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Graduate School College of Arts Science & Education

Title:

**AN EXPLORATION OF THE GENDERING MEDIATING STUDENTS' ATTITUDES
AND EXPERIENCES IN THE FORMAL ACADEMIC CURRICULUM AT
SECONDARY SCHOOL LEVEL IN LIBYA**

By:

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PREFACE

Following the downfall of Libya's former dictator, the country's transitional government faces a difficult legacy with the peaceful reconstruction of the country, which has a population of around 6.5 million. Approximately 35% of Libya's population is under 20 years of age. This young generation is full of expectations and needs vital investment in education, health and all the other sectors (L.N.C., 2001). This will depend to a large degree on how quickly Libya succeeds in involving its youth in the national dialogue on broad and fundamental social change processes which will provide these young people with the prospects for the employment and income that they been demonstrating for since February 2011, first of all in Benghazi and Misrata, then AL-Zawija and Tripoli. They all were calling for democracy, liberty, and gender participation, and protesting against corruption. Therefore, restructuring the entire education system, including preschool education, general education, technical and vocational education and training, higher education and research, is certainly one of the most difficult challenges in the transformation process. It must be tackled if the serious failings of the education policy in recent decades are to be overcome.

Undoubtedly the trajectory of my research was interrupted by this terrible war in my own country. Some problems and difficult circumstances arose quite naturally from me being witness to hostilities in my own country that had a significant impact on my close friends and relatives. I was obviously deeply concerned that Gaddafi and his henchmen were killing innocent people and that their regime, which had been sustained for many years by the questionable use of military and political power, was on the brink of a downfall. Gaddafi was using extreme measures and every means to ensure that everyone available became part of his war-making machine. What was worrying me most during hostilities was that Gaddafi refused to lay down his arms and moved the fighting

to southern Libya where most of my family lives. Besides being cut off from all electricity sources there, the military action had made it impossible for me to be able to communicate or connect directly or indirectly by any means. I deeply hoped all my families and Libyans be saved from possible massacre and executions. On a personal level, I am one of six brothers and I also have three sisters. The family remains very close, in spite of the hostilities, which started in February 2011. My father died three months later, but I was not able to meet with my family for obvious reasons, I was also unable to talk with them directly about my father's death. On the basis of the considerable sources of anxiety and pressure that I was under at that moment arising from the hostilities in Libya since February 2011. I was in touch by e-mail with my supervisory team: Dr. Kevin Flint, Prof. Sue Wallace and Dr. Ben Oldfield about the hostilities and my concerns in my own country that had a significant impact on my study and also myself. I had meetings with my director of studies Dr Kevin Flint where he spent much of the time listening to my concerns about the conflict in Libya.

All members of the supervision team of my research were more than willing to support me in every way possible. They asked, therefore, that on an official and formal basis they grant me, retrospectively, an intercalation that extended the timeline from an original intended plan. Evidently at that time my progress had not accorded with my own high expectations based upon what I had originally intended. However, when the hostilities ended in my own country, I saw no reason at all why I could not complete my thesis in the near future. I was always highly focused and professional in my approach to my research. I resumed my research with strength and was making excellent progress in developing my thesis. I was working closely with the supervision team and I was assiduously taking up the various commentaries with the aim of completing my thesis as soon as possible.

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Finally, thanks must surely go again to all head teachers, colleagues and students at Libyan schools in giving me the great opportunity to distribute all my questionnaires during my field research in my study as well as the students and teachers who helped with the interviews. Their help and co-operation are greatly appreciated as without them this thesis would not have been finished. Above all, thanks to Libyan Government and Sebha University in giving me this valuable opportunity to accomplish my PhD research study in the United Kingdom.

ABSTRACT

Introduction: The study was conducted to explore the gendering mediating students' attitudes and experiences towards the formal academic curriculum at secondary school level in Libya. The problematic nature of the link between access, quality of schooling and gender equality in the curriculum in Libya is not sufficiently recognised.

Methods: A total of 800 secondary students (ages 15-20), (males=389, females=411), who were from urban (n=360=45%) and rural (n=440=55%) localities of Libya completed a questionnaire designed to respond to a 5-point Likert scale of 19 items to elicit and to find out the key factors that influence students' gendered perceptions, interests and characteristics of their future subject directions towards the aspects of school academic curriculum. 16 semi-structured interviews were also followed up to gain a deep understanding of the issues and enrich the validity of the questionnaire evidence. The statistical analysis software Statistical Package for Social Sciences (SPSS) was applied. The t-test statistic was used to compare the means and test the significance of any possible differences that existed between male and female responses.

Results: These depicted a significant effect of gender differences on students' perceptions, experiences and attitudes related to the aspects of the science curricula, science and technology courses. Females had significant higher attitudes towards science than males in urban school regions on the total scale. A significant gender difference was also depicted in the students' perceptions of their abilities related to learning mathematics. Females showed more negative attitudes compared with males. Rural males had significant higher attitudes and perceptions towards mathematics, more than so urban males. The causes of these gender differences were found to be multifaceted. The study has identified students' classroom experiences, culture, religion and societal factors as being

influential in making females internalize the feeling that they are inferior to males.

Discussion: The findings evidently showed a great desire for positive curriculum changes among participants' effective amendments within the contents of the formal academic secondary school curriculum in major areas: *Curriculum and Assessment; Teachers' Attitudes and Classroom Environment; Teacher Training and Qualification; Teachers' and Students' Participation; and Gender Religion and Culture Influences*. This study has made a contribution to the theoretical social and educational framework of curricular alignment by investigating the alignment between the non-testable elements of the curriculum which are related to the affective domain of Bloom's taxonomy (includes the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations, and attitudes) and shown that a tight alignment between these elements and classroom practice can help to minimize the role played by the implicit curriculum.

OVERVIEW OF CHAPTERS

This thesis starts with the introduction and background of this particular research context of Libya. It looks at the secondary school education and gender issues in particular; it also highlights the research aims and rationale: why the gender issue is important in undertaking this research which focuses on gendered attitudinal factors and dispositions of young people towards formal academic curriculum at the secondary school level in Libya. In addition, it clarified the personal goal and motivation of the study and the extent of how this study contributes to knowledge.

CHAPTER ONE: Discusses the educational curriculum context, the rationale and the researcher's personal perspective in undertaking this study. It highlights the educational commitment and outlines the formal school curriculum through its goals and the general objectives of education in the context of Libya. It also raises the issues of the equity of gender in the educational context and key arenas where the variation in gender patterns are created in the curriculum context. These have also been identified as they are likely to have a major impact on the development of students' attitudinal factors and experiences towards the secondary school formal curriculum in Libya.

CHAPTER TWO: Discusses the literature review, interconnecting the impact of gender, language, and power in organisations. It discusses the insights offered from developments that have taken place in the discipline of organisational studies with regard to gender issues. It has covered areas where gaps exist in the literature in relation to the investigation of young individuals' gendered identities in the context of Libya (Islam). Furthermore, it debates the theory of gender as a social structure and re-engages the sex role theory to include broad social relations within and beyond the school curriculum context that offers insights into the possible dynamics of, firstly, how traditional representations of women and with more focus on their gender identities; and, secondly, how the gendered sites of knowledge impacts on the women's knowledge. The division

of women's knowledge is discussed at three levels: the economic, the political and societal.

CHAPTER THREE: Presents the methodology: Design and logistical considerations including: philosophical and historical foundations of three key paradigms; the relationship between methods and paradigms; the rationale for using a mixed methods research; the epistemological and ontological considerations; and ethical and logistic considerations. It also covered the pilot work and the difficulties encountered and the ways in which data collection were gathered in this study.

CHAPTER FOUR: Discusses data measurement and analysis. It discusses the measurement of attitudes, variables and scaling methods. It also presents the summary of the research findings and discussions. It looks at the outcomes from the whole study, bringing these together as an attempt to draw the final conclusions.

CHAPTER FIVE: Considers the theoretical interpretation of the gender impact analysis on individuals' gendered identities in the context of Libya (Islam). It raises the issues of the equity of gender concerns through multinational firms as they are often the driving force behind the further major impact on the development of young individuals' gendered identities towards the school formal curriculum directions at secondary school level in Libya. This chapter places practices within this debate and also looks at how practices affect women and their knowledge. It argues that women's knowledge is valuable to firms and often ignored for numerous reasons. It also suggests the framework solution on learning where social participation and the community membership provide the vehicle for learning as its practice in the real world.

CHAPTER SIX: Draws the summary conclusions of the research outcomes and the limitations and recommendations for future research studies.

1.0.0.0 INTRODUCTION AND BACKGROUND CONTEXT OF LIBYA

Libya is part of the Arabic cluster situated in North Africa with extensive reserves of oil and gas. Until the discovery of oil in 1951, Libya's history was marked by severe levels of poverty. Despite the discovery, the beneficial effects were slow to develop due to a lack of production and exports. This was primarily caused by a shortage of capital and expertise in the management and accounting fields. The latter was caused, in part, by the academic underdevelopment in the country (Clarke, 1963). There were just 16 students who graduated from universities in 1949, and no citizen in the country had a PhD (Abouzied, 2005; Gurney, 1996). The industrial sector was undeveloped and there was a scarcity of capital and skills to manage it. In comparison to the developed countries, formal education in Libya is a relatively developing system which was born only some six decades ago (Aгнаia, 1996). There was more or less no unified organisational activity in Libya before the period of independence (Aгнаia, 1996). The main reason for that was because Libya was subjected to many foreign occupations (D.F.I, 1991).

