- Financial support for educational institutions in this aspect.
- Raising the awareness of staff members aiming to enhance their recognition of and consideration for the importance of inclusive education.
- Implementing training programmes.

On the other hand, a large number of the respondents pointed out the possibility of cooperation between the Ministry of Education and the universities through the initiative of the Ministry of Education to launch specialised schools for those with special needs which consider their physical and mental disabilities and aim to enhance their talents and creativity in order to accept them in the universities. However, the respondents stressed the necessity to integrate those with special needs in society, which is considered a noble goal that should be accomplished. To conclude, it is obvious according to the respondents' views that the Ministry of Education has some initiatives and policies towards inclusive education, however these initiatives and

policies lack the mechanisms of implementation, such mechanisms could be developed through effective cooperation between the Ministry of Education, the universities and society.

6.2.2 Research aim two: Curriculum and inclusive education

The second aim of this research was to explore curriculum design in Libyan universities in the context of inclusive education; the respondents were questioned about their level of agreement with eighteen statements that relate to the curriculum and inclusive education. Based on the descriptive analysis of the curriculum variable, the results showed that the majority of the responses were found in the questionnaire. They indicated that some of these issues are quite often found at their universities. The following issues with curriculums of inclusive education were highlighted:

1) The curriculum sensitivity to ethnicity, more than half of the respondents disagreed with this point.

2) The curriculum sensitivity to gender, where about 60% deny this statement with most of them thinking that the curriculum is not at all sensitive to gender.

3) The curriculum sensitivity to disability, where a majority of about 68% of the respondents deny this idea.

According to several qualitative and quantitative studies, different problems have been identified in designing inclusive curricula (or curriculum problems as they sometimes call them); generally the findings show that there is no difference in the curriculum challenges identified in Libyan universities from the ones observed from other studies. For instance, the first two points shown above are comparable to inclusive curriculum problems reported by (Chan 2007), who mentioned curriculum sensitivity to ethnicity and gender. To facilitate changes in students' beliefs about social identity in general - and about gender in particular there is a vital need for a gender-inclusive curriculum. According to Arnett (2000), at a critical point in their identity development known as emerging adulthood, a gender-inclusive curriculum is especially relevant for college students. This enables the college students to develop the rationale as well as the

emotional maturity to make decisions about the opportunities available to them within the larger culture. The students' knowledge in the area of identity-matched exemplars is very important for the simple fact that the mixture of self-concept with social context determines the academic and occupational options open to people. According to Lips (2004) a good instance of this is where female students may declare a wholly positive self-perception with regards to a male dominated field, yet at the same time be without similar chance compared to their male counterparts in imagining career opportunities for themselves in the same contexts. The inability to construct a "possible self" (Ruvolo and Markus 1992) within a male-dominated domain can be attributed to life-long lessons about femininity and gender roles (Dasgupta and Asgari 2004; Killeen *et al.,* 2006), including educational curricula that confirm gender stereotypes by emphasising or focusing predominantly on male accomplishments and by failing to include female examples (Warren 1989; Basow 2004; Wyer *et al.,* 2007).

Another challenge identified by the faculty members in Libyan universities is the curricular sensitivity to disability. This was pointed out by more than half of the participants that the curriculum does not involve every student, including the disabled ones. This conclusion corresponds with that of (Tomlinson 1999; Smith *et al.,* 2001), who explained that considering the type of disability and other factors hindering the student's ability to succeed academically, a disabled student may require adjustment in the taught curriculum. He also pointed out that if adequate adjustment is not carried out in the curriculum materials used it could be insufficient for disabled students, which could deny them from achieving the important aim of the curriculum. It is important for the curriculum development units in Libyan universities to consult the instructors, especially those faculty members that have handled disabled students. The involvement of faculty members that have experience in handling disabled students in the curriculum development is important due to the fact that they have the understanding of the requirements and capabilities of disabled students. Slee (2004) pointed out that teachers' education requires engaging in a dialogue instead of 'training teachers to install it'

The need for a flexible curriculum that is within reach of all is regularly stated in the literature as an vital enabler of inclusive education; UNESCO (2005) stresses that "accessible and flexible curricula can serve as the key to creating inclusive schools or inclusive universities". Likewise the Salamanca World Conference on Special Needs Education (1994) stressed the significance of curriculum adaptation, stating that the aim of the curriculum is to adapt to the requirements of students and not the other way round; and that students are meant to be given extra assistance as regards the regular curriculum and not a different curriculum. In this case the term curriculum denotes not just 'what' is taught in universities, but also the way in which students are taught and assessed. The curriculum is at the core of schooling (Pugach and Warger 1996).

6.2.3 Research aim three: Teaching and inclusive education

The third aim of this study was to explore the methods of teaching practice in Libyan universities in responding to the challenges of inclusive education. The respondents were questioned about their level of agreement with sixteen statements that relate to the methods of teaching practice in Libyan universities in the context of inclusive education. They indicated that some of these issues are quite often found at their universities. The following issues relating to teaching of inclusive education were highlighted:

1) Inclusive education is a good idea and it will solve the problems in supporting equal education for all students.

2) Inclusive education practice offers mixed group interactions which foster understanding and acceptance of individual differences.

3) A serious problem in Libya for the practice of inclusive education is lack of interest from competent authorities.

4) Adopt teaching methods that work to develop effective social communication skills and stay away from the method of memorization.

5) Encourages the adoption of methods of teaching to play roles and provide a generation capable of playing a leadership role in the community.

6) Adopt teaching methods that link the material theory and the reality of the environment surrounding the theory of the entrance to social awareness.

7) Adopt teaching methods that work on the development of scientific thinking skills and problem-solving methods.

In this study a vast majority of nearly 88% of the respondents raised the inclusive education as a good idea and believe it will solve the problems in supporting equal education for all students.

Though it is difficult to judge inclusive education as a good or bad idea, the majority of faculty members who responded to the questionnaires believed that inclusion is a step into an equal future; and inclusive education is a system in which all learners, non-disabled and disabled, are offered a comparable education (Dyson and Millward 2000) and are located in the same environment in which the curriculum is adjusted in accordance with individuals' difference. The notion derived from inclusion provides a paramount aim, that is, that all human beings are equal.

The above issues are reported by the faculty members in Libyan universities for learning inclusive teaching practices. They need: the adoption of methods of teaching to play roles and provide a generation capable of playing a leadership role in the community; adopt teaching methods that link the material theory and the reality of the environment surrounding the theory of the entrance to the social awareness; adopt teaching methods that work on the development of scientific thinking skills and problem-solving method, and instructional and technical skills to work with the needs of diverse learners. Professional development must prepare educators for collaboration and support and assist them in understanding their roles and responsibilities in embracing change through adopting flexible teaching methods. According to Ainscow (1999) staff development is more powerful in encouraging improved teaching practices when it is set within the school context and addresses daily concerns of educators. The ability to transfer knowledge into everyday classroom practice requires planned application and on the job support. This necessitates that time be set-aside for educators to work in teams and support one another. Teaching strategies and, teaching

methods are needed that are accessible and beneficial to all students (Hunt *et al.,* 2003; Frattura and Capper 2006; Idol 2006; McLeskey and Waldron 2007; Todd 2007).

Giangreco and Doyle (2007) assert that, within an inclusive approach, teachers need to be involved in ongoing substantive instruction for all students in the classroom. However, despite twenty-five years of inclusive education, responsibility for all students (Hemmingsson *et al.,* 2003; Broer *et al.,* 2005; Giangreco *et al.,* 2006; Tews and Lupart 2008), although teachers' attitudes toward inclusive education are increasingly positive, they report multiple concerns regarding the implementation of an inclusive approach (Burstein, Sears et al. 2004; Dybdahl and Ryan 2009). In particular, several studies report that teachers feel ill-equipped to provide instruction tailored to the ever-increasing range of needs within their classrooms (Smith and Smith 2000; Burstein, Sears et al. 2004; Idol 2006).

The issues that gave rise to this research study paralleled those identified in the literature. Concerns related to support for inclusive education, specifically the role of teachers.

The correspondents pointed out that every student has the ability to learn, but it is important for the faculty members to detect their specific learning style so as to succeed. This perception corresponded with White Paper 6 (DoE, 2001) and Outcomes-Based Education with its premise that "*all students can learn and succeed, but not on the same day in the same way"*.

Another problem described by the faculty members is teachers' professional development. There is a need to review faculty members so as to archive an improved comprehensive knowledge of inclusive education and its teaching techniques, within this common and shared national education policy and curricular vision. Using Finland as an example, quality teacher education programmes at the university level have resulted in highly skilled and independence instructors, and have assisted in effectively professionalising the teacher profession and fortifying the education system in general. Halinen and Jarvinen (2008) pointed out that skilled instructors have a profound knowledge and appreciation of students' varieties, by acting respectfully towards their

students, supporting their students individually and stressing objectives like “learning to learn”, problem-solving and analytical skills, as well as developing a sense of responsibility and ability to co-operate.

6.2.4 Content analysis of the open-ended Question

The questionnaire included four open-ended questions which gave the respondents the opportunity to raise issues not covered by the scales of the questionnaire. The data emerged analysis of the responses and the key points raised by the respondents are presented below.

Factors which could make participants' responses more positive

The open-ended questions were posed to the participants immediately after the main questions of the questionnaire and they were requested to provide their opinions regarding what would have been needed in order to make improve the implementation of inclusive education in the Libyan universities. The following issues were reported by the participants:

- ***Support:*** according to some respondents, inclusive education support is an important necessity and there should be a general policy for such kind of education through the experiences and best practices of other countries in implementing the inclusive education policies.

Where the opinions obtained from the respondents concerning their believe and support of the philosophy of inclusive education shows that nearly 43% of the respondents believe in and support the philosophy of inclusive education with showed 30% neutral response, while similar responses were obtained regarding the financial support for inclusive education and its resource and whether it is adequate and enable appropriate delivery and the support with regard to the curriculum material for inclusive education e.g., modified and adapted materials and whether they are adequate, while the level of support availability from the Department of Education for improving programmes and services was satisfactory for most of the respondents.

- ***Ability:*** The inability of some universities was manifested in the inability of regular classroom teachers to meet the needs of the majority of students currently in their classrooms. This situation implies that inclusive education is a future challenge for Libyan Universities as for mainstream in present-day for which the society is still not ready.

Most of the respondents attributed the inability of the Libyan universities to implement inclusive education to the following reasons:

•The lack of awareness among the teaching staff with regard to the concept of inclusive education, in addition to the limited financial resources, as well as the lack of the teaching expertise and the inadequacy of the education curricula of the universities.