Libya had suffered from colonialism for five centuries; the Ottoman Empire's long occupation (1551-1911) when the state of education was poor in both quality and quantity; the Italians invaded Libyan territory in 1911; in 1912, the Turkish signed the 'Ouchy' treaty with Italy leaving the Libyan people to face a harsh colonial destiny. Libyans resisted the invading force for more than twenty years (D. F. I, 1991). At the end of 1943, the British entered Libya and established a military government in the country. The French entered the southern region of Libya and established their military rule. From 1942 to 1951, Libya was under temporary British military rule, but, in 1951, the independence of the country was acknowledged through the United Nations and Libya was established as a Kingdom in 1951. In fact, education was not given priority in these periods of occupations. It was almost non-existent in

most of that period for a number of reasons:

- The closure of most learning centres and education institutions which were established by Libyans before the arrival of the Turks.
- The poor level and contents of the learning centres which avoided closure where memorizing the holy Koran and teaching the basics of reading and writing was the only knowledge provided.
- The lack of students due to the scarcity of learning centres, the discouragement of the Turkish authority or the low level of learning to which Libyans were allowed to reach.

The situation of education had improvement towards the end of the Ottoman rule through the reopening of some of the learning centres, such as the Asmari institute, many mosques and some primary schools as well as the opening of the Islamic School for Arts and Crafts. There has been a great dependency on mosques on a wide scale in adult education because such places have the capacity and capability of attracting all people in Libyan society, since they are places of worship and learning the holy Koran as well as attending religious lessons.

Mosques play an active role in providing children and adults with religious and general knowledge and teach them the basics of reading and writing for beginners as well as memorizing and interpreting the holy Koran, all over the geographic locations in Libya. During 1551-1951 the number of mosques and beacons that have been providing educational programmes had reached 1500 centres with 1700 teachers, 190,000 students and 152 education inspectors. However, the situation of Libyans remained unchanged because such improvement occurred towards the end of Ottoman rule as the Italians took over and the country sank deeper into ignorance. The first measure taken by the

Italian invaders was closing down all existing learning centres and burning down what was left of libraries and publishing houses which led to complete illiteracy. Only a small minority of Libyans were given the opportunity to learn, as the majority encountered the following obstacles:

- Only 5% of Libyans out of the total number of students living in Libya were allowed to attend Italian schools.
- Libyan students were not permitted to exceed the fourth year of primary school. Studying was done in the Italian language.
- Italian history and geography as well as the Italian language were compulsory subjects.
- The Arabic language was a secondary language.

Consequently, Libyan people abstained from sending their children to such schools. In addition to that, they were engaged in fighting the attacker. Hence, these scenarios have affected all spheres of life and illiteracy existed amongst all age groups all over the country. Due to this political instability, the various governments have always focused on stabilising their rule, meaning that other sectors like education have been ignored, adversely affecting the quantitative expansion as well as the qualitative improvement of education.

The education sector has seen many policy documents, but practical and substantial steps have not been taken toward the realisation of the stated policy aims. In 1921, for instance, only 600 Libyans went to Italian schools in the western region and by the end of the Italian colonial rule, the rate of illiteracy reached 98%. Only little improvement took place during the British and French mandates as the number of male students slightly increased and females were allowed in education centres where Arabic became the language of learning. Nevertheless, such improvement did not reduce the rate of illiteracy, nor it did enhance the welfare of the people. By the end of this mandates and the beginning of a new era, the number of Libyan students at all levels was about

3200, including 537 females, and only 14 people had university qualifications. As for illiteracy, it was widespread and exceeded 90%. However, during the period of monarchy, (1951-1969), all Libyans were guaranteed the right to an education at school at all levels but education was not compulsory. Compulsory education started in 1975 and it was fully funded by the government. Education performs a vital role in nation building, and the attention paid to the education sector by any government shows the level of commitment that a government has to its people. Therefore, the education system is regarded as important for the development of Libya. Indeed, it can be thought of as the means by which we ensure the future development, prosperity and cultural identity of the country. Libya is a developing country and faces many challenges, including education and economic depression. The Constitution of Libya has placed the responsibility for basic education with the state, but despite constitutional and policy commitments to promote literacy and education, for most of the past six decades, the education system in Libya has been seen largely as a resource for the economy.

In Libya, schools are not only providing students with explicit directions in academic curricular subjects, but also they are the means through which young people are socialized more than any other institution. Giroux (1998, p. 34) claims that “schools are conservative forces which, for the most part, socialize students to conform to the status quo”. In addition, schools provide more subversive training in social norms and behaviours (Giroux, 1998). Although explicit efforts have been made to reduce gender inequality in schools, young males and females are still socialized in a way that emphasizes differences in ability between the genders. Consequently, the paradox remains that, while the education gender gap shows a steady diminution, there are still substantial differences in the economic, political and social power of men and women. Important occupations and fields of study remain segregated by gender differentials between men and women.

1.1.0.0 GENDER AND CURRICULUM

The term ‘gender’ refers to the social and culture educational aspects of the learners being male or female. To “do gender” means to follow traditional conceptions of the responsibilities of men and women in everyday life and to reinforce the idea that gender is a natural means for society to differentiate itself (Brullet, 1996). However, knowledge is socially situated, and gender influences it; it takes part in forming what students know, what students are capable of knowing, and limiting or permitting what students are able to know. This appears to be particularly true of students’ socialization and gender roles within these particular contexts of Libyan culture, society and school curriculum.

The collective patriarchal consciousness attributes qualities and attributes to men and women that are inherent to their sex and that entail different ways of living and thinking in their everyday lives. As a result, from an intergenerational standpoint, socialisation for production is a male characteristic and socialisation for reproduction is the backbone of female life. It is significant to note that much of the hidden curricula are related to gender and sex, which is generally an unpleasant subject that cannot be discussed openly in the context of Libyan culture, society and school curriculum. Sexual ethics and values are important areas which are not dealt with in the formal curriculum. Unless the issue of gender is openly addressed, gender prejudice may unconsciously continue to seep into the curriculum.

Much work has been done at secondary school levels to explore gender images in textbooks, and there have been various examples of gender stereotyping, such as doctors always being depicted as men and nurses as women, active and productive roles being depicted as male roles, and supportive and passive roles being depicted as female roles. Technical and vocational training programmes are traditionally male dominated areas, with females gathering around secretarial courses.

There is need for research into each of these disciplines to investigate whether it is possible to improve both the curriculum and the teaching/learning processes so that women are not excluded. The problematic nature of the link between access, quality of schooling and gender equality for the curriculum in Libya is not sufficiently recognised. The problem relates to the quality of the curriculum, lack of gender responsiveness in the curriculum and gender hostile attitudes among teachers and community members. Moreover, ideas and constructs about gender constitute an important feature of Libyan culture and the gendered cultures which are reproduced in the science curriculum. This is simply because uptakes in certain aspects of science subjects are matters of concern in many countries (Ramsden, 1998; Reid and Skryabina, 2002a).

It is often claimed that the school curriculum reflects the values, biases, prejudices and divisions of society (Evans, 1998, p. 94) and that the selection of the knowledge for the curriculum is made by those in power, enabling them to privilege certain groups in society over others. The curriculum deals with the tangible content of education. It deals with the methodologies and processes by which learning takes place. It deals not only with facts and figures, but also with the culture and values of the society. Teaching and learning take place within a context of a conceptualisation of the society, its values, its direction and its role in the world as a whole.

The curriculum can re-enforce the status quo or it can question the status quo. It involves a “hidden curriculum”, which incorporates the often unspoken but nevertheless important messages which are transmitted within the higher education establishment. For example, the hidden curriculum may say that a woman who has chosen a career, such as a career as a lecturer, is misbehaving against societal mores, and deserves to be harassed. A higher education establishment deals with subjects linked to productive manufacture, such as

engineering disciplines and construction. The disciplines dealing with actual production are highly related to human rights, culture and equity. The curriculum is likely to play an important role in defining the society, its characteristics and its future. The curriculum context is discussed later, as Chapter One aims to explore how the construction of the curriculum reflects the predominant attitudes and ideologies of its time, and how policy makers have influenced a curriculum differentiated according to gender.

Furthermore, the hidden curriculum often informs the hierarchical power dynamic between teachers and their students, and places students on a continuum of power with other students, depending on variables like gender, race and socio-economic status. The school curriculum is the conservative force through which traditional gender roles are reproduced (Brullet, 1996). One of the concepts that best explains this difference in female and male identity is the hidden curriculum. This term refers to the entire set of norms, attitudes, expectations, beliefs and practices that are unconsciously taught in institutions and in the hegemonic culture (Santos, 1996).

The hidden curriculum is a mechanism that explains the lack of awareness as to the transmission of the patriarchal culture's implicit norms and values. Students' aspirations, rooted in social and cultural norms, may be reinforced or challenged through norms that become embedded in schooling through policy and practice. This influence, felt in students' epistemic practices, shapes their understanding of the world and its presentation to them via experience—highly relational in nature—shapes students' expectations, aspirations, and definitions of self as individuals and as citizens. Lorber (1994, p. 33) claimed that “gender is an institution that is embedded in social organizations and all the social processes of everyday life. She further claimed that gender difference is primarily a means to justify sexual stratification. Gender is so endemic because unless we see

difference, we cannot justify inequality”. Lorber (1994, p. 33) also wrote that “the continuing purpose of gender as a modern social institution is to construct women as a group to be subordinate to men as a group”. I share this presumption that the creation of difference is the very foundation on which inequality rests.

The subordination of women often results in the subordination of their knowledge and the subordination of their knowledge results in the subordination of women; it is cyclical. This is spread in both the public and private domains. Women are far behind, they are not consulted or they are not involved. In the case of this particular context of Libya, it is very strange, as if you look at the household, women have a very powerful role but if you look at their role in the society, for example, a women’s political role is very negligible. Women in Libya who are still working around areas of biological diversity and knowledge protection realise that the structures that exist within a society need to be improved and become more equal in order for their knowledge to be recognised and protected.

In the community, there is a dualism that men and women are one, but, in the society, it is men who have more decision-making power and women are relegated into our communities. Our society does not recognise the importance of women’s knowledge. Instead of spreading women’s knowledge and improving their rights, they remain a bit behind and this can really affect the protection of women’s knowledge. Social institutions within societies operate from an epistemology which discounts women’s knowledge at every level within society. When social institutions dismiss half of the available knowledge, then they are incomplete structures that are not functioning at full capacity (UNDR, 1997).

The new educational policies and principles have to work to activate the role of women and ensure they have equal rights with men and highlight their importance as essential and necessary humans in the developing countries. Concentrated efforts are needed to fight against customs and traditions that were limiting the woman's participation and entry to areas that are believed to be in harmony with her nature and composition. Concentrated efforts are also needed to change the reality that has prevailed for a long time, which limited the role of women to the family, social and domestic work matters (which believes that woman's education could limit respect and dignity and spoil her attitude and take her away from her primary role in procreation and childrearing). The most important objectives of the Libyan education system are to contribute to the cultural, economic and social development of Libyan society and to rapidly raise the standards of human development in the society by improving the skills and abilities of Libyans (RLICE, 2008).

1.2.0.0 THE RESEARCH AIMS

Since research on certain educational aspects affecting the social construction and reproduction of gender has not been conducted in Third World settings sufficiently, therefore, the study has several related aims:

1. To explore and analyse students' gendered attitudes and students' experiences of the Libyan secondary formal academic curriculum.
2. To explore to what extent the religion and culture factors interact in the lives of students and their gender role beliefs towards the secondary school curriculum.
3. To explore to what extent the formal academic curriculum shapes the gendered attitudes of students towards their teachers and learning.
4. To explore the implications for secondary school curriculum changes.

1.3.0.0 THE RESEARCH QUESTIONS

- 1- What do students in urban and rural schools in Libya generally identify as objects and subjects that strongly mediate gendered attitudes towards the formal academic curriculum at secondary school level?
- 2- What are the students' beliefs about gender roles in relation to the school formal academic curriculum? How do religion and culture impact on the students' beliefs about their gender roles in relation to their subject directions within the formal academic curriculum?
- 3- How do students' experiences of the formal academic curriculum impact upon their gendered attitudes? Whether any significant measures of attitude difference emerge in the priorities projected by male and female students towards their formal academic curriculum?

4- What are the barriers, if any, facing the secondary formal academic curriculum development?

5- Are any curriculum changes suggested by teachers' and students' perceptions of effective amendments for formal curriculum improvements at secondary school level in Libya?

1.4.0.0 **THE PURPOSE** is to:

- identify the differences or similarities in gendered attitudinal factors between males and females across the level of the secondary formal education system of one particular developing nation in the Middle East, Libya;
- discuss the factors that affect access to and attainment in the formal curriculum for both females and males;
- examine the gender role experiences students undergo within the curriculum settings;
- identify the occupational opportunities and value changes that the curriculum fosters or fails to foster in both genders;
- examine policies implemented by the government to alter educational conditions and content; and
- analyse and devise strategies for improving and making the curriculum an effective resource for gender transformation.

1.5.0.0 RATIONALE: WHY ARE GENDER ISSUES AN IMPORTANT FOCUS?

The following are a number of other reasons for undertaking this research focusing on gendered attitudinal factors and dispositions of young people towards the academic curriculum at secondary school level in Libya.

- Attitudes of school teachers and/or students, including parents and peer group, and students' lack of awareness of their own abilities may contribute to the gender stereotypes attributed to different subjects. The attitudes of parents can mediate the traditional gender roles in their children's construction of identity. Often families have placed their hopes for the equality of their sons and daughters in the hands of formal education and have forgotten about the informal upbringing that takes place inside the home (Valiente, 1997). Peer interactions can reinforce or contradict messages about gender emanating from the school curriculum. Often, peer networks are more supportive of traditional gender arrangements than are school personnel (Goetz and Grant, 1988). Therefore, it is important to know what students' thoughts and feelings are towards what they do in school. A positive approach to any school subject should be an educational goal in itself. A researcher, therefore, needs to look at factors that might be leading to males' and females' unequal preferences in many subject choices.

- Gender stereotyping and stereotyping of ability, both unwise, are often interrelated, with gendered culture stereotyping thrown in for good measure. The pressure to conform to subculture gender stereotypes is immense as, in general, these values and pressures will vary across cultures. For example, based on my own professional experience in Libya, teachers and students' own peers can have gendered stereotypical preconceptions in their image of highly able students (e.g. males can do maths or mathematics is male dominated), such stereotypical preconceptions might be leading to males' and females' unequal

preferences in many subjects. There is also an influential anti-school subculture forcing boys away from any stereotypical feminine traits, such as being intellectual, arty, or indeed, learners (Bray *et al.*, 1997; Cohen, 1998; Pickering, 1997). The implication of this, in the given context, although stereotypes can include positive traits, they most often consist of negative ones that are then used to justify discrimination against members of a given group (Andrews and Ridenour, 2006).

- Gender is subject to transformations, due to historical, religious, cultural and social trends, and has to do basically with the social relationships between men and women (UNHCR, 2003). However, in societies, women's social roles are almost invariably less valued than men's social roles; thus, this results in inequalities in disfavour of women. Thus, there is a need to identify the effects of culture and social background contexts on student's gendered ability that might be leading to males' and females' unequal preferences in many subject choices. In respect of gender, a researcher could usefully investigate the value systems of any cultural group within the school which may be 'sending messages' different from the value systems the school itself generally promotes.

There is a growing need to challenge the traditional perception and cultural influence that stress the gender stereotyping within the school curriculum which might affect the progress for many young students, and females in particular. Therefore, conducting research into gender within the frame work of the formal curriculum in Libya means exploring, examining and understanding the ways in which these characteristics, religiously and socially defined roles and responsibilities are reflected in our classrooms, schools, and educational communities system, and how they may place one gender (females or males) at a disadvantage.

For instance, do these characteristics affect whether or not females and males have equal opportunities to enter particular school subjects? Do they affect how girls and boys interact with each other as equals? Do the traditional perception and cultural influence that stress the gender stereotyping affect how girls and boys interactions (male and female)? Are these roles and responsibilities reflected as gender stereotypes in the curriculum the children are taught, in the textbooks that they use, as well as in the wider educational system of which they are a part? Moreover, Bernstein (2000) speaks of the way in which pedagogies recontextualize phenomena that become part of the school curriculum, but he never fully explores just how the gendering of the identity of young people engages with particular forms of pedagogy.

Thus, the study presents a holistic view of the relationship between gender, religion and culture towards the formal curriculum in the developing context of the national education development in Libya. The study seeks to help to fill a gap as an attempt to bring the insights of students' and teachers' gendered identities and attitudes within a Muslim context to alter the role the curriculum plays in the emergence of gendered identities and achievement or impediment, in particular, of girls' education.

1.6.0.0 PERSONAL GOAL AND MOTIVATION OF STUDY

The goal of this research into gender within the formal curriculum in the developing context of Libya is to explore and to look at factors that might be leading to males' and females' unequal preferences in many subject choices within the formal curriculum. This means that females and males should have equal opportunities to enter school subjects as well as equal opportunities to participate in, and benefit from, the range of school disciplines or other learning experiences that are offered in school classrooms. It also an attempt to help them to achieve their fullest potential within and outside of the educational system regardless of their sex. My motivation for this study is:

- ❖ Better understanding of the key role of the curriculum as a transformation tool in terms of both human rights and social educational development.
- ❖ Highlight the need for a formal discussion to bring about curricular transformation.
- ❖ Exploration of processes for incorporating gender into different productive disciplines.
- ❖ Achievement of greater level of gender justice and human rights through the formal curriculum. A close reading of the Global Monitoring Reports EFA (UNESCO, 2000, p. 97) Western based position, highlights the issues of human rights within and through the curriculum, representing the 'curriculum as an opportunity': 'curriculum as reform' and 'curriculum as a democratic tool' (Arnot, 2006a, 2006b; Marshall, 2007; Walker, 2006).

1.7.0.0 CONTRIBUTION TO KNOWLEDGE

In the post-Gadaffi's regime, the Libyan government faces a difficult legacy in the peaceful reconstruction of the country, which has a population of round 6 million. Approximately 35% of Libya's population is under 20 years of age. This young generation is full of aspirations and expectations that they been demonstrating for since February 2011. They all were calling for the democracy, gender participation and protesting against corruption and need vital investment in education, health and all the other sectors (L.N.C, 2001). Therefore, restructuring the entire education system, including general education, technical and vocational education and training, is certainly one of the most difficult challenges in the transformation process. This will depend to a large degree on how quickly Libya succeeds in involving its youth in the national dialogue on broad and fundamental political social change processes.

The study of the national curriculum, therefore, offers the possibility of exploring the equity dimensions of global-national and local educational interfaces and policy agendas that consider schools as mechanically reproducing gender identities. Schools may be seen as active agents in mediating teachers' and pupils' femininities and masculinities. "[i]dentity is not an individual affair. Individuals make their own identity, but not under conditions of their own choosing. In fact identities are often created in the crucible of colonialism racial and sexual subordination, and national conflicts, but also in the specificity of group histories and structural position" (Alcoff, 2003, p. 3). Alcoff quotes Hall (1990, p. 225), who puts it concisely: "identities are the names we give to the different ways we are positioned by, and position ourselves within, the narratives of the past". In this way, the official and hidden curricula do not merely reflect the dominant role models of wider society, but actively produce a range of femininities and masculinities that are made available in local

schooling arenas for pupils collectively to negotiate and inhabit with peer subcultures (Clark and Millard, 1998).