•The lack of the education materials such as the technological equipment, which in turn affects the implementation of inclusive education.

•The ambiguous policies of higher education in Libya, particularly with regard to inclusive education, which is unstable and unclear to the extent that it is difficult to depend on.

- ***Maturity:*** Most of the respondents were in consent regarding immaturity of the experience of inclusive education in the Libyan university, and attributed its challenges to the needs for government support through policies and finance, lack of expertise and the need for training and qualifications for the staff, educational material and equipment, and above all building the capacities of the universities in order to be able to implement such an important sort of education. Therefore, a large number of the respondents believe that the Libyan universities are still in the early stage of establishment and maturity regarding the curriculum and teaching staff as well as the departments and specialisations.

- ***Training:*** A vast majority of nearly 75% of the respondents the training they received that was meant to be an instructive approach to distribute knowledge from instructors to learners. But these kinds of training they received do not take into

consideration the diverse learning requirements of students and it is inconsistent to the pedagogy that is required to give instructors the opportunity to offer a reasonable and reachable education for all.

- *Teaching methods:* A large number of 76 of the respondents confirmed that the Faculty members adopt adequate teaching methods in their classes and as well they treat the students humanly without any tendency to inequality with regard to sex, race, culture, and other characteristics. In this regard, a vast majority of 83% of the respondents suggested the adaptation of teaching methods to make it appropriate and suit individual abilities and needs of all students, another suggestion was to adopt teaching methods that work to develop effective social communication skills and stay away from the method of memorization, which is agreeable to about 72% of the respondents, As well the many respondents believe that the solution may be in adopting methods of teaching to play roles and provide a generation capable of playing a leadership role in the community, Another agreeable solution was the adoption of teaching methods that link the material theory and the reality of the environment surrounding the theory of the entrance to the social awareness, and a final suggestion was to adopt teaching methods that work on the development of scientific thinking skills and problem-solving method, while large number of the respondents were not satisfied with the suggestion of using one basic method of teaching because it is unlikely that most students have a similar style of learning

- *Curriculum design :* Most of the respondents were confirmed an obvious inadequacy in curriculum design and use of the modern technology and the lack of books and leaflets that support inclusive education in the universities, moreover, the curriculums were not designed to suit the current situation and support inclusive education.

6.2.5 Discussion of final structural model

This study explored the impact of curriculum, teaching and policies on inclusive education practices in Libyan universities. I collected survey data for this study from 247 faculty members in four universities in Libya. The survey instrument consisted of

51 questions with Likert scale responses and five demographic questions. Data were analysed using EFA, CFA, and SEM.

The overall model fit was assessed using multiple fit indices as suggested by (Hair J, Anderson R et al. 1998; Hu and Bentler 1999; Schumacker and Lomax 2004). The study reported the following fit indices for the final model: Chi-square/df = 1.57 RMSEA = 0.048, NFI = 0.97, CFI = 0.99, IFI = 0.99, RFI = 0.95, the 90 percent confidence interval of RMSEA was in the acceptable range 0.048; an indication that the final structural model fitted the data well.

The results of the structural equation modelling (SEM) showed the factors that influence inclusive education in Libya and that fit the data of this study through the final modelling, (See figure 5.6 in Chapter Five) including some factors relating to Curriculum, Teaching and Policy. We can discussion the results' final structural model as follows:

6.2.5.1 The effects of curriculum design on inclusive education

It was hypothesized that curriculum design would have a positive and direct effect on inclusive education. The results of the SEM indicated inclusive education is mostly affected and can best be reformed by addressing the curriculum through establishing clear and comprehensive objectives within the curriculum of various disciplines in the colleges. This finding is consistent with other research findings within the literature, which recommends curriculum development through establishing clear and comprehensive objectives and setting criteria involving students, cultures, and disciplines and using it as a basis for curriculum development (Cole and Johnson 1981). The findings in this study are consistent with the majority of the literature which suggests that the curriculum should be relevant to the needs and future of all students (Thomas *et al.,* 1998; Karger and Hitchcock 2003). Students' involvement in bringing normal education curricula motivates amplified professional accountability for instructional decisions and students' learning outcomes (Nolet and McLaughlin 2005; Browder *et al.,* 2007).

The results of the SEM indicated an obvious inadequacy in curriculum design and use of the modern technology and the lack of books and leaflets that support inclusive education. This result is similar to curriculum issues reported by (Cole and Johnson 1981; Westwood 2006).

6.2.5.2 The effects of teaching methods on the inclusive education

It was hypothesized that teaching methods would have a positive and direct effect on inclusive education. The results of the SEM indicated inclusive education is mostly affected through encouraging the adoption of methods of teaching to play roles and provide a generation capable of playing a leadership role in the community. And adopting teaching methods that are concerned with the surrounding environment and social awareness, and adopting teaching methods that work on the development of scientific thinking skills and problem-solving methods. This finding is related to findings of studies by Frattura and Capper (2006); McLeskey and Waldron (2007) who state that adoption of these methods of teaching have a positive and direct effect on inclusive education.

6.2.5.3 The effects of policies on inclusive education

The results from the SEM indicated that inclusive education is mostly affected through articulating clear goals and implementing educational policies. An examination of the international literature on inclusive education suggests that the concept of inclusive education is elusive and has different meanings in different contexts (Florian 1998; Kavale and Forness 2000; Dyson 2003; Hodkinson 2005; Singal 2006; Friend and Bursuck 2011). In other words, inclusive education is not a fixed concept, but a social construct that is dependent on the context and the needs to be addressed in that context (Barton 2003). Theorists of change also argue that implementers are not passive recipients of policy: Individuals construct their own meanings of what constitutes desirable change (Bowe *et al.,* 1992; Clark *et al.,* 1999). Bowe et al., (1992) argue that policy is not just received and implemented in any context but is subject to interpretation and recreation. This could be attributed to the perception that participants did not have a clear sense of what needs to be done. This perception seems

to support the view of a top-down approach that assumes that clear and unambiguous policy directives would lead to more effective policies for the implementation of inclusive education.

The model suggests some correlations to complement these factors and work together to influence inclusive education, correlations are suggested to be implemented regarding the dimension of policies and some factors that relate to curriculum and teaching; this means that when policy factors are designed they should be linked to the factors of curriculum and teaching, as the interaction of these factors could be considered as a new dimension.

Through the discussion, the research objectives have been answered in details. A brief about the research question could be as follows:

- This study has aimed to identify the main challenges faced by Libyan universities with respect to adopting inclusive education practise from the descriptive analysis of the main four universities based on the information generated during the questionnaires. immaturity of the experience of inclusive education in the Libyan university, and attributed its challenges to the needs for government support through policies and finance, lack of expertise and the need for training and qualifications for the staff, educational material and equipment, and above all building the capacities of the universities in order to be able to implement such an important sort of education.

- Help understand how curriculum design can support the implementation of successful inclusive education in the Libyan universities. this relationship has been discussed and the results show that curriculum design can support the implementation of successful inclusive education, when the curriculum was designed through establishing clear and comprehensive objectives, setting criteria involving students, cultures, and disciplines and using it as a basis for curriculum development in universities and to ensure that the curricula are flexible and relevant to the needs and future of all students.

- Obtain the factual information on teaching methods in Libyan universities in the context of inclusive education; the results shows that there is teaching strategies adopted by higher education institutions in Libya are still restricted to the traditional teaching methods such as the traditional lecture, where often the method of dialogue and discussion are not used and there is a need to correct the views of faculty members who believe that they are not qualified to manage all students. It can be addressed through encouraging the adoption of methods of teaching to play roles and provide a generation capable of playing a leadership role in the community, adopting teaching methods that concern the surrounding environment and social awareness and adopting teaching methods that work on the development of scientific thinking skills and problem-solving methods.

6.3 Conclusions

The following conclusions and implications were drawn from examining the research aims involved in this study. They are presented as follows.

1. Based on the findings derived from the first aim of this study, it can be concluded that policies and practices of Inclusive Education in Libyan universities. As perceived by the participating faculty members, the most important policies and practices include: The most serious problem in Libya, as far as the practice of inclusive education is concerned, is a lack of teachers with special training. Integration of learners experiencing barriers to learning affects teachers' capacity to meet the needs of other learners in the class; The lack of awareness among the teaching staff with regard to the concept of inclusive education, in addition to the limited financial resources, as well as the lack of teaching expertise and the inadequacy of the education curricula of the universities; The lack of education materials such as technological equipment, which in turn affects the implementation of inclusive education. The ambiguous policies of higher education in Libya, particularly with regard to inclusive education, which is unstable and unclear to the extent that it is difficult to depend on.

2. As a result of examining the second aim of this study, it can be concluded that in Libyan universities there are many obstacles associated with curriculum design. As perceived by the participating faculty members, the most extensive obstacles include: The curricula need to be updated to be able to correspond with the advancement in teaching methods and with the requirements of learners; The majority of faculty members, confirmed an obvious inadequacy in curriculum design and use of the modern technology and the lack of books and leaflets that support inclusive education in the universities; moreover, the curriculums were not designed to suit the current situation and support inclusive education; lack of clear scientific studies for curriculum design, and to benefit from the experiences of the developed countries in this field; accordingly it could be clear how to design the appropriate curriculum that suits inclusive education in Libya.

3. On the basis of the findings derived from the third aim of this study, it can be concluded that certain factors affect the teaching methods in Libyan universities. As perceived by the participating faculty members, the most agreeable factors include: Inclusive education is a good idea and it will solve the problems in supporting equal education for all students; Inclusive education practice offers mixed group interactions which foster understanding and acceptance of individual differences; A serious problem in Libya for the practice of inclusive education is lack of interest from competent authorities; Adopt teaching methods that work to develop effective social communication skills and stay away from the method of memorization; Encourages the adoption of methods of teaching to play roles and provide a generation capable of playing a leadership role in the community; Adopt teaching methods that link the material theory and the reality of the environment surrounding the theory of the entrance to social awareness; teaching methods that work on the development of scientific thinking skills and problem-solving methods.