This study has made a contribution to the theoretical, social and educational framework of curricular alignment by investigating the alignment between the non-testable elements of the curriculum which are related to the affective domain of Bloom's taxonomy (includes the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations, and attitudes) and shown that tight alignment between these elements and classroom practice can help to minimize the role played by the implicit curriculum. Since the lives of young Muslims have not been included in the literature on the psychology of men and women, there is a lack of literature and knowledge regarding the influences of their religious identities, gender ideologies and social cultural backgrounds.

Therefore, by providing a descriptive and in-depth holistic view exploring the roles of gender, culture and social structures within the context of the formal educational curriculum and relationships between religion, cultures and gender role beliefs in the lives of young Muslims, this study has also made a contribution in the reconstruction of the students' identities through educational school curriculum and filled the gap in the literature on young learners' gender identities in the developing context of Libya. The implication of this idea is likely to bridge the literature gap of gender identities between Western and/or American and Arab background contexts.

All too often national school curricula have a potential role in reproducing gender inequality in the public and private spheres and sustaining hegemonic male regimes on a national and global scale (Arnot, 2002). Curriculum research, however, can challenge these social messages embedded in curricular formations as well as raising deeper questions about whose forms of knowledge

should be transmitted through the official structure of schooling. Critical sociological research (Bernstein, 2000, p. 85), for example, recognises the importance of the rules governing the access and redistribution of knowledge, and also the politics behind the selection, organisation and evaluation of legitimate knowledge through formal national educational institutions within developing economies and the impact these have on indigenous social stratifications. The curriculum research can also critically assess new global interventions into the secondary school curriculum whether in the name of economic progress, human rights or social justice (Marshall and Arnot, 2007; Walker, 2006). These global developments are controversial, not least because of the challenge they represent to what has been considered the prerogative of the national government– to transmit its own selection of educational knowledge to its citizens, using its own contextualised pedagogic style.

SUMMARY

The overview of the chapters has opened the introduction and background to this particular research context of Libya and highlighted the school education issues within this context. It has also defined the research aims and justification; why the gender issue is significant in undertaking this research which focuses on gendered attitudinal elements and dispositions of young people towards formal academic curriculum at the secondary school level in Libya. Moreover, the overview has simplified the personal goal and motivation of the study and the extent to which this study contributes to knowledge. The following chapter discusses the educational curriculum context of Libya and its rationale. It also highlights the formal school academic curriculum through the goals and general objectives of the education context of Libya. The government has comprehensive control over the education sector, and this substantial political input in education matters influences all the decisions taken, from budget allocation to curriculum approval.

CHAPTER ONE

2.0.0.0 EDUCATIONAL CURRICULUM CONTEXT OF LIBYA

2.1.0.0 INTRODUCTION

This chapter outlines the historical educational context of Libya and its rationale. It highlights the historical and educational commitment. The government has comprehensive control over the education sector, and this substantial political input in education matters influences all the decisions taken, from budget allocation to curriculum approval. It also outlines the formal school academic curriculum through the goals and general objectives of education in Libya.

2.2.0.0 CONTEXT AND THE RATIONALE: A SYSTEM UNDER STRESS

Since September 1969, there have been major reforms and innovations introduced in the education system which took many positive steps in Libya (Duwayb *et al.*, 2007). Education started to grow at an enormous rate, alongside huge economic and social changes. Education expanded particularly rapidly between 1973 and 1984. Over the same period, illiteracy declined substantially and the literacy growth of the gender gap in education narrowed significantly (see Figures in Table 1.0: Growth in Education in Libya 1951-1986) (NPC, 2007).

TABLE 1.0: GROWTH IN EDUCATION IN LIBYA (1951-1986) (NPCGJ, 2007, p.54)

Year	Number	Literacy
1951	34000	Population literacy (20%).
1962	150000	Female literacy was (6%).
1977	980000	Overall literacy (51%) but females (31%).
1986	1245000	Literacy (54%) male, (46%) female.

In 2004, the literacy rate was 92.4% for males, 72% for females. There has been considerable, although very variable, progress in women's access to education in the countries under discussion, with Libya having a particularly high level of female access, due to its long-standing tradition of female education. Policies of free and open access to education have led to increases in female enrolment, but there is still a significant gender gap in access in all countries at all levels (El-Sanabary, 1998).

In Libya the total number of pupils enrolled in basic education (age 15-19), in both the first and second levels, reached 1,088,120 pupils in the school year 2005-2006, equivalent to 8.9% of the total of Libyan population, 5,323,919 inhabitants, according to the preliminary result of the general census of the population in 2006. The total number of students in the secondary level of education reached 348,872. Also the total number of pupils and students enrolled, including in kindergarten, is 1,455,558, equivalent to 27.33% of the total Libyan population (NPC, 2007). Approximately 35% of Libya's population is under 20 years of age. This young generation is full of expectations and needs vital investment in education, health and all the other sectors (L.N.C, 2001).

Any system growing at that rate is bound to face pressures and stresses. Such a rate of development has only been possible given the vast oil revenues generated in the country. Oil revenues contribute to the bulk of the Gross National Products (GNP) of oil producing countries. Similarly, the oil sector plays an important role in Libya since its economy is heavily depended on oil revenues, which represent more than 90% of GNP (Yahia, 2008). Most of the oil money has been invested in education, for instance, in the last decade, the Libyan government has invested between 52% to 54% of the national budget in education (Delinda, 2001, p. 58). The allocation of the budget for education has been much smaller than what is required to achieve a 100% literacy rate and reform of the education sector.

Moreover, the whole system of Libyan education from Middle School to Secondary School evolved on the basis of Italian and Egyptian influences after 1945, specifically in the middle school, and the growth is enormous, bringing about considerable strain in the system. The signs of stress are shown by problems in a very marked curriculum bias reflecting the job market and heavily overloaded curricula, frequently abstract and difficult in the sciences and mathematics. This is reflective of gender stereotyping between the number of students enrolled in the humanities and arts in favour of females, and those in sciences and mathematics in favour of males (El-Sanabary, 1998). Furthermore, the development and provision of quality resources, such as the curriculum, and other teaching aids, along with teacher training, all need investment and the funds available for education can hope to meet all the educational challenges.

2.3.0.0 SITUATING THE RESEARCHER: PERSONAL CONTEXT OF THE STUDY

The decision to explore the alignment between the broader goals of the education policy and gender-related issues towards the secondary school curriculum aims related to equality has its roots in the researcher's educational and professional background. Since 1998, I have worked as an English teacher at different levels (at secondary and tertiary education) in Libya, and I have observed that the formal academic curriculum in general needs to be reformed if it is to be effective. At the secondary school level, the students are tested by the external boards of examination over the country, and, therefore, the need to pass the examinations and master the curriculum content is further stressed, resulting in a culture of just training students to get through examinations successfully. However, the students who passed the board examination might not acquire the necessary skills in the foreign language and found it very hard to get to the next level of the language and communicate successfully in the foreign language. In my experience in teaching the English language, it is this de-contextualization that poses the greatest problems for students in terms of motivation and engagement.

In my professional journey of teaching at these different levels, I came across some questions which encouraged me to probe further into the curriculum particularly at secondary education level. I realised that due to the dominance of the examinations, teaching practice revolves around the mastering of the syllabus covered by the examination boards, which comprises the textbooks. The teachers' performance is gauged by the results of the examinations, and the school authorities also check that teachers follow the pattern set by the examination boards. Therefore, teachers' creativity and decision-making ability is not encouraged, and a teacher's role at secondary education level is restricted to conveying what is in the teaching materials and what is to be examined. I

observed that the teachers are not very motivated. The teachers never accessed the curriculum document as a guideline, only the syllabus and the textbooks, while the development of the curriculum and students' gendered attitudes and experiences relating to studies in the area are neglected. It can be argued that if an educator designs the classroom carefully so as to construct a community of practice where students participate in situated learning, then most students will experience a greater engagement in the content area. Consequently, teachers and students alike will be more motivated to contribute to not only their own learning, but to the learning of their classmates.

The personal experience I had guided me to identify the deficits in the Libyan formal curriculum; for example, the quality and standard of the curriculum, the students' proficiency in acquiring languages (i.e the English language), lack of gender responsiveness in the curriculum, and the women's identities and their limited roles which reflect the gender stereotypes subject by culture. All of these need further research. The personal context led to the selection of the research topic and persuaded me to research the goals the government sets for young students, and whether the curriculum is appropriately articulated through the teaching materials and leads to the desired outcomes. Reflection on the personal context has also helped me to reflect on the biases I may have which had the potential to hamper the objectivity of the research. The research has been designed in a manner to ensure that the personal affiliation of the researcher and his position do not compromise the objectivity of the data collection tools. This has further enhanced the validity of the data analysis and the conclusions drawn from it.

3.0.0.0 THE EDUCATIONAL COMMITMENT OF LIBYA

The education statistics available state that Libya achieved a breakthrough in educating its citizens of both genders and perhaps the most prominent achievements in the field of public education, illiteracy and the training of women. This is clear in the content of the constitutional declaration of 11th of Dec., 1969. It insists in Article (14) that “education is a right and duty of all of Libyans and it is compulsory until the end of basic education stage (see Figures 2.0 and 2.1). This is guaranteed by the State through the establishment of schools, colleges, universities, cultural and educational institutions, where education is free”.

This Constitutional Declaration also emphasised “equality between both genders in education, employment, rights, duties and social and health care”. The opportunities for women’s education are not restricted to public education and they were offered the opportunities to enrol in university and in various types of technical and vocational institutes. Since the Libyan government has been responsible to ensure access to appropriate education for all members of the society, males and females, in order to guarantee this right the presence of a peoples' committee for education was a must in the state's administrative and political structure.

This Peoples’ Committee is responsible for the implementation of the decisions and recommendations of the Basic People’s Congresses in the field of the education sector, and ensures the dissemination of education among all citizens in all parts of Libya. The People’s Committee for Education is composed of at least two levels: firstly, the Central Administration, which oversees the programmes and education policies of various stages of education; and secondly, sub-departments in the various local administrative sub-divisions which are working on the implementation of the educational policies and pursue

the provision of all that is required, including the technical structure and the provision of teachers and inspectors. The legislations in the governmental system ensure coherence, coordination and integration between the central administration and the local administrative bodies in the Municipalities (*Shabiat*). The educational activity at the basic and secondary education level in Libya aims to combat illiteracy, ignorance and promote science and general knowledge among the society's members in order to allow them to keep up with progress and enable positive interaction with global developments. The following are some extracts from the educational official policy statement detailing the goals and the general objectives of education organised by the Libyan Education Authority (1995, p. 35), translated into English:

3.1.0.0 THE GOALS OF THE EDUCATION SYSTEM IN LIBYA

- Freedom of learning is guaranteed for all, through the institutions of public education, and there is open and free education.
- Basic education is compulsory for all, free at public education institutions.
- All educational institutions of various types and patterns are subject to uniform standards.
- Educational institutions are managed by qualified educational officials who are able to interact and harmonise with the social environment.
- The distribution of educational institutions in accordance with the national geography (taking into account population, density and geographic expansion), to respond to the requirements of development and meet the social demand for education.
- Continuous curriculum development and review are its objectives and the continuous updating of teaching methods with a system for assessment and measurement, are designed to ensure the quality of outputs of the educational institutions (L.E.A, 1995, p. 35).

3.2.0.0 THE GENERAL OBJECTIVES OF THE EDUCATION SYSTEM IN LIBYA

- To enable students to understand Islamic values derived from the Koran and the Sunnah.
- To help students in the proper use of the Arabic language in all areas with an interest in foreign languages to communicate with the world.
- To help students to develop the proper use of the language strategies, and to ensure that work in speaking, listening, reading and writing is integrated.
- To develop the students' sense of national belonging, and deepen their pride in the Arabic Nation and the Islamic world civilization.
- To develop the students' sense of belonging, geographically and historically to the African continent.
- To enable students to acquire the appropriate knowledge of skills and positive attitudes and cultural and social values appropriate to the needs of the student, and the needs and civilization aspirations of the society.
- To enable students to represent the spiritual and moral values.
- To provide educational opportunities for all and assist students to choose the specialization that is in conformity with their orientation and abilities and to meet the needs of the society to achieve sustainable human development.
- To enable students to acquire the skills of thinking and scientific analysis.
- To achieve a balance between theoretical information and its practical applications and establish linkage and integration between different fields of knowledge, which helps to employ them in their lives.
- To enable students to understand the principles of security and social peace and human rights, and encourage them to build a society of peace, a community of mutual understanding (L.E.A, 1995, p. 45).

3.3.0.0 THE STRUCTURE OF THE EDUCATION SYSTEM IN LIBYA

Since education is among the constitutional rights for Libyan citizens, the Libyan law requires all citizens to register their children, males and females, in free education until the end of the Basic Education Stage (see Figures: 1.0 and 1.1 for the structure). The Basic Education Stage means free education for all Libyan students. This is guaranteed by the State through the establishment of cultural and educational institutions, such as schools, colleges, and universities. The Basic Education Stage consists of three stages: primary, middle, and secondary (see Figure 1.0). It lasts thirteen years with pupils entering the primary stage at the age of six. There are examinations at the end of each year stage and students who pass may proceed to the next year stage (Ministry of Education, 2004).

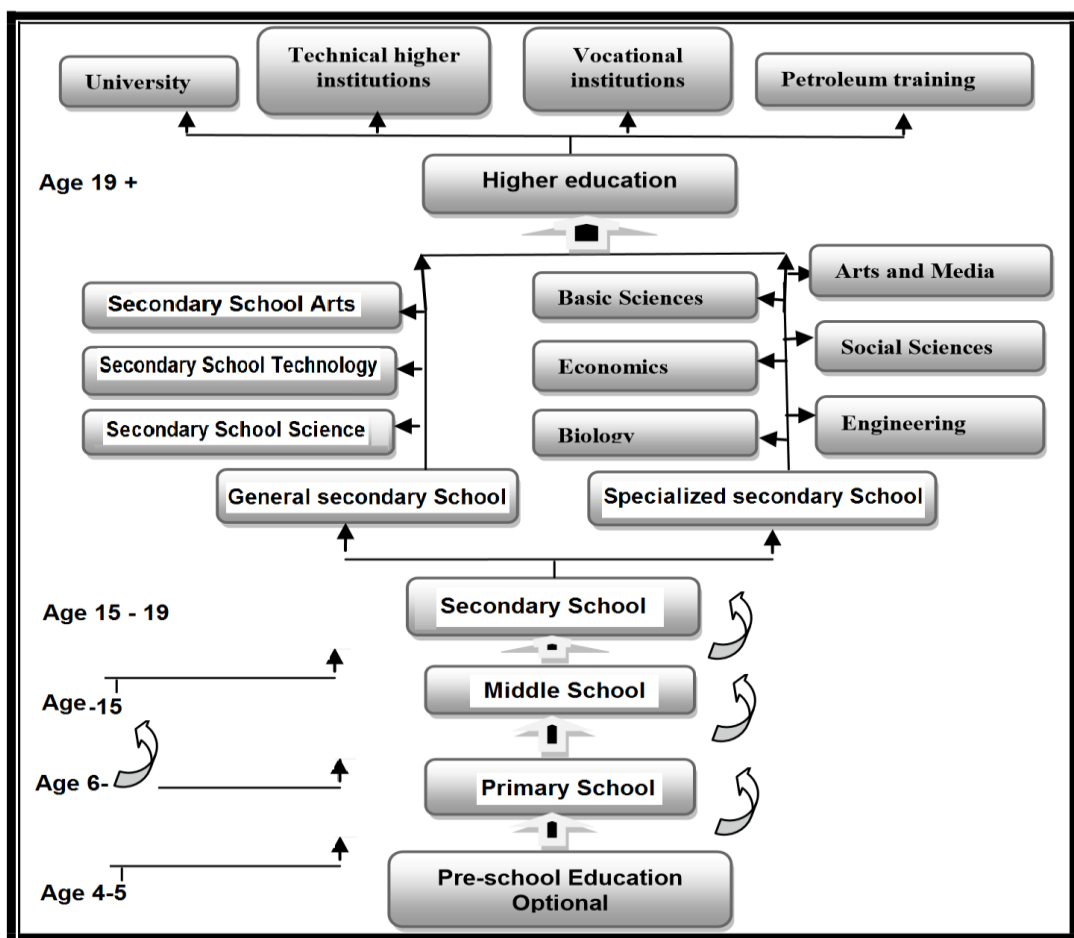
FIGURE 1.0: ILLUSTRATES THE STAGE STRUCTURE OF THE EDUCATIONAL SYSTEM IN LIBYA.

Stage	Year Group	Age	Period
Primary	1-6	6ys - 12yrs	6 years
Middle	7-9	12ys - 15yrs	3 years
Secondary	10-13	15ys - 19yrs	4 years

Almost all Libyan families are keen to send their children to state schools and continue their free Basic Education Stages and school achievements. The vast majority (99%) of children in Libya attended state schools for the compulsory free basic education stages, involving primary and middle and secondary school stages. Performance in examinations at the secondary stage determines entry to

Tertiary or Higher Education. The overall structure of the education system in Libya for all students can be seen in Figure 1.1 below. The focus of this study is on the secondary school stage (age 15-19), Figure 3.0 below shows more details about the structure of education in Libya.

FIGURE 1.1: ILLUSTRATES THE OVERALL STRUCTURE OF EDUCATION SYSTEM IN LIBYA.



For more details about the curricula, in terms of the subjects to be studied in the compulsory Education Stages of the three levels: Primary, Middle, and Secondary stages, is shown in the following Figure 1.2 below:

FIGURE 1.2: ILLUSTRATES THE CURRICULAR, IN TERMS OF SUBJECTS TO BE STUDIED IN COMPULSORY EDUCATION STAGE IN LIBYA.

Schools	Primary	Primary	Middle	Secondary
Grades	1st-3rd	4th-6th	7th-9th	10th-13th
	Arabic	Arabic	Arabic	Arabic
	Mathematics	Mathematics	Mathematics	Computing
	Religion	Religion	Religion	Religion
	Physical Ed.	Physical Ed.	Physical Ed.	Physical Ed.
	Painting	Painting	Painting	English
		Culture	Culture	Culture
		Science	Biology	
		History	Chemistry	
		Geography	Physics	Plus choice by
			History	Subject
			Geography	Direction
			English	

3.4.0.0 THE COMPULSORY EDUCATION

The three stages of education are compulsory for the students to get a certificate allowing them to enter higher educational institutions, such as colleges and universities. The compulsory stage includes 13 years of education (6-19 years old) usually, with three education level stages: Primary Education, Middle Education and Secondary Education Stages.

Primary Education starts from the age of 6 years until 12 years. It comprises six levels. The curriculum at this stage consists of Islamic Education, Arabic Language, Mathematics, General Sciences, Social Studies, Physical Education and Arts. This stage aims to help children to learn the basic skills and knowledge which will help them in their life and prepare them to progress into the next level, after which the pupils move to the Middle Stage. They have three years of study to finish the compulsory middle school stage with a final national examination that is organised all over the county and all pupils are examined simultaneously. This examination is considered by the pupils as a new and frightening experience, as the methods used for this final national examination has enormous stress and negative psychological impact on the pupils' performances.