4. As a result of testing the Structural Equation Modelling (SEM), it can be concluded a number of issues: Inclusive Education is mostly affected and thus

can best be reformed through some factors related to the dimensions of Curriculum, Policy, and Teaching. Regarding the dimension of the Curriculum, the model suggest that Inclusive Education is mostly affected and can best be reformed by addressing the curriculum through establishing clear and comprehensive objectives within the curriculum of various disciplines in the colleges, setting criteria involving students, cultures, and disciplines and using it as a basis for curriculum development in colleges and to ensure that the curriculum relevant to the needs and future of all students. With regard to the dimension of Policy, Inclusive Education is mostly affected through articulating clear goals and policies for the inclusive education by the universities, as well as including and implementing policies in the national curriculum of inclusive education. Regarding the dimension of Teaching, Inclusive Education can be addressed through encouraging the adoption of methods of teaching to play roles and provide a generation capable of playing a leadership role in the community, adopting teaching methods that concerns the surrounding environment and social awareness and adopting teaching methods that work on the development of scientific thinking skills and problem-solving methods. The model suggests some correlations to complement these factors and work together to influence Inclusive Education, correlations are suggested to be implemented regarding the dimension of Policies and some factors that relate to Curriculum and Teaching, this means that the when Policy factors designed they should be linked to the factors of Curriculum and Teaching, as the interaction of these factors could be considered as a new dimension.

6.4 Limitations of study

It is essential to note that this research was carried out in the early years of implementing inclusive education in Libya. It is expected that there could be supplementary adjustments in policies and practical implementation of inclusive education, especially after the revolution and the amendment that will take place in the public policies of the state. Owing to the result of this research, the following are the limitations and implications for future research.

- This study is restricted in scope, due to the fact that only four universities were sampled. It may be helpful to determine if the attitudes and beliefs of the responders to this study are similar to those responding to the same issues in other similar universities in Libya as a whole.

- The sample size used in this study is considered to be small, which makes it challenging for the conclusions to be generalized to the whole population of faculty members working in Libyan universities. It is recommended that if further studies are carried out on this topic and/or relevant topics, the sample size should be bigger.

- In this study the correspondents sampled were all university workers. It is recommended that in a further study, it will be interesting and beneficial to verify if teachers working at high school levels have similar experiences, perceptions, attitudes and beliefs about inclusive education. Due to the fact that there is little research addressing the effectiveness of inclusion in Libya, more research in this area is suggested.

- The study was based majorly on questionnaires which include four open-ended questions as the main tool for data collection, and then the quantitative data were analysed statistically; thus, the disadvantages of using this method of data collection and the statistical techniques used, added to the limitations of this research, though, the technique of using a questionnaire including open-ended questions is standard practice when carrying out such research, and is considered to be an appropriate method of data collection associated to inclusive education practices. Because of the sensitivity of the issues involved, they are thought to be more insightful than direct questions about experience or hypothetical questions about what a respondent would actually do.

6.5 Contributions and implications of study

Despite the limitations outlined above, I believe that this study contributes to the relevant literature in many ways. Methodologically, this study shows the value of quantitative research as it involves a questionnaire with an open-ended questions in studying how and why faculty members implement inclusive education in particular

ways. This study provides detailed insight into a range of factors which affect the inclusive education practices.

Academic Contribution

The findings of this study have important implication for the research as it provides further support to the studies that examine the relationship between policy inclusive education, Curriculum design and teaching methods.

A number of studies have examined some of these study variables, such as the relationship between Curriculum and teaching, or between teaching methods and educational policy, or between Curriculum and educational policy. But few of them integrate all of these variables together.

Another contribution is that it will add to academic contribution in investigating the study variable (policy of inclusive education, Curriculum design, teaching methods) in the higher education institution, in addition to helping enhance the Arabic and Libya literature of these topics. This study combines between these variables to figure out their interrelationship. Accordingly, this study could be considered, a recognized Academic contribution.

Managerial Contribution

Several studies assume the relationship between policy of inclusive education, Curriculum design, teaching methods, and only few examine the relationship between all these variables (policy of inclusive education, Curriculum design, teaching methods).

The findings of this study have another importance to the universities that are planning to Implementing inclusive education practises. Implementing inclusive education requires a lot of preparation and sometimes restructuring and re-organizing the educational policies.

This study is considered particularly of great value, as it provides evidence on the positive relationship of implementing the (policy of inclusive education, Curriculum design, teaching methods) based on experimental study on four large and recognised universities in Libya, which will assist in providing implication and insight for those universities and other universities and higher education institutions as well.

In addition to contributions to educational research in general, this study suggests several implications for inclusive education practices in Libyan universities. I highlight these implications in the following points:

1) It is vital for educational policy makers within the Libyan educational context to understand that inclusive education does not only mean introducing a new set of textbooks, but it also implies a change in teaching methods, curriculum design and thinking commensurate with the diversity of students .
2) Educational officials in Libya need to realise that in order for the intentions of inclusive education to be implemented effectively, faculty members need the skills and knowledge to enable them to cope with the demands of inclusive education.
3) Inclusive education should be a required course for all faculty members. Inclusive education courses should be offered as comprehensive, fill credit courses and should ideally be offered over several months duration.
4) Inclusivity in education should be an ideological thread that runs through all education courses. Teaching for cultural competency and social inclusion must be implemented in an integrated and consistent manner to produce sustained results that will transform the experiences of teachers and will translate into inclusive and equitable experiences for a diversity of prospective students.
5) To achieve behavioural change, inclusive education must go deeper than consciousness-raising. Inclusive education must impact students on an emotional level, evoke self-reflection and, most importantly, secure a commitment to intentionally work towards student inclusion and equity.

Exposing students to a diversity of marginalized perspectives is an important part of this process.

6) Inclusive education represents a very large domain. Therefore it is necessary to rethink and reform the curricula in order to assure a better understanding and a better training of the teachers for inclusive education.

7) Since praxis is a critical element of inclusive education, theory must be integrated into education in order for informed action to result. For students to value theory, they must be exposed to it early on and frequently in their education program. The threads of theory should be integrated across disciplines so that connections are made between theory, practice and action.

8) Effective pedagogy for inclusive education should incorporate the following: the establishment of classroom climates of comfort and safety; time for debriefing, challenging and dialogue about the course concepts; and a range of activities to accommodate learning styles and preferences. To increase the chances of the inclusive concepts being transferred out into the university context, the students must have an experiential, emotional and personal understanding of them. Reflective journals, guest speakers, films, personal narratives and role plays are potentially effective strategies for engaging students with inclusive concepts.

9) Evaluation of inclusive education courses should be instructor-determined. Serious consideration should be given to offering the course in a non-graded format.

10) Faculty members' recruitment and enrolment should proactively seek student diversity, relating to ethnicity, culture, gender, social-economic status and/or ability.

11) Education faculties should proactively seek teaching diversity, relating to ethnicity, culture, gender, socio-economic status and/or ability.

12) Faculty wide peer support for inclusive education is important to its success. Peer support should involve the presence of active academic support networks on inclusive education pedagogy. Peer support should also involve a faculty wide commitment to integrate inclusive education principles into all educational practices and subject curricula.

13) Finally, administrative leaders (Ministry of Education and universities) within education programmes should be directly involved in the advocacy, development, and implementation of inclusive education courses. Their presence within the course models the course's importance to both faculty and students.

6.6 Recommendations of study

6.6.1 Recommendations for Libyan Universities

On the grounds of discovering the empirical fieldwork and my experience in teaching in Libyan universities, I would recommend the following steps for the university instructors to be clear about what constitutes good practice of inclusive education.

- Inclusive education continues to be in implemented; it may be time consuming and expensive. It is necessary to train instructors and there is a need for the curriculum to be reviewed. It may be a lot easier for instructors to adopt inclusive education if the curriculums are designed with inclusion in mind. With this curriculum the wide range of capabilities and learning styles within a classroom will be accommodated. A greater number of activities could be suggested to help students consolidate information at their own level of learning. Further research could look at how much preparation time is needed for instructors to make available the inclusion opportunities within the classroom. This could be understood by visiting individual instructors to determine how much time they really have for professional development. The more brilliant students devoting time in regular classrooms to hearing the experiences of these instructors would be advantageous to others. It would

help educators to determine what works and what does not, considering multiple factors.

- To offer faculty members the chance to develop the disposition, values, knowledge and skills for collaboration for successfully applying inclusive education. The findings from this research show that faculty members working with all students must have the suitable knowledge and approaches towards inclusive education. Principals, teachers, and those who intend to get involved in inclusive education, should obtain sufficient training in terms of theory and practice.

- The organisation of seminars and short-term courses: Seminars and short-term courses are meant to be prearranged for faculty members who are involved in students' education. The writer is capable of, and willing to help, in organising seminars and short-term courses on inclusive education, as he has vast experience as a lecturer in University of Omar Al-Mukhtar.

- There have been several questions and insufficient answers. Lots of arguments that have taken place regarding inclusive education have been at the philosophical level instead of the practical level (Winzer 2000).There is lots of work required to be carried out at the practical level that fills the requirements of both the students and teachers.

6.6.2 Recommendations for future research

Having recognised the major contributions of this study, and explained its educational implications, I will now progress to give some recommendations for further studies. Owing to the fact that this research has provided the understanding into the inclusive education practices, I would suggest that more research of this kind will provide insights both in Libya and other countries.

Just as with other major studies, this study has its own scope and limitations including the sample selection, the survey instrument, the data collection procedures, as well as

the research design. Accordingly, the following suggestions may be considered worthwhile by future researchers who might be interested in conducting other possible studies related to the topic:

1) This research was limited to the views of a selected sample of faculty members from four universities of Libya. For a future study on this topic, it is suggested that a replication of the study should be carried out nationwide so as to determine the range at which the result of such studies are consistent throughout Libya.
2) This researcher conducted his survey based on the views of faculty members concerning the inclusive education practices in their universities. Other researchers are recommended to carry out related studies to learn the opinions of vital educational policymakers regarding the same issues involved in this study.

3) In this study a single quantitative method was used to collect data from faculty members about inclusive education practices in their universities. In further studies it is recommended that a multifaceted design should be used, which involves both qualitative and quantitative data methods. Using such an elaborate method may provide a better insight. Surveys could be combined with either focus groups or interviews. Observations of structured and unstructured activities, meetings, and professional development activities might also prove advantageous. A mixed method approach has the potential to add depth and insight and possibly unearth relationships that a single method could not.

4) A nationwide replication of this study would help all the Libyan universities to discover the strengths and weaknesses of their university curricula, which will enable them to adjust to an appropriate curriculum suitable for every student. Replication studies may consider including the following applicable questions: (A) How can universities improve the quality of internal communications and

consistent feedback among students, faculty members, and university administrators?; (B) How can universities best use instructional technology to enhance the quality of learning for students with special needs?; What can be done by faculty members and university administrators to overcome the obstacles facing all students?; and (C) How can universities best evaluate the quality of student learning and overall effectiveness of educational programmes?