Middle Education Stage: pupils who pass the primary education stage successfully are admitted to this middle stage level. Approximately equal figures between the genders are expected each year, with their age range between 12 and 15 years, during which students learn the same subjects present in the previous primary stage but at a more advanced level.

Secondary Education Stage: students who complete the national examination successfully at the middle stage level are admitted to the three secondary education grades. To take the final national examinations, students must have

success every year during the three years. This national examination is organised over the whole country and all students are examined simultaneously. Normally, the age range is between 15 and 19 years. In this secondary stage level, students would study science related subjects (Mathematics, Biology, Physics and Chemistry) or arts related subjects (Arabic, History, English Language, Geography and Civic Education and Islamic Education). That is to say, the students can choose one of either the arts stream in which students learn Arabic (more deeply than the science stream), History, Geography, Civic Education, General Sciences and uncomplicated Mathematics; or the science stream in which students learn Biology, Physics, Chemistry, Mathematics and Arabic. In addition, Islamic Education, English Language, Physical Education, and Art exist in both streams (Al-Kindi, 2005).

In 1997, it was decided to create specialised secondary schools in Basic Sciences, Economics, Biology, Arts and Media, Social Sciences and Engineering. Studies usually last for three years (IAU, 2000). This secondary stage level aims to prepare students for higher education, vocational employment and to be interactive citizens in society. Students from specialised secondary schools are strongly encouraged to continue their field of specialism at the tertiary level, such as medicine, engineering and economics. In Libya, in some state secondary schools, there are few comprehensive pilot and technical schools.

In Libya, the total number of Schools of Basic Education is 3397 with 939,799 students enrolled in them and 119,313 teachers available. The total number of Schools of Secondary Education is 1033 with 226,000 students enrolled in them and 39,847 teachers available (GPCE, 2008). These statistics (see Figures in Table 1.1) show the number of schools and classrooms and the number of students and teachers in basic and secondary education for the academic year

2007-2008. The Figures in Table 1.1 below show the challenge that Libya faces in terms of the quantitative expansion of education. Moreover, the pupil-teacher ratio at the secondary level is reflecting that the number of teachers in Secondary Education is not sufficient compared to enrolment, in terms of the educational challenges faced.

TABLE 1.1 STATISTICS OF THE GENERAL PEOPLE’S COMMITTEE FOR EDUCATION (SGPCE), 2008-LIBYA.

Level	Educational Stage	Number of Schools	Number of Classrooms	Number of Students	Female Students	Male Students	Number of Teachers
First stage	Basic	3397	40743	939799	618590	321209	119313
Second stage	Secondary	1033	10940	226000	133130	92870	39847
Third stage	Joint	72	1228	30697	10269	20428	3764
	Total	4502	52911	1196496	761989	434507	162924

This expansion has been accompanied by great efforts to develop the education process and improve the output of education in various fields to meet the needs of the individual and the society in light of the new developments and rapid changes of contemporary life and to take advantage of the employment of the results of scientific and technical progress and the knowledge explosion. As a result, educational reforming processes started to take on a new characteristic that requires inclusive change of the educational system in content, management and tools for the development of self-capacity and to combat underdevelopment and to build a strong and solid economy through the study of modern basic and applied science and broaden the base of technical and vocational education and opening the area of early specialization.

However, the real challenge is to maintain this achievement by encouraging students, particularly girls, to continue their education at the higher level, so that they can develop understandings of themselves as they move through

adolescence into adulthood. The outcomes in adult life are often the product of educational and social processes comprising a combination of influences in which literacy plays a part. Literacy has tangible relationships with many aspects of a person's life, not just educational attainment, but also economic well-being, aspirations, family circumstances, physical and mental health as well as civic/cultural participation (Dugdale and Clark, 2008).

Certainly, there will be opportunities for the young students to see how their knowledge and understandings can be applied in practice which will develop skills leading to useful careers and jobs in the wider society. The point is that there are specific jobs and careers where there is a huge need for well qualified young people to make their major contribution. The overall objective is to offer positive educational experiences for young students that allow and support the development of all the potential of each student. New political and educational policies have been launched recently by the General People's Committee for Education in Libya seeking to develop and renovate the entire educational process, including the development of curricular policies and the educational content, which will be discussed next.

3.5.0.0 THE HIGHER EDUCATION

The higher education system offers a variety of higher vocational institutes and universities (El-Hawat, 2003). These include public and private universities, an Open University, technical higher institutions, vocational institutions and also petroleum training and qualifying institutes (Arabsheibani and Manfor, 2001). Admission to these programmes requires the Higher Education Certificate awarded at the end of the secondary school. Since 1990, all universities require a score of 65% or better in this national examination. Some Universities (such as medicine and engineering), require scores exceeding 75% for admission. Students who have an average below 65% are admitted to higher training and vocational institutes.

The universities have grown to include several campuses. Undergraduate courses require four to five years' full-time study. Post-graduate studies are not free but are sponsored. Masters studies are of two to three years length. A Doctorate requires three years of research following completion of a master's degree. Relatively few students receive PhDs from Libyan universities; mainly in fields such as Arabic, Islamic studies and the humanities. Libyan universities have not yet started doctoral programs in science, technology, and engineering. Most academics have Doctorate and Masters' degrees from foreign universities (Clark, 2004). The undergraduate higher education system is predominantly financed by the state; students only pay tuition fees at the Open University and private universities. The Open University was established in 1990 in Tripoli and now has 16 campuses around the country. It awards Bachelor level degrees, depending heavily on printed materials (Clark, 2004).

Higher technical and vocational institutions were established in 1980. These include: higher teacher training institutes; higher vocational centres; and, specialized higher institutes for technical, industrial and agricultural sciences.

During the eighties and mid-nineties, the Higher Institute for Workers Education contributed tremendously to the field of workers' education. The Libyan government in this period established express training centres to train Libyan workers in order to: (a) Improve their performance; (b) Qualify new comers from other sectors; (c) Train workers and qualify them to replace foreign workers. The training period in those centres was in the range between 3 months and one year. Figures in Table 1.2 illustrate some training centres and the number of gendered participants during a specified period.

TABLE 1.2: TRAINING CENTRES AND THE NUMBER OF GENDERED PARTICIPANTS (1986-2000).

Training Level	1986- 1990	1991- 1995	1996 - 2000
Gender	Females - Males	Females- Males	Females - Males
In House Training	20400 - 6300	35800 - 4000	62300 - 10000
Vocational Training centres	4000 - 23200	8000 - 26000	10000 - 40500
Other Training Centres	18600 - 49400	27300 - 72300	28300 - 81200

Creating such training programmes was essential for the following reasons: Libya's vast wealth of natural resources needed to be discovered and developed; huge agricultural projects needed a large number of trained workers; the high illiteracy rate amongst those connected with such jobs. The data from the public administration of institutes and training centres at the General People's Committee for Manpower, Training and Operating indicate that the total number students enrolled in vocational training centres at the intermediate level had reached 190,660 trainees in the academic year 2005-2006 (N.P.C, 2007). Higher institutes offer programs in fields such as electricity, mechanical engineering, finance, computer studies, industrial technology, social work, medical technology and civil aviation. After three years study at vocational institutes and centres, a Higher Technician Diploma is awarded or else, after four to five years study, a Bachelor's degree is awarded (Clark, 2004). At the petroleum training

and qualifying institutes, trainees and employees within the oil and gas sector take courses leading to City and Guilds qualifications of the London Institute (Clark, 2004).

3.6.0.0 CHALLENGES IN THE EDUCATION SECTOR

The lack of social differences means that there will not be vast differences in the way in which people will react to a suggested educational innovation. At the time of independence in 1951, Libya was one of the poorest countries, with few known natural resources, and a population that was small, poor and illiterate. Since 1963, oil revenues have allowed the rapid growth of the development of education. Thus, education has only recently been seen as a tool of value as it is seen as opening doors to new opportunities and secures employment. Girls and women fifty years ago did not have equal opportunities and this influenced the girls' education in particular.

The higher education system in Libya is considered a relatively recent established development, as the first college of Arts and Education was founded in 1955, to form a base of the Libyan Universities in the city of Benghazi, and the number of students was 33 male students only. Libya has made some progress in spreading education and circulating it. Those Universities have grown and also the number of Universities with more than 300 scientific sections and departments in academic year 2004-2005 has increased (N.P.C, 2007). The number of students also developed from 19,315 students in academic year 1980-1981, to 165,447 students in the academic year 1998-1999, and up to 279,150 students in academic year 2006-2007. It is expected that this figure will increase to reach more than half a million students by 2025 (N.P.C, 2007). Therefore, the plan of development in higher education (2008-2012) included the establishment of 24 University Cities (University compound), distributed in the Shabiyyat (administrative regions). These universities contain

four major disciplines: Arts, Science, Technology and Medicine. Graduation in Faculty of Arts is after four years, in science and technology after five years and in medicine after seven years (El-Hawat, 2003). Hence, the university sector has been transformed from a single, state-run multi-purpose university into a decentralised group of generalist and specialised universities.

The Libyan higher education sector currently faces the challenge of significant reform (Sawahel, 2009). Under a five-year national strategic plan costing US\$9 billion, universities are engaging in structural reforms to become more efficient and effective in providing learning and support for students. The strategy includes the establishment of a National Authority for Scientific Research (NASR) to help build scientific capacity and a Centre for Quality Assurance and Accreditation (CQAA) to evaluate the academic performance of the education system according to international performance standards (Sawahel, 2009).