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Appendixes

Appendix A: Faculty Members Questionnaire

Dear Teacher,

I am a doctoral student at the University of Huddersfield, UK. currently conducting a research entitled: management and practices of inclusive education in Libyan universities, "which aims to explore and examine the perceptions of faculty members on the concept of inclusive education in terms of the philosophy of inclusive education, curriculum, teaching, management of inclusive education in addition to trying to identify the most important problems and obstacles that may face the application of inclusive education in universities.

In order to achieve successfully the aim of the study, an empirical work should be carried out in the context of Libya using a research questionnaire as a data collection tool. Therefore, your cooperation is required in order to enable the researcher to obtain adequate and proper data needed for the research. You are kindly requested to complete all sections of the questionnaire and if you have any further comment you are welcome to include them.

It will take you approximately 10-15 minutes to answer the questions. There is no right or wrong answers.I can also assure you that all the answers and information given will be treated confidentially and complete and that it will be used only to serve the aims of the research .For further clarification and to inquire about any item included in the questionnaire, please do not hesitate to contact Scholar at the address indicated at the bottom of the page.

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Part 1- General Information About yourself.The data which is given in this section will only be used as background to answers given in other section of the questionnaire. Please provide the following data:

1- Age: please mark one

less than 30 ☐ 30-<40 ☐

40-50 ☐ more than 50 ☐

2- Gender: Male ☐ Female ☐

3-Nationality: please mark one

Libyan ☐ Other (Specify) ----------

4. Position : Professor Associate ☐ Professor Senior ☐

Lecturer ☐ Assistant Lecturer ☐

Teaching Assistant ☐ Other (Specify) ----------

5- Position within the University:

Dean of faculty ☐ Head of department ☐ Teaching of staff ☐

6-Education:

Master ☐ Doctoral ☐

Other qualificationon----------

7- In which college do you currently work? ----------

8- By the end of this year, for how many years will you have been teaching: ☐☐

9- By the end of this year, for how many years will you have been manager : ☐

10- information about your university: please mark one

University age:

10 or less ☐ 10-<20 ☐ 20-30 ☐ More than 30 ☐

Part 2.A Philosophy for inclusive education.
Please indicate your level of agreement with the following statement by circling the appropriate number that most closely reflects opinion.

Strongly Agree	Agree	Neutral	disagree	Strongly disagree
5	4	3	2	1

I believe in and support the philosophy of inclusive education.	5	4	3	2	1
Do you feel all learners are included in the inclusive education policy?	5	4	3	2	1
Resource/financial supports for inclusive education are adequate and enable appropriate delivery.	5	4	3	2	1
Curriculum material supports for inclusive education (e.g., modified and adapted materials) are adequate.	5	4	3	2	1
There is the level of support is available from the Department of Education for improving programs and services.	5	4	3	2	1
Inclusive education is more beneficial than it is detrimental	5	4	3	2	1
Integration of learners experiencing barriers to learning affects my capacity to meet the needs of other learners in the class.	5	4	3	2	1
Do you feel professionally prepared to work with learners experiencing barriers to learning?	5	4	3	2	1
I am positive about working with teacher support teams to implement inclusive education.	5	4	3	2	1
Members of faculty have experience on issue of implementing inclusive education.	5	4	3	2	1

Part 2.B -policy and implementation inclusive education
Please indicate your level of agreement with the following statement by circling the appropriate number that most closely reflects opinion

Strongly Agree 5	Agree 4	Neutral 3	Disagree 2	Strongly disagree 1

1- Your country/Ministry of Education has a policy on Inclusive Education?	5	4	3	2	1
2-The university has clearly articulated goals and policies for the inclusive education?	5	4	3	2	1
3- The national curriculum contain policies implementation the inclusive education	5	4	3	2	1
4- That different groups of students are not disadvantaged as a result of their socio- cultural background	5	4	3	2	1
5- Give all students the opportunity to be educated in the colleges	5	4	3	2	1
6- The financial issues of the institution have to be the major criteria when considering the practice of inclusive education.	5	4	3	2	1
7-The most serious problem in Libyan as far as the practice of inclusive education is lack of teachers with special training	5	4	3	2	1

Part 3 – Content Design. (Curriculum)
Please indicate your level of agreement with the following statement by circling the appropriate number that most closely reflects opinion.

Not at all	Hardly at all	A little bit	More than a little bit	To a great extent				
1	2	3	4	5				
-From your experience in your college, to what extent has curriculum intended to support equity and inclusion at colleges?				1	2	3	4	5
-From your experience in your college, to what extent has curriculum sensitive to ethnicity?				1	2	3	4	5
-From your experience in your college, to what extent has curriculum sensitive to gender?				1	2	3	4	5
-From your experience in your college, to what extent has curriculum sensitive to disability?				1	2	3	4	5
-From your experience in your college, to what extent has curriculum sensitive to cultural identity?				1	2	3	4	5
-From your experience in your college, to what extent do you observe a coherent theoretical framework operating in curriculum development efforts at the college level?				1	2	3	4	5
-From your experience in your college, to what extent have curriculum development efforts at the college level emphasized basic principles of inclusive education?				1	2	3	4	5
-From your experience in your college, to what extent do you believe the college curriculum has attempted to meet the needs of all students?				1	2	3	4	5
-From your experience in your college, to what extent have relevant learning experiences that accommodate differences in individual student ability and motivation been incorporated within the curriculum of various disciplines in the college?				1	2	3	4	5
-From your experience in your college, to what extent have clear and comprehensive objectives been established within the curriculum of various disciplines in the college?				1	2	3	4	5
-From your experience in your college, to what extent has the college curriculum incorporated knowledge's, attitudes, values, and skills of cultural relevancy?				1	2	3	4	5
-From your experience in your college, to what extent has a set of criteria involving students, cultures, and disciplines been used as a basis for curriculum development colleges?				1	2	3	4	5
-From your experience in your college, to what extent has flexible curriculum promotes human rights in education?				1	2	3	4	5
-From your experience in your college, to what extent has curriculum relevant to the needs and future of all students?				1	2	3	4	5
-From your experience in your college, to what extent do you observe the college, in curriculum development efforts, responding to technological and scientific advancements?				1	2	3	4	5
-From your experience in your college, to what extent have rule of communication with other in all curricula and their practical application in educational activates.				1	2	3	4	5
-From your experience in your college, to what extent has got the student acquainted with self-learning skills.				1	2	3	4	5
-From your experience in your college, to what extent have national goals for education to need linked with national assessment, pupils' learning outcomes, related school curriculum, and teacher training curricula?				1	2	3	4	5

Part 4 (Teachers)
Please indicate your level of agreement with the following statement by circling the appropriate number that most closely reflects opinion.

Strongly agree	Agree	Neutral	disagree	Strongly disagree
5	4	3	2	1

1- Is Inclusive education a good idea and will it solve the problems in supporting equal education for all students?	5	4	3	2	1
2- Is your University able to include any students with special needs eg? Types special needs.	5	4	3	2	1
3- Regular classroom teachers struggle meeting the needs of the majority of students currently in their classrooms	5	4	3	2	1
4-For Libyan Universities inclusive education is a challenge the future, as for mainstream present-day society is not ready for it yet.	5	4	3	2	1
5- Inclusive education practice offers mixed group interactions which foster understanding and acceptance of individual differences	5	4	3	2	1
6- Regular classroom teachers hold the primary responsibility for the education of the all students in their classrooms	5	4	3	2	1
7-A serious problem in Libya for the practice of inclusive education is dependent on teachers	5	4	3	2	1
8-A serious problem in Libya for the practice of inclusive education is the lack of teaching materials, curricula, textbooks, etc classrooms and facilities	5	4	3	2	1
9- A serious problem in Libya for the practice of inclusive education is attitude of teachers concerning inclusive education	5	4	3	2	1
10- A serious problem in Libya for the practice of inclusive education is Poor working conditions education management	5	4	3	2	1
11- A serious problem in Libya for the practice of inclusive education is lack of interest of competent authorities	5	4	3	2	1
12- Do you use one basic method of teaching because you found that most students have a similar style of learning?	5	4	3	2	1
13- There are any adopt teaching methods that work to develop effective social communication skills and stay away from the method of memorization.	5	4	3	2	1
14- Encourages the adoption of methods of teaching to play roles and provide a generation capable of playing a leadership role in the community.	5	4	3	2	1
15- To adopt teaching methods that links the material theory and the reality of the environment surrounding the theory of the entrance to the social awareness.	5	4	3	2	1
16- To adopt teaching methods that work on the development of scientific thinking skills and problem-solving method	5	4	3	2	1

Part 5- Express your opinions of your University's views and support for inclusive education.

Part 6- Provide your opinions on the effectiveness of the policies from ministry of education and Also your university.

Part 7- Short your experiences and observations on teaching styles and How this fits with supporting inclusion equality for student's e.g .Gender, ethnicity, identity, disability.

Part 8-How Do you feel curriculum designs fits with supporting inclusion and equality for students. Please provide best practice examples eg. Handouts, books, videos.

Appendix B: Arabic Questionnaire

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أخي عضو هيئة التدريس
السلام عليكم ورحمة الله وبركاته
الباحث طالب في مرحلة الدكتوراه في جامعة " –هدرسفيلد" بالمملكة المتحدة. يقوم حاليا بإجراء بحثا بعنوان : ***إدارة وممارسات التعليم الشامل في الجامعات الليبية "*** والذي يهدف الي استقصاء وفحص وجهات نظر اعضاء هيئة التدريس حول مفهوم التعليم الشامل من حيث فلسفة التعليم الشامل ، المناهج ، التدريس ،ادارة التعليم الشامل بالاضافة الي محاولة التعرف علي اهم المشاكل والعوائق التي قد تواجه تطبيق التعليم الشامل بالجامعات.

لغرض الوصول الي هدف الدراسة ، سوف يتم اجراء الدراسة العملية في البيئة الليبية وذلك بأستعمال استبيان للبحث كأداة لتجميع وتحصيل البيانات. عليه, تعاونكم مطلوب لغرض تمكين الباحث من الحصول علي البيانات الملائمة والمناسبة المطلوبة للبحث. وبالتالي يرجي منكم اتمام كافة فقرات الاستبيان وإ ن كان لديكم تعليقات وملاحظات يرجي ادراجها.