Libyan organisations face challenges to improve the quality of education services, the efficiency of education expenditure and to introduce new teaching and learning methods. These challenges include the provision of better teacher training and qualifications, finding mechanisms for adopting e-technologies, providing professional development and technological infrastructure and overcoming culture influences. In order to achieve the general and objective goals, education needs to be higher on the new government's list of priorities, and real political spirit is needed to provide equal opportunities to the masses in qualitative and quantitative terms to help create an equity of gender opportunity.

4.0.0.0 EQUITY OF GENDER IN THE CONTEXT OF THE FORMAL ACADEMIC CURRICULUM IN LIBYA

Equity means equal opportunities for all students to develop their fullest potential (Bennett, 1990). According to the requirements of equity in education, the curriculum policy and practice that give fair treatment to learners is one that is culturally sensitive and responsive to all learners' needs in an equal and fair manner. According to the Council of Europe (2008), gender equality signifies the empowerment, reflectiveness and involvement of all members of society, irrespective of their gender, in all domains of public and private life. However, in today's society with equal opportunities for females, improvements in educational access have had some impact on improving girls' access to education; however, there are fundamental systemic issues that constrain progress towards gender equality within the formal academic curriculum in secondary education in Libya. There still exists an underlying gender gap that seems to loom over a fair educational system, even where education is free, as the indirect costs of schooling and also the opportunity cost of girls' contribution to household labour may act against their participation.

There is much debate about whether we should try to achieve gender equity or gender equality. Teachers promoting gender equality believe all students should receive the same opportunities to participate in the classroom activities, and access classroom resources including teachers' attention. The reason for the change is no longer the need for gender equality, but, simply, because we fall short in the number applicants to higher level science and maths skilled related jobs. The specific reasons for this phenomenon may be difficult to determine. Some believe that the differences are due to innate biological differences (Sax, 2005), while others believe that society has largely impacted on the gender gap (Berk, 2005), and some even believe cultural factors are the reasons for this separation of ability (Devitt, 2009).

During the 20th century, the daily life of high school students became increasingly more complex as they gained the opportunity to try out many content areas and thus the development of new identities in order to choose a path for themselves. The standard curriculum in the public secondary school was compartmentalized as content areas became more defined, such as science, maths, social studies, and languages. Teaching positions became specialized by field of study. Looking at schools and classrooms as key sites for the formation of beliefs about femininity and masculinity has necessitated close attention to everyday practices: teacher talk, peer culture, curriculum content, and school messages. Such attention has shifted from a strong focus on the individual to examining the role of social contexts in the process of identity formation. It has further necessitated observation and analysis of subtler social phenomena, often involving biased and unconscious practices (Connell, 2002).

Students' attitudes surely change continually with the ever changing reflexive narratives of students reflecting how they have been variously involved in shaping and in being shaped by the curriculum. In the case of this particular research context of Libya and the curriculum at secondary school level that has two paths for the learners (either to continue their study in higher education (Universities) or engage in the labour market and the professional life), allowing learners to choose the subjects they study and/or performance at the 14-16 stage gives them more 'ownership' of their school curriculum, and reduces the possibility that they will be isolated by an over-prescriptive curriculum (Salisbury and Riddell, 2000). This perception has focused predominantly on technical and vocational education, to serve the purposes and objectives of the social and economic transformation. However, the technical and vocational training education in most educational societies tends to move towards the creation of qualified human resources for technical and vocational work. This possibly leads to many girls in gendered cultures such as Libya choosing to

study ‘girls’ subjects’ that are seen as appropriate for their gender roles and, thereby, limiting their choices for future careers generally. This choice can have an enormous effect on the students’ long-term perceptions when the individuals responsible for making the choices are overly influenced by gender and the traditional attitudes and unequal opportunity structures of society and culture.

Therefore, improvement of teaching and learning in the school curriculum demands changes in intellectual competence, attitudes, perceptions, conceptions and beliefs (Al-Mansory, 1995). The purpose of education in the early 20th century focused on social efficiency, or the high school’s goals of creating effective workers. Though complicated by issues of standardized testing and placement according to scores, these social efficiency rules not only emphasized the availability of multiple trajectories toward college or vocation, but a movement towards equality in a youth’s opportunity for choice in such trajectories. A 1913 National Education Association Commission issued the Cardinal Principles of Secondary Education: an argument for comprehensive high schools that provided youth with “...a wide variety of contacts and experiences to obtain a basis for intelligent choice of his educational and vocational career” (as quoted in Spring 2008, p. 260).

Therefore, key arenas where the variations in gender patterns are created in the educational school curriculum context have also been identified in the following aspects: first, the secondary school education and the curriculum; second, individuals’ (teachers/students) gendered attitudes and the school environment; and third, the religion and culture influences, which are likely to have a major impact on the development of students’ attitudinal factors and experiences towards the secondary school formal curriculum in Libya.

4.1.0.0 FIRST, THE SECONDARY SCHOOL EDUCATION AND THE CURRICULUM

Considering the number of students at the secondary level operating in Libya, it becomes clear that the majority of the students in Libya are directed towards public schools. The school principal is the central manager of the school education system in Libya, administering the curriculum in particular. For the proper implementation of any school curriculum, it becomes part and parcel of the education system. Especially in developing countries, it has been a regular practice to consider textbooks as the major source of the teaching and learning process to be undertaken in schools where the state curriculum is followed and examinations are conducted by the boards of secondary education. It is important to assess whether the curriculum is implemented effectively and whether the desired outcomes are produced, because these schools serve a large proportion of the total population. If what is taught is not reflective of the broader goals of the policy, it will remain unaccomplished and the personal development of the majority of the population will not be catered for, resulting in an unequal society.

Roach *et al.* (2008) argued that there have been very few studies done on the implications of alignment research in a classroom setting. It is also significant that all alignment research has been conducted in the context of developed countries, and their policies to illustrate the alignment between testing tools and state standards (Johnson, 2005; Leffler *et al.*, 2005). Squires (2005) has identified the major areas which can be aligned, for example, district curriculum, teacher assessment, state standards. It is significant to see our state standards and the district curriculum to be aligned with curriculum objectives, teaching materials and the content taught in the classroom.

Almost all alignment studies have been conducted in the context of developed countries, so the terminologies used and their interpretation in developing countries may be different. It will be a setting of reference used to reflect, analyse and evaluate curriculum (see also Chapter Three). English (1992, p. 8) has identified three different curricula, called “the *written curriculum*, the *taught curriculum* and the *tested curriculum*” which can be aligned. These three curricula deal with the content which can be used in schools: the written curriculum is the document produced by the authorities and is often termed standards. The taught curriculum comprises the content taught in the classroom and is termed instruction, and the tested curriculum details the different types of tests, for example, State-administered examinations, and the students’ assignments.

The students’ assessment should be derived from what is expected of them as mentioned in the curricula, as well as from what is being taught to them by their teachers. Even though not everything from the curricula can be assessed, alignment research can throw light on the amount of the curriculum tested in assessment. The theory which forms the basis of alignment research is that a reliable message from all parts of the educational setup, i.e. the curriculum, content taught and assessment, will end in methodical, standard-based reform (Smith and O’Day, 1991). This type of consistent message has been explained by Porter (2002, p. 5):

“An instructional system is to be driven by content standards, which are translated into assessments, curriculum materials, and professional development, which are all, in turn, tightly aligned to the content standards. The hypothesis is that a coherent message of desired content will influence teachers’ decisions about what to teach, and teachers’ decisions, in turn, will translate into their instructional practice and ultimately into student learning of the desired content”.

Bloom's theory (1976) believed that modification of these aspects would be helpful in improving student outcomes; particularly, if the quality of instruction is improved, the students' outcomes are automatically improved. This improvement in the outcomes prepares the student cognitively and affectively to meet upcoming challenges in instruction. Porter (2002) believes that the sequence and scope of the instructional task, also known as curriculum, will have a positive impact on students' performance. "The quality of instruction students receive has a demonstrable effect on their achievement and learning processes over one or more learning tasks" (Porter, 2002, p. 171). Hence, this research exploration can demonstrate the link between curriculum, assessment and the learning experience. If all the components are aligned, or are delivering a consistent message about teaching and learning, it will have a positive impact on student achievement.

According to the context of this particular study, the written curriculum is the curriculum document produced by the Ministry of Education which provides the guidelines and sets students' learning outcomes. The taught curriculum is the materials (textbooks) printed by the government as the main teaching tool. And the tested curriculum is the examinations administered by the Boards of Secondary Education. All these categories can be aligned to each other. A conceptual base for the concept and role of alignment in a teaching and learning environment was provided by Bloom's theory (1976, p. 11) of school learning where he considered the three interdependent variables (cognitive entry behaviours, affective entry characteristics and the quality of instruction) were responsible for variations in the learning experience of the students.

The findings of these variables are the level and type of achievement, the rate of learning and the affective outcomes. Bloom (1976, p. 12) explains that: "Where the student entry characteristics and the quality of instruction are favourable,

then all the learning outcomes will be at a high or positive level and there should be little variation in the measures of the outcomes. Where there is considerable variation among students in their entry characteristics and where the quality of instruction is not optimal for the different students, there should be great variation in the learning outcomes”.

In this particular study context of Libya, curriculum development is a centralised function and the state has complete control over the education system. Accordingly, the government provides policy statements detailing the goals of education. In this process, the national bodies like the Ministry of Education set the direction and then pass on these directions to the school authorities which are then passed to teachers. The curriculum must cover all the activities in a school designed to promote the moral, cultural, intellectual and physical development of students, and must prepare them for the opportunities, responsibilities and experiences of life and society. The following is an extract from the curriculum as presented by official policy statement aims prepared by the Libyan Education Authority (L.E.A, 1995, p. 27), translated into English:

- (a) Build knowledge and skills which enable children to understand a wide range of concepts and apply this understanding in appropriate ways;
- (b) Check the knowledge the students already have so that teachers know from where to start teaching;
- (c) The teaching strategies ensure that work in speaking, listening, reading and writing is integrated;
- (d) Ensure that appropriate provision is made for all children to achieve their full potential;
- (e) Develop positive attitudes to learning in an environment which will preserve self-esteem and confidence;
- (f) Develop as wide a variety as possible of all curriculum skills and knowledge necessary for everyday life;
- (g) Develop a positive attitude to physical activity through participation in activities which promote confidence and self-esteem;
- (h) Work in partnership with parents and the community enabling children to gain maximum benefit in their environment (L.E.A, 1995, p. 27).