إن الاجابة علي كل الاسئلة الموجودة بهذه الاستبانة ستستغرق من10 الي 15 دقيقة ، مع العلم بأ نه لاتوجد إجابات صحيحة أو خاطئة لأي منها. الباحث مهتم فقط بوجهة نظركم حول مفهوم التعليم الشامل من حيث فلسفة التعليم الشامل ، المناهج ، التدريس ،ادارة التعليم الشامل. والتي حتما تمثل غاية في الاهمية لتحقيق اهداف البحث.***كما يمكنني التأكيد لكم بأن كل الإجابات والمعلومات المعطاه سيتم التعامل معها بسرية تامة وكاملة وأنها سوف تستخدم فقط لخدمة اهداف البحث.*** وللمزيد من التوضيح والاستفسار عن اي بند مدرج في الاستبيان ، يرجي عدم التردد في الاتصال بالباحث علي العنوان المبين في أسفل الصفحة .

اشكركم جزيل الشكر علي حسن تعاونكم
والسلام عليكم ورحمة الله وبركاته

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الجزء الاول -- معلومات عامة
سوف تستعمل البيانات المدرجة في هذا القسم كخلفية عن الاسئلة في الفقرات الآخري من الاستبيان. الرجاء اختيار الإجابة المناسبة بوضع علامة (صح) في المربع المناسب

1. العمر: اختر واحدة من فقط من فضلك

□ اقل من 30 سنة □ من 30-40 سنة
□ 40- 50 سنة □ اكثر من50 سنة

2. الجنس:

□ انثي □ذكر

3. الجنسية: اختر واحدة فقط من فضلك

□ ليبي □اخري حدد من فضلك.....

4. المستوي التعليمي:

□ ماجستير □ دكتوراه □ اخري حدد من فضلك :.....

5. الدرجة العلمية: اختر واحدة من فقط من فضلك

□أستاذ □ أستاذ مشارك □ أستاذ مساعد
□ محاضر □ مساعد محاضر □ اخري حدد من فضلك :.....

6. في اي كلية تعمل: .....

7. موقع داخل الكلية:

□ عميد الكلية □ امين قسم □عضو هيئة تدريس

8. بحلول نهاية هذه السنة كم عدد السنوات التي درستها : .....

9. بحلول نهاية هذه السنة كم عدد السنوات التي اشتغلتها :.....

10- عمر الجامعة : اختر واحدة فقط من فضلك

□ من 10 سنوات فأقل □ من 10-20 سنة
□ من20-30 سنة □ أكثر من 30 سنة

الجزء الثاني أ :فلسفة التعليم الشامل.
باستخدام المقياس ادناه, يرجي تحديد مدي اتفاقكم مع البيانات التالية وذلك بوضع دائرة علي الرقم الماسب الذي يعكس رايكم الشخصي.

موافق بشدة 5	موافق 4	محايد 3	غير موافق 2	غير موافق بقوه 1				
1. أعتقد أن هناك دعم لفلسفة التعليم الشامل في الجامعات الليبية.				5	4	3	2	1
2. هل تشعر بأن جميع المتعلمين يتم تضمينهم في سياسة التعليم الشامل				5	4	3	2	1
3. الموارد والدعم المالي للتعليم الشامل وافية ، ويتم تسليمها في الوقت المناسب.				5	4	3	2	1
4.مواد المناهج الدراسية مدعومة بشكل كافي من أجل التعليم الشامل (على سبيل المثال ، تعديل وتكييف المواد)				5	4	3	2	1
5.هناك مستوى من الدعم متوفر من اللجنة الشعبية العامة للتعليم لتحسين البرامج والخدمات التعليمية.				5	4	3	2	1
6.التعليم الشامل هو أكثر فائدة مما هو ضار.				5	4	3	2	1
7.دمج المتعلمين الذين يعانون من العوائق التي تحول دون التعلم يؤثر على قدرتي على تلبية احتياجات المتعلمين الآخرين في القاعات الدراسية.				5	4	3	2	1
8. اعضاء هيئة التدريس يشعرون بأنهم على استعداد للعمل مع المتعلمين الذين يعانون من الحواجز التي تعترض التعلم.				5	4	3	2	1
9. أنا إيجابي حول العمل مع فرق دعم المعلمين لتنفيذ التعليم الشامل				5	4	3	2	1
10.أعضاء هيئة التدريس لديهم خبرة في مسألة تنفيذ التعليم الشامل.				5	4	3	2	1

الجزء الثاني ب : سياسات وتطبيق التعليم الشامل.
باستخدام المقياس ادناه, يرجي تحديد مدي اتفاقكم مع البيانات التالية وذلك بوضع دائرة علي الرقم الماسب الذي يعكس رايكم الشخصي.

موافق بشدة 5	موافق 4	محايد 3	غير موافق 2	غير موافق بقوه 1				
1. إن ليبيا / واللجنة الشعبية العامة للتعليم لديها سياسة حول التعليم الشامل.				5	4	3	2	1
2. حددت الجامعة بشكل واضح الأهداف والسياسات المتعلقة بالتعليم الشامل.				5	4	3	2	1
3. المناهج الوطنية تحتوي على تنفيذ سياسات التعليم الشامل.				5	4	3	2	1
4. توجد مجموعات من الطلاب المحرومين من التعليم، ليست نتيجة لخلفياتهم الاجتماعية والثقافية.				5	4	3	2	1
5. يعطي جميع الطلاب جميع الفرص للحصول على التعليم في الكليات.				5	4	3	2	1
6. المسائل المالية للمؤسسة الجامعية يجب أن تكون المعايير الرئيسية عند النظر في سياسات و ممارسات التعليم الشامل.				5	4	3	2	1
7. المشكلة الأكثر خطورة في ليبيا بخصوص ممارسة التعليم الشامل هو عدم وجود المعلمين مع تدريب خاص.				5	4	3	2	1

الجزء الثالث : المناهج الدراسية

باستخدام المقياس ادناه, يرجي تحديد مدي اتفاقكم مع البيانات التالية وذلك بوضع دائرة علي الرقم الماسب الذي يعكس رايكم الشخصي.

اطلاق 1	قليل 2	قليل جدا 3	اكثر من قليل 4	الي حدكبير 5				
1- من خبرتكم في كليتك ، وإلى أي مدى المناهج تهدف إلى دعم المساواة والاندماج بين الطلاب في الكليات.				1	2	3	4	5
2- من خبرتكم في كليتك ، وإلى أي مدى المناهج حساسة للعرق.				1	2	3	4	5
3-من خبرتكم في كليتك ، وإلى أي مدى المناهج تراعي الفوارق بين الجنسين .				1	2	3	4	5
4-من خبرتكم في كليتك ، وإلى أي مدى المناهج حساسة للإعاقة.				1	2	3	4	5
5- من خبرتكم في كليتك ، وإلى أي مدى المناهج حساسة في الهوية الثقافية.				1	2	3	4	5
6- من خبرتكم في كليتك ، وإلى أي مدى يتم الالتزام بتنسيق الجهود لتطوير المناهج الدراسية في المراحل الجامعية				1	2	3	4	5
7- من خبرتكم في كليتك ، وإلى أي مدى كانت جهود تطوير المناهج مبنية علي المبادئ الأساسية للتعليم الشامل.				1	2	3	4	5
8- من خبرتكم في كليتك ، وإلى أي مدى تعتقد أن المناهج تلبية احتياجات جميع الطلاب.				1	2	3	4	5
9- من خلال تجربتك في كليتك ، إلى اي مدي تجارب التعلم ذات الصلة التي تستوعب الاختلافات والدوافع في قدرة الطالب الفردية قد أدرجت ضمن المناهج الدراسية في مختلف التخصصات في الكلية.				1	2	3	4	5
10-من تجربتك في كليتك ، وإلى أي مدى وضعت أهداف واضحة وشاملة ضمن المناهج الدراسية في مختلف التخصصات في الكلية				1	2	3	4	5
11- من خلال تجربتك في كليتك ، وإلى أي مدى كانت قد أدرجت المواقف والقيم ، والتنوع الثقافي في مناهج الكلية				1	2	3	4	5
12- من خلال تجربتك في كليتك ، إلى أي مدى لديها مجموعة من المعايير التي تنطوي علي الطلاب والثقافات والتخصصات تم استخدامها كأساس لتطوير المناهج الدراسية في الكليات.				1	2	3	4	5
13- من تجربتك في كليتك ، وإلى أي مدى المناهج مرنة تشجع على قدم المساواة في التعليم؟				1	2	3	4	5
14- من خلال تجربتك في كليتك ، إلى اي مدي المناهج لها صلة لاحتياجات ومستقبل جميع الطلاب.				1	2	3	4	5
15- من خبرتكم في كليتك ، وإلى أي مدى تلاحظ إن الكلية لديها جهود لتطوير المناهج الدراسية ، والاستجابة للتكنولوجيا.				1	2	3	4	5
16- من تجربتك في كليتك ، وإلى أي مدى يوجد التعاون بين المعلمين لدعم و تطوير المناهج الدراسية وتطبيقها عمليا في الممارسة التعليمية.				1	2	3	4	5
17-من خبرتكم في كليتك ، إلى أي مدى تحقيق الأهداف الوطنية للتعليم تحتاج إلى ربط مع التقييم الوطنية				1	2	3	4	5
18- من خبرتكم في كليتك ، إلى أي مدى تحقيق الأهداف الوطنية للتعليم تحتاج إلى ربط مع نتائج تعلم التلاميذ ، والمناهج المدرسية ذات الصلة ، ومناهج تدريب المعلمين.				1	2	3	4	5

الجزء الرابع : التدريس
باستخدام المقياس ادناه, يرجي تحديد مدي اتفاقكم مع البيانات التالية وذلك بوضع دائرة علي الرقم المناسب الذي يعكس رايكم الشخصي .

موافق بشدة 5	موافق 4	محايد 3	غير موافق 2	غير موافق بقوه 1				
1. التعليم الشامل فكرة جيدة وسوف يحل مشاكل التعليم و يدعم المساواة لجميع الطلاب.				5	4	3	2	1
2. لدي الجامعة قادرة على تضمين الطلاب ذوي الاحتياجات الخاصة.				5	4	3	2	1
3. يعمل أعضاء هيئة التدريس من أجل تلبية احتياجات جميع الطلاب حاليا في القاعات الدراسية.				5	4	3	2	1
4. التحول الي التعليم الشامل في الجامعات الليبية يشكل تحديا للمستقبل ، لأن المجتمع في الوقت الحاضر ليس مستعدة لذلك بعد.				5	4	3	2	1
5. ممارسة التعليم الشامل تعرض تفاعلات المجموعة المختلطة التي تعزز فهم وقبول الاختلافات الفردية للمتعلمين.				5	4	3	2	1
6. المشكلة الخطيرة في ليبيا لممارسة التعليم الشامل هو عدم وجود مواد التدريس والمناهج والكتب والفصول الدراسية والمرافق وغيرها .				5	4	3	2	1
7.هناك مشكلة خطيرة في ليبيا لممارسة التعليم الشامل هو موقف المعلمين بشأن التعليم الشامل.				5	4	3	2	1
8- هناك مشكلة خطيرة في ليبيا لممارسة التعليم الشامل هو عدم اهتمام الجهات المختصة بالتعليم.				5	4	3	2	1
9- هناك مشكلة خطيرة في ليبيا لممارسة التعليم الشامل هو فقرالعمل لشروط إدارة التعليم.				5	4	3	2	1
10- تقع المسؤولية الرئيسية في تعليم جميع الطلاب في صفوفهم الدراسية علي أعضاء هيئة التدريس.				5	4	3	2	1
11- يجب ملائمة وتكييف اساليب التدريس لتتناسب مع القدرات الفردية واحتياجات جميع الطلاب.				5	4	3	2	1
12- يمكنني استخدام أسلوب واحد اساسي للتدريس لأنني وجدت أن معظم الطلاب لديهم أسلوب مماثل من التعلم.				5	4	3	2	1
13- تبني أساليب تدريس تعمل على تنمية مهارات التواصل الاجتماعية الفعّال والابتعاد عن أسلوب التلقين.				5	4	3	2	1
14- تبني أساليب تدريس تشجع على لعب الأدوار وتوفير جيل قادر على لعب دور القيادة في المجتمع.				5	4	3	2	1
15- تبني أساليب التدريس التي تربط بين المادة النظرية وواقع البيئة الليبية المحيطة كنظرية مدخل الوعي الاجتماعي.				5	4	3	2	1
16- تبني أساليب التدريس التي تعمل على تنمية مهارات التفكير العلمي وأسلوب حل المشكلات				5	4	3	2	1

الجزء 7-- بأقل تجاربك وملاحظاتك على أساليب التدريس وكيف أن هذه الاساليب تتناسب مع دعم المساواة والإدراج بين الطلابمثلا. الجنس والهوية ، الثقافة والعجز ...الخ

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الجزء 8-- كيف تشعربأن تصميم المناهج يتناسب مع دعم التعليم الشامل للطلاب. يرجى تقديم أمثلة عن أفضل الممارسات مثل الكتيبات والكتب وأشرطة الفيديو.

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الجزء 5 -- عبر عن آرائك ووجهات نظرك حول دعم الجامعة للتعليم الشامل.

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الجزء 6-- الرجاء تقديم آرائكم على فعالية السياسات من وزارة التعليم وكذلك الجامعة من أجل التعليم الشامل.

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Appendix C :The questionnaire designed from a literature review

Table 4.3 Factor : policy and implementation inclusive education and Philosophy and Practice of inclusive education

Part 2. A **Item 1**	I believe in and support the philosophy of inclusive education. Strongly Agree----------Strongly Disagree	AndoniaPiau-Lynch (2007)
Item 2	Do you feel all learners are included in the inclusive education policy? Strongly Agree----------Strongly Disagree	Beres, (2001)
Item 3	Resource/financial supports for inclusive education are adequate and enable appropriate delivery. Strongly Agree----------Strongly Disagree	PhindileMayaba(2006)
Item 4	Curriculum material supports for inclusive education (e.g., modified and adapted materials) are adequate. Strongly Agree----------Strongly Disagree	PhindileMayaba(2006)
Item 5	There is the level of support is available from the Department of Education for improving programs and services. Strongly Agree----------Strongly Disagree	PhindileMayaba(2006)
Item 6	Inclusive education is more beneficial than it is detrimental. Strongly Agree----------Strongly Disagree	Noemi,Birta-Szkely (2006)
Item 7	Integration of learners experiencing barriers to learning affects my capacity to meet the needs of other learners in the class. Strongly Agree----------Strongly Disagree	PhindileMayaba(2006)
Item 8	Do you feel professionally prepared to work with learners experiencing barriers to learning? Strongly Agree----------Strongly Disagree	PhindileMayaba(2006)
Item 9	I am positive about working with teacher support teams to implement inclusive education. Strongly Agree----------Strongly Disagree	PhindileMayaba(2006)
Item 10	Members of faculty have experience on issue of implementing inclusive education. Strongly Agree----------Strongly Disagree	PhindileMayaba(2006)
Part 2. B **Item 1**	Your country/Ministry of Education has a policy on Inclusive Education? Strongly Agree----------Strongly Disagree	Andonia Piau-Lynch (2007)
Item 2	The university has clearly articulated goals and policies for the inclusive education? Strongly Agree----------Strongly Disagree	Lethbridge, Alberta (2001)
Item 3	The national curriculum contain policies implementation the inclusive education Strongly Agree----------Strongly Disagree	Jenkins, E. W.(2000)
Item 4	That different groups of students are not disadvantaged as a result of their socio- cultural background Strongly Agree----------Strongly Disagree	Kortman, Wendy(2008) PhD
Item 5	Give all students the opportunity to be educated in the colleges Strongly Agree----------Strongly Disagree	Kortman, Wendy(2008) PhD
Item 6	The financial issues of the institution have to be the major criteria when considering the practice of inclusive education. Strongly Agree----------Strongly Disagree	Noemi,Birta-Szkely (Romania)
Item 7	The most serious problem in Libyan as far as the practice of inclusive education is lack of teachers with special training. Strongly Agree----------Strongly Disagree	Noemi,Birta-Szkely (Romania)

Table 4.4 Factor: Part 3: Curriculum

Item 1	From your experience in your college, to what extent has curriculum intended to support equity and inclusion at colleges? not at all---------- to a great extent	Christopher C.Sonn(2008)
Item 2	From your experience in your college, to what extent has curriculum sensitive to ethnicity? not at all---------- to a great extent	Christopher C.Sonn(2008)
Item 3	From your experience in your college, to what extent has curriculum sensitive to gender? not at all---------- to a great extent	Aikman, et al, (2005)
Item 4	From your experience in your college, to what extent has curriculum sensitive to disability? not at all---------- to a great extent	Chan, Elaine (2007)
Item 5	From your experience in your college, to what extent has curriculum sensitive to cultural identity? not at all---------- to a great extent	Chan, Elaine(2007)
Item 6	From your experience in your college, to what extent do you observe a coherent theoretical framework operating in curriculum development efforts at the college level? not at all---------- to a great extent	Cole, Bryan R. and Johnson, Glenn Ross(1981)
Item 7	From your experience in your college, to what extent have curriculum development efforts at the college level emphasized basic principles of inclusive education? not at all---------- to a great extent	Cole, Bryan R. and Johnson, Glenn Ross(1981)
Item 8	From your experience in your college, to what extent do you believe the college curriculum has attempted to meet the needs of all students? not at all---------- to a great extent	Cole, Bryan R. and Johnson, Glenn Ross(1981)
Item 9	-From your experience in your college, to what extent have relevant learning experiences that accommodate differences in individual student ability and motivation been incorporated within the curriculum of various disciplines in the college? not at all---------- to a great extent	Cole, Bryan R. and Johnson, Glenn Ross(1981)
Item 10	From your experience in your college, to what extent have clear and comprehensive objectives been established within the curriculum of various disciplines in the college? not at all---------- to a great extent	Cole, Bryan R. and Johnson, Glenn Ross(1981)
Item 11	From your experience in your college, to what extent has the college curriculum incorporated knowledge's, attitudes, values, and skills of cultural relevancy? not at all---------- to a great extent	Cole, Bryan R. and Johnson, Glenn Ross(1981)
Item 12	From your experience in your college, to what extent has a set of criteria involving students, cultures, and disciplines been used as a basis for curriculum development colleges? not at all---------- to a great extent	Cole, Bryan R. and Johnson, Glenn Ross(1981)
Item 13	From your experience in your college, to what extent has flexible curriculum promotes human rights in education? not at all---------- to a great extent	Christopher C.Sonn(2008)
Item 14	From your experience in your college, to what extent has curriculum relevant to the needs and future of all students? not at all---------- to a great extent	UNGEI 2010
Item 15	From your experience in your college, to what extent do you observe the college, in curriculum development efforts, responding to technological and scientific advancements? not at all---------- to a great extent	Cole, Bryan R. and Johnson, Glenn Ross(1981)
Item 16	From your experience in your college, to what extent have rule of communication with other in all curricula and their practical application in educational activates. not at all---------- to a great extent	Cole, Bryan R. and Johnson, Glenn Ross(1981)
Item 17	From your experience in your college, to what extent has got the student acquainted with self-learning skills. not at all---------- to a great extent	UNESCO 2008
Item 18	From your experience in your college, to what extent have national goals for education to need linked with national assessment, pupils 'learning outcomes, related school curriculum, and teacher training curricula? not at all---------- to a great extent	Working Paper New York,USA(2000)

Table 4.5 Part 4: Factor: Teaching

Item 1	Is Inclusive education a good idea and will it solve the problems in supporting equal education for all students? Strongly Agree----------Strongly Disagree	Noemi,Birta-Szkely (2006)
Item 2	Is your University able to include any students with special needs eg? Types special needs Strongly Agree----------Strongly Disagree	Beres, (2001)
Item 3	Regular classroom teachers struggle meeting the needs of the majority of students currently in their classrooms Strongly Agree----------Strongly Disagree	Noemi,Birta-Szkely (2006)
Item 4	For Libyan Universities inclusive education is a challenge the future, as for mainstream present-day society is not ready for it yet. Strongly Agree----------Strongly Disagree	Noemi,Birta-Szkely (2006)
Item 5	Inclusive education practice offers mixed group interactions which foster understanding and acceptance of individual differences Strongly Agree----------Strongly Disagree	Beres, (2001)
Item 6	Regular classroom teachers hold the primary responsibility for the education of the all students in their classrooms. Strongly Agree----------Strongly Disagree	Beres, (2001)
Item 7	A serious problem in Libya for the practice of inclusive education is dependent on teachers Strongly Agree----------Strongly Disagree	Noemi,Birta-Szkely (2006)
Item 8	A serious problem in Libya for the practice of inclusive education is the lack of teaching materials, curricula, textbooks, etc classrooms and facilities Strongly Agree----------Strongly Disagree	Noemi,Birta-Szkely (2006)
Item 9	A serious problem in Libya for the practice of inclusive education is attitude of teachers concerning inclusive education Strongly Agree----------Strongly Disagree	Noemi,Birta-Szkely (2006)
Item 10	A serious problem in Libya for the practice of inclusive education is Poor working conditions education management Strongly Agree----------Strongly Disagree	Noemi,Birta-Szkely (2006)
Item 11	A serious problem in Libya for the practice of inclusive education is lack of interest of competent authorities Strongly Agree----------Strongly Disagree	Noemi,Birta-Szkely (2006)
Item 12	I use one basic teaching method because I have found that most students have a similar style of learning. Strongly Agree----------Strongly Disagree	Rong L, Xiaomei Q &YingliangL . University of Arizona (2004)
Item 13	There are any adopt teaching methods that work to develop effective social communication skills and stay away from the method of memorization. Strongly Agree----------Strongly Disagree	Frattura& Capper, (2006)
Item 14	Encourages the adoption of methods of teaching to play roles and provide a generation capable of playing a leadership role in the community. Strongly Agree----------Strongly Disagree	Frattura& Capper, (2006)
Item 15	To adopt teaching methods that links the material theory and the reality of the environment surrounding the theory of the entrance to the social awareness. Strongly Agree----------Strongly Disagree	McLeskey& Waldron, (2007)
Item 16	To adopt teaching methods that work on the development of scientific thinking skills and problem-solving method Strongly Agree----------Strongly Disagree	McLeskey& Waldron, (2007)

Appendix D: The first output of the factor analysis was the correlation matrix

Items	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12	Item 13	Item 14	Item 15	Item 16	Item 17	Item 18	Item 19	Item 20	Item 21	Item 22	Item 23
Item 1	__	.534	.430	.213	.307	.143	.240	.255	.065	.130	.133	.118	.241	.077	-.013	.106	-.080	-.019	.092	.051	.154	.183	.183
Item 2	.534	___	.560	.165	.297	.160	.268	.159	-.042	.120	.085	.027	.347	.144	-.022	-.083	-.165	-.215	.038	.047	-.016	.061	.061
Item 3	.430	.560	___	.164	.074	-.027	.163	.170	-.008	.061	.043	-.012	.183	.124	.101	-.111	-.166	-.255	.127	.120	.053	.084	.084
Item 4	.213	.165	.164	___	.548	.510	.721	.487	.563	.500	.549	.485	.568	.466	.450	-.072	-.412	-.325	-.097	.009	-.136	.090	.090
Item 5	.307	.297	.074	.548	___	.594	.681	.509	.492	.469	.574	.327	.589	.434	.278	-.067	-.324	-.102	-.076	.129	.029	.148	.148
Item 6	.143	.160	-.027	.510	.594	___	.642	.321	.426	.513	.591	.400	.498	.414	.276	.029	-.243	-.099	-.239	-.021	-.035	.060	.060
Item 7	.240	.268	.163	.721	.681	.642	___	.536	.553	.467	.728	.470	.675	.478	.393	-.067	-.372	-.223	-.094	.013	-.125	.004	.004
Item 8	.255	.159	.170	.487	.509	.321	.536	___	.613	.601	.457	.467	.590	.398	.334	-.206	-.364	-.318	-.013	-.020	-.080	-.004	-.004
Item 9	.065	-.042	-.008	.563	.492	.426	.553	.613	___	.615	.538	.396	.468	.396	.395	-.040	-.128	-.140	.040	-.050	-.091	-.059	-.059
Item 10	.130	.120	.061	.500	.469	.513	.467	.601	.615	___	.566	.464	.495	.324	.272	-.198	-.280	-.352	-.039	.086	.042	.099	.099
Item 11	.133	.085	.043	.549	.574	.591	.728	.457	.538	.566	___	.595	.584	.431	.278	-.128	-.313	-.243	-.135	.016	-.054	-.022	-.022
Item 12	.118	.027	-.012	.485	.327	.400	.470	.467	.396	.464	.595	___	.529	.389	.374	.010	-.247	-.224	-.130	.026	-.019	.038	.038
Item 13	.241	.347	.183	.568	.589	.498	.675	.590	.468	.495	.584	.529	___	.541	.540	-.171	-.359	-.319	-.080	.052	-.074	.089	.089
Item 14	.077	.144	.124	.466	.434	.414	.478	.398	.396	.324	.431	.389	.541	___	.570	-.166	-.281	-.228	-.160	.177	.006	.114	.114
Item 15	-.013	-.022	.101	.450	.278	.276	.393	.334	.395	.272	.278	.374	.540	.570	___	-.120	-.196	-.145	-.114	.065	-.065	.092	.092
Item 16	.106	-.083	-.111	-.072	-.067	.029	-.067	-.206	-.040	-.198	-.128	.010	-.171	-.166	-.120	___	.560	.526	.005	.053	.211	.201	.201
Item 17	-.080	-.165	-.166	-.412	-.324	-.243	-.372	-.364	-.128	-.280	-.313	-.247	-.359	-.281	-.196	.560	___	.627	.118	-.049	.223	.024	.024
Item 18	-.019	-.215	-.255	-.325	-.102	-.099	-.223	-.318	-.140	-.352	-.243	-.224	-.319	-.228	-.145	.526	.627	___	-.071	.113	.168	.003	.003
Item 19	.092	.038	.127	-.097	-.076	-.239	-.094	-.013	.040	-.039	-.135	-.130	-.080	-.160	-.114	.005	.118	-.071	___	.140	.239	.050	.050
Item 20	.051	.047	.120	.009	.129	-.021	.013	-.020	-.050	.086	.016	.026	.052	.177	.065	.053	-.049	.113	.140	___	.598	.474	.474
Item 21	.154	-.016	.053	-.136	.029	-.035	-.125	-.080	-.091	.042	-.054	-.019	-.074	.006	-.065	.211	.223	.168	.239	.598	___	.694	.694
Item 22	.183	.061	.084	.090	.148	.060	.004	-.004	-.059	.099	-.022	.038	.089	.114	.092	.201	.024	.003	.050	.474	.694	___	
Item 23	.118	.079	.143	-.046	.085	-.089	-.032	.050	-.159	.032	-.062	-.014	.051	.120	-.001	.029	-.021	-.049	.163	.484	.676	.765	___

Appendix E: Output of the factor analysis was the correlation matrix

Items	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12	Item 13	Item 14	Item 15	Item 16	Item 17	Item 18	Item 19	Item 20
Item 1	___	.534	.430	.213	.307	.143	.240	.255	.065	.130	.133	.118	.241	.106	-.080	-.019	.051	.154	.183	.118
Item 2	.534	___	.560	.165	.297	.160	.268	.159	-.042	.120	.085	.027	.347	-.083	-.165	-.215	.047	-.016	.061	.079
Item 3	.430	.560	___	.164	.074	-.027	.163	.170	-.008	.061	.043	-.012	.183	-.111	-.166	-.255	.120	.053	.084	.143
Item 4	.213	.165	.164	___	.548	.510	.721	.487	.563	.500	.549	.485	.568	-.072	-.412	-.325	.009	-.136	.090	-.046
Item 5	.307	.297	.074	.548	___	.594	.681	.509	.492	.469	.574	.327	.589	-.067	-.324	-.102	.129	.029	.148	.085
Item 6	.143	.160	-.027	.510	.594	___	.642	.321	.426	.513	.591	.400	.498	.029	-.243	-.099	-.021	-.035	.060	-.089
Item 7	.240	.268	.163	.721	.681	.642	___	.536	.553	.467	.728	.470	.675	-.067	-.372	-.223	.013	-.125	.004	-.032
Item 8	.255	.159	.170	.487	.509	.321	.536	___	.613	.601	.457	.467	.590	-.206	-.364	-.318	-.020	-.080	-.004	.050
Item 9	.065	-.042	-.008	.563	.492	.426	.553	.613	___	.615	.538	.396	.468	-.040	-.128	-.140	-.050	-.091	-.059	-.159
Item 10	.130	.120	.061	.500	.469	.513	.467	.601	.615	___	.566	.464	.495	-.198	-.280	-.352	.086	.042	.099	.032
Item 11	.133	.085	.043	.549	.574	.591	.728	.457	.538	.566	___	.595	.584	-.128	-.313	-.243	.016	-.054	-.022	-.062
Item 12	.118	.027	-.012	.485	.327	.400	.470	.467	.396	.464	.595	___	.529	.010	-.247	-.224	.026	-.019	.038	-.014
Item 13	.241	.347	.183	.568	.589	.498	.675	.590	.468	.495	.584	.529	___	-.171	-.359	-.319	.052	-.074	.089	.051
Item 14	.106	-.083	-.111	-.072	-.067	.029	-.067	-.206	-.040	-.198	-.128	.010	-.171	___	.560	.526	.053	.211	.201	.029
Item 15	-.080	-.165	-.166	-.412	-.324	-.243	-.372	-.364	-.128	-.280	-.313	-.247	-.359	.560	___	.627	-.049	.223	.024	-.021
Item 16	-.019	-.215	-.255	-.325	-.102	-.099	-.223	-.318	-.140	-.352	-.243	-.224	-.319	.526	.627	___	.113	.168	.003	-.049
Item 17	.051	.047	.120	.009	.129	-.021	.013	-.020	-.050	.086	.016	.026	.052	.053	-.049	.113	___	.598	.474	.484
Item18	.154	-.016	.053	-.136	.029	-.035	-.125	-.080	-.091	.042	-.054	-.019	-.074	.211	.223	.168	.598	___	.694	.676
Item19	.183	.061	.084	.090	.148	.060	.004	-.004	-.059	.099	-.022	.038	.089	.201	.024	.003	.474	.694	___	.765
Item20	.118	.079	.143	-.046	.085	-.089	-.032	.050	-.159	.032	-.062	-.014	.051	.029	-.021	-.049	.484	.676	.765	___

Appendix F

A lists the universities existing in Libya in the academic year 2003-2004, together with their designation and geographical location in the country.

	Name of University	Educational Interface	District
1	University of Benghazi	Faculties	Benghazi
2	University of Tripoli	Faculties	Tripoli
3	University of ALzowia	Faculties	Zawia
4	University of Sabha	Faculties	Sabha
5	Omar El-Mukhtar University	Faculties	AL- Baida
6	AL-koums University	Faculties	Khoms
7	Sert University	Faculties	Sirt
8	University of Darna	Department	Darna
9	Gouba University	Departments	Gouba
10	Marag University	Departments	Marag
11	Wahat University	Departments	Agdabi
12	Kofra University	Departments	Kofra
13	Ben Waled University	Departments	Ben Waled
14	Musrata University	Departments	Musrata
15	Sakar Africa University	Departments	Nalut
16	Subrata and Surman University	Departments	Subrata
17	Ghyrian University	Departments	Ghyrian
18	Yefran University	Departments	Yefran
19	NikatKams University	Departments	Zwara
20	Al-Hizam Al-Alkter University	Departments	Gydabia
21	Mizda University	Departments	Mizda
22	Al-Maser Al-Kubra University	Departments	Boutnan
23	The Open University	Faculties	Tripoli
24	Al-Asmaria University (Islamic)	Faculties	Zliten
25	Naser University	Faculties	Tripoli

Appendix G

Strategy and aims of Libyan higher education

Based on a report carried out by a committee of Libyan experts and presented to the International Conference of Education, held in Geneva, Session 47, 2004, titled _'the development of education in Libya', the strategy and goals of Libyan higher education are represented in the following:

Higher education is considered free of charge for all Libyan students, as the financial support for education is considered to be the country`s responsibility

The Arabic language is the basic language for academic programmes, though foreign languages are used in some specialisations.

Members of staff should be encouraged by supporting them both materially and morally.

Work on the use of modern educational technologies and methods should be performed, such as communication means, educational illustrations, study groups, workshops, self-education, and so on.

Higher education should contribute to solving social problems by means of linking the higher education institutions with society in order to enhance cooperative relationships between each other, and work to strengthen this relationship should be undertaken.

The educational system should be reviewed, not only the higher education system but the various stages of education, in order to design a new educational environment which is able to meet the needs of society, and face the challenges of the twenty-first century.

The higher education sector should be linked with the requirements of national development in order to increase compatibility and harmony between the higher education sector and future development plans.

Reforming and developing the educational curricula in order to reflect and respond to international trends.

The enhancement of environmental awareness of students, in order to motivate them to care and maintain the safety and integrity of the environment and its various resources, and encourage students to contribute and play a fundamental role in solving environmental problems.

Support private higher education institutions to be a main part of the education system by means of adopting their curricula and certificates, encouraging them to make links with public institutions, and following up their work to ensure they conform to public higher education institutions. Also to ensure they meet generally accepted standards, furthermore to motivate them to develop educational process by providing new areas of education.

Work on the distribution of higher education institutions in accordance with the geographical distribution of population on one hand, and the requirements of quality on the other hand, in order to meet the society`s demand for higher education.

Enable students to gain the skills of thinking and scientific analysis to go with the contemporary international transformations in the field of technology and science.

Enable and encourage students to connect with the different cultures in the world so they are able to integrate into the international community

Barriers and obstacles in Libyan higher education

As noted above, the number of higher education institutions has increased and is distributed more evenly throughout the country, and the number of students enrolling in higher education has increased significantly in recent years, both of which are positive indicators in educational development. However, the criteria of quality and efficiency of performance of Libyan higher education is extremely low and weak (Bin Saeed, 2007), accordingly a lot of weaknesses which are

considered as obstacles and barriers are still existing and threaten to prevent this sector from accomplishing its mission and function.

According to several national reports prepared by the Libyan National Commission for Education, Culture and Sciences, regarding the development of education in Libya, and presented to the International Conferences on Education, held in Geneva, in Session 46 (2001), (2004) and (2008), the main obstacles and barriers that face higher education can be outlined as the following:

1) Weaknesses of development of inputs to the educational process, due to their not being based on evaluative field studies which could reveal the strengths and weaknesses to be taken into account in planning education programs, especially the educational inputs

2) The large increase in the number of students, where the current proportion of 37% of the population consists of students in various stages of education due to the high rate of population growth which reached 4% per year in 1996 (El-Hawat 1996); this increase has not been offset by a tangible increase in human and material resources. There is also a limitation of capacity of some Libyan higher education institutions to accommodate the increased numbers of students, as can be seen in the overcrowding of students in classrooms, laboratories, and universities' corridors.

3) A lack of integration and harmonisation between educational and economic planning, especially in terms of the correlation between the curricula and the labour market (El-Zubidi 2000).

4) The teaching strategies adopted by higher education institutions in Libya are still restricted to traditional teaching methods such as the traditional lecture, where often the method of dialogue and discussion are not used (El-Zubidi 2000).

5) Lack of scientific coordination and cooperation among Libyan universities on the one hand, and between them and the international universities on the other hand.

6) The inability of the current system of teaching in some specialisations to enable students to get a job after graduation, except in the field of teaching.

7) Lack of availability of modern sources of information in Libyan universities and limitations on the books which are available at libraries, due to lack of introducing and use of information technology in the field of higher education, which makes it difficult to trace and keep abreast of the latest educational developments in this field.

8) Lack of encouragement of scientific research and lack of encouragement of teachers to participate in the international and Arabic scientific events and to publish their researches in Arabic and international journals.

Proposals of Libyan Higher Education Ministry for reforming university education

The aim of this section is to outline the proposals recently put forward by the Libyan Higher Education Ministry to improve and develop Libyan university education, which are based on the existing obstacles.

a) General solutions (Remedial Reforms)

General proposals mean the suggestions and recommendations that have been made or been implemented by responsible authorities or that have been suggested by specialists who take care of the development of university education. These suggestions have been made in order to tackle the aforementioned problems of this sector. They therefore focus on improving the current situation of the higher education sector. The aim of this section is:

1) To identify these suggestions in order to compare them with the suggestions those have been given by students and teachers in geography departments later in this thesis.

2) To find out to what extent these suggestions can be considered appropriate solutions to the problems identified.

The most important solutions that have been suggested can be set out as below:

1) The task and mission of Libyan university education must not be limited to the traditional pedagogic process, but must also give special attention to scientific research and knowledge production, in addition to providing national institutions with scientific, technical, and advisory services, since these institutions contribute to supporting universities financially.

2) The planning of university education must be linked to the development planning of society so that education meets the future needs of the community.

3) Universities must be supported by government and local authorities for the purpose of promoting and encouraging scientific research on the one hand, as well as supporting researchers to participate in the activities of international organisations and bodies concerned with higher education on the other hand.

4) Reforming the educational curricula for the 21st century; these curricula should be based on the needs and abilities of students on the one hand, and to meet the future needs of society on the other hand. Accordingly these curricula must provide students with skills, knowledge and experience in order to enable them to face the future, and to take part in building society in future. Such reforms should take the global revolution in the field of communications and information, and its influence on the life of students and society, into consideration, and also should not ignore the economic and social developments in the world and their effects on knowledge, moreover balancing the need for both theoretical information and its practical

application in order to increase students' comprehension. Furthermore, national and global environmental issues should be given a place within the reformed curricula.

5) Encouraging universities to contribute to implementation of the sustainable development concept, and to work to achieve recommendations of international declarations. Sustainability should become an integral part of university life, as one of the aims of education must be to sustain the possibility of a good society of right living (Corcoran and Wals 2004).

6) Committees should be established within the higher education sector consisting of specialists for each discipline, to be responsible for determining the modules taught and their syllabuses, and to develop and evaluate educational curricula periodically (Bin saeed, 2007).

7) The need to pay more attention to university libraries and provide them with up to date books and reference materials; furthermore, they should be provided with necessary equipment such as copy machines, computers, printers and so on.
8) The need to pay more attention to the establishment of laboratories in each department and supply them with modern equipment in order to support the theoretical information with practical application.

9) New specialisations should be established within the higher education sector in the light of the development needs of society on the one hand, and international transformations on the other.

b) Developmental reforms: the implementation of the national project for the use of information and communication technologies in the higher education sector

The Libyan Higher Education Ministry has expressed its intention to improve the higher education sector with regard to the technology available. As a result, in June 2007 a cooperation agreement was signed between the Director of the Libyan Higher

Education Ministry and the headquarters of the United Nations Education, Scientific and Cultural Organization (UNESCO) with regard to the implementation of the national project for the use of information and communication technologies (ICT) in the Libyan higher education sector.

The agreement aims to provide higher education institutions with computer laboratories and classrooms for education and training, in addition to the creation of digital libraries, and also the establishment of a local information network linking the universities with one another. This project consists of 450 workshops and laboratories comprising more than 600 computers, as well as the creation of rooms for digital presentation in each university consisting of computers along with display screens. The project costs 72 million US dollars and needs five years to be implemented. The main components and the timetable for completion of the project are shown in Table.

The national project for the use of information and communication technologies in the higher education sector

Phases of the project		Years				
		1	2	3	4	5
1	Libyan national network among universities	*	*	*		
2	The local network in each university	*	*	*		
3	Computer Network		*	*	*	
4	E-learning classrooms			*	*	*
5	Infrastructure Application		*	*	*	
6	Video on Demand					*
7	Major Application System	*	*	*		
8	Computer Labs			*	*	*
9	Online Educational Content	*	*	*		
10	Digital Libraries				*	*
11	Multimedia Educational			*		

Source: Libyan General Authority for Information (2007: p.98)

Appendix H

الجماهيرية العربية الليبية الشعبية الاشتراكية العظمى
المكتب الشعبي - لندن
الشئون الثقافية

أمانة اللجنة الشعبية للشئون الثقافية

التاريخ:
الرقم الإشاري:
التاريخ : 05/08/2010
الرقم الاشاري : 10-08-
رقم الملف : 5025
رقم قرار الإيفاد:
بداية الصرف : 01/07/2007
نهاية الصرف : 31/07/2011
اشهر المنحة : 49

اسم الطالب : خالد عبدالرفيع امعيتيق محمد
الدرجة العلمية : دكتوراة
التخصص : ادارة الاعمال

بعد التحية ،،،

الموضوع : افـــــادة الي الاخوة / ب

-جامعة قاريونس
-جامعة الفاتح
-جامعة التحدي
-جامعة عمر المختار

يشهد القسم الثقافي بأن الأخ / خالد عبدالرفيع امعيتيق محمد احد الطلبة الموفدين لدراسة الدكتوراه في مجال ادارة الاعمال على حساب المجتمع في الساحة البريطانية من الفترة 01/07/2007 إلى 31/07/2011 م . يرغب الطالب لجمع بعض البيانات والمعلومات المتعلقة ببحثه العلمي لذا يرجى تسهيل مهمته وإبداء المساعدة في هذا المجال.

أعطيت له هذه الإفادة بناءا علي طلبه لاستخدامها فيما يخوله القانون و تعتبر رسمية بعد التوقيع و الختم.

والسلام عليكم ورحمة الله وبركاته ،،،

د. سعد عبدالعزيز مناع
الأمين التعليمي