However, Ellis (2004, p. 13) points out that, “A purposeful school curriculum must be built on a foundation of freedom and opportunity on the one hand, and responsibility and restraint on the other”. This narrative of a desirable curriculum by Ellis (2004) reflects the researcher’s view of what a curriculum should be. This quotation circles the measurement of the curriculum the researcher wants to explore. The researcher holds the view that checks and balances as the alignment demands should be in place; however, decision-making abilities, teachers’ freedom, and creativity should also be valued. The authorities should ensure the provision of aligned curricula gives opportunities to teachers to explore the curriculum according to the needs of the students and the learning process and then the students’ performance can be judged in the examinations.

In relation to the exploration of the secondary formal academic curriculum, it is significant to see the nature and composition of the curriculum under research; this will not only highlight the aims of the curriculum but will also bring out the needs for its implementation and the limitations of the curriculum. Different educationalists have provided many definitions of a curriculum. One useful starting point when studying the curriculum is to consider the three different types of curriculum outlined by Marsh and Willis (2007, p. xiii), namely the ‘planned curriculum’, the ‘enacted curriculum’ and the ‘experienced curriculum’. The following highlights the different components of the curriculum.

4.1.1.0 THE CURRICULUM AS PLANNED

The planned curriculum is all about defining what is most important to teach and/or what knowledge is of most worth – the important goals and objectives. This also does not exclude the curriculum documents produced by the educational authorities; Campbell (2006, p. 111) refers to this as ‘curricular

authority’ – the legitimacy of standardized curricular guidelines. This curricular authority is applied by different educational authorities in the shape of a ‘National Curriculum’. Many countries around the world, for instance, England, the USA, and Egypt follow a national curriculum, comprising of some standards to be met and some objectives to be accomplished. Being a policy given at a national level, it gains inspiration from the political framework in which it is formulated (Atkin and Black, 2003; Carr *et al.*, 2001).

Reid (1992, p. 17) uses the term “systematisers” for the educationalists who perceive and define the curriculum as “plans or a blue print for activities”. While Ellis (2004) uses the term ‘prescriptive’ curriculum for this type of planned curriculum, as the originators of the curriculum prescribe and propose and the teachers at schools follow. This perspective of the curriculum as a plan or intention has been adopted and followed over a long period of time; for example, Taba (1962, p. 11) defined a curriculum as “a plan for learning”. The preceding definitions perceive the curriculum as a planned, well written document, which has all that is required for the development of students’ cognitive skills and only needs implementation. This curriculum development might be found in the curriculum documents, the textbooks used in various disciplines and other sources, such as teaching textbook materials used in the schools’ activities. However, the adoption of the definition of the curriculum as planned and guided misses an important aspect called the “Hidden Curriculum” (Taba, 1962, p. 11).

The hidden curriculum is a general concept which includes how certain subjects and their contents are organised, the way teachers and students interact with each other and also how peer-to-peer contact is made. The hidden curriculum means “[t]hose things which pupils learn at school which are not overtly included in the planning” (Kelly, 2004, p. 5). Anderson (1992, p. 21) defines the

hidden curriculum as “the indelible message, often non-verbal, that a person takes from an event or an experience. It is the essence, the soul, which is remembered after the source is forgotten”. The implications of the hidden curriculum were also stated in AIOU (2007, p. 81), as “covert and therefore more difficult to detect, isolate and exercise”. Kelly (2009) further explains that such covert messages are included in the teaching materials and sometimes the organisers and writers are unconscious of the occurrence of such messages.

In this particular study context of Libya, the issue of presence in formal academic curriculum organisation at secondary education reveals that a certain kind of hidden curriculum is active, which has different implications for different groups interacting with these activities. For instance, most of the language in the teaching materials such as textbooks is gender specific, the role allocation and the ratio of gender representation is not equivalent to the population. Sexism is evident, the representation and the characters allocated to the females are not proportionate to the male characters. The roles assigned to the females are very traditional which reflect stereotypes; more than half of Libya’s population is comprised of women, but their contribution to the national stream of progress has been ignored completely and the female role models within the teaching materials are, in one way or another, related to stereotypes which are influenced by the Islamic religion. Generally, formal curriculum policy as planned in Libya has been a method of achieving the political support in order to retain power. Curriculum improvement is not reflected by the steps taken by the government.

4.1.2.0 THE CURRICULUM AS EXPERIENCED

The prescriptive and planned curricula are only an ideal and what happens in the classroom might be different (Marsh, 1997). McGee (1997, p. 15) believes that this difference in what is planned and what actually happens is referred to as the 'enacted curriculum'. This is a dynamic side of the curriculum, which includes the implementation of the official curriculum. This is "the process of transforming the intended curriculum into the operational curriculum". Moreover, McNeil (2003) refers to the curriculum, as generated by the interaction of teachers and students in the classroom activities that are meaningful, as 'experienced curriculum', 'the live curriculum rather than the inert, dead curriculum' in the terms of Marsh and Willis (2007).

The experienced curriculum refers to what actually happens in the classroom. As noted by Smith and Lovat (2003), lived experience defies complete description either before or after it happens: it is individual, ongoing and unpredictable (Marsh and Willis, 2007). Expanding the dimensions of the experienced curriculum, Kennedy (2005, p. 37) highlights that, in the age of information technology, the curriculum is not restricted to classroom activities alone and that there is a wide gap between "official' school knowledge and real-world knowledge to which students have access through information technology". He suggests that a major issue for school curriculum in the twenty-first century is how to "create a sense of community and common values in a context where knowledge cannot be restricted in any way and where individual control is much more powerful" (Kennedy, 2005, p. 37).

Marsh (2009, p. 4) considers the enacted curriculum as the "professional judgement" by teachers about what is to be implemented and evaluated in the classroom. However, in this particular research context of Libya, it becomes very clear that, with restricted freedom for teachers and very limited resources,

all tiers of the teaching and learning process should be combined to maximise learning outcomes. The curriculum document, which sets the broader aims of the education for a particular subject, should be implemented in its original form through schoolbooks; learning judged through testing should be based on curriculum aims. This will help to implement the curriculum, which is developed according to needs of the learners across the different grade levels. Despite policy promises, the reality is that the implementation of the policies has not been achieved effectively in terms of fulfilling the commitments or objectives.

While educational improvement is still a priority for the government, the curriculum programmes suffer from limited curricula as experienced by teachers and students. Overall, the curriculum context of the secondary school education is not connected to the students' environment or lifestyles, as the curriculum presents concepts in very abstract ways. There is frequently not enough equipment and facilities at some schools (e.g. computers and laboratories) and this is another important contradiction in the state's policy on providing access to quality education. It is evident from the huge disparities in the types of school institutions for education all over the country. In the commitment to implement uniform curricula in all institutions, the State has not succeeded. This acknowledges that a gap exists between the planned curriculum and the experienced curriculum, between so called "theory and practice" (Kelly, 2009, p. 11).

Moreover, the matter of existence in academic formal curriculum at secondary education discloses that a certain kind of hidden curriculum is active; for example, in the school practice, the reality of classroom experiences in different areas of the curriculum may still vary for girls and boys because of their attitudes and the influences of their society. For instance, females' dual adherence, both productive and reproductive (see Chapter Two for more details), will lead them to live a permanent system of a twofold presence that

they could scarcely imagine. Amongst the teenager generations particularly, at the secondary school level, boys and girls share the collective consciousness of equal opportunities and access to school curriculum directions thus making them believe this. However, once they enter adulthood, many women discover the hidden facet of this notion: the dual adherence, both productive and reproductive, which will condition their entire life time and do so in both their personal lives and their workplace.

Since it has been acknowledged that there is a gap between the planned or official curriculum and the delivered curriculum; it can be argued that this gap might result in students not learning what is written in the official or planned curriculum, which in turn could promote attitudes that are damaging for a student's development as an individual as well as a member of a society; or it can be argued that the hidden curriculum often fills this gap and what is ultimately learnt does not necessarily reflect what is planned. However, a tight procedure between all the curriculum processes can help to bridge this gap as well as to reduce or control the influence of the hidden curriculum. Both Campbell (2006) and Harris (2005) believe that there might be differences which may cause conflicts between how the planners perceive the curriculum and how is it performed by teachers. Teachers may emphasise the teaching of a concept and may neglect other concepts based on their professional judgement.

Moreover, if the evaluation of the students is carried out externally, then it is very important to bridge the gap existing between the planned and operational curriculum so that students' learning is raised with respect to the intended curriculum. Therefore, alignment between all the curriculum competencies and teaching becomes significant. It can help to produce maximum output and assist in the achievement of curriculum objectives, which reflect the aspirations of all the stakeholders including teachers, parents and school authorities. Young

(1998, p. 31) claims that the curriculum is more than just a ‘product’ of teachers’ and pupils’ interaction and that it is also the product of the vision of all the other stakeholders, including parents, the school administration and any other monitory body. He asserts that the concept that the curriculum is the result of the classroom interaction only is “more than utopian” in practice.

Rudolph (2002) also believes that stakeholders may have diverse interests which are reflected in the selection of the content of curriculum. These interests can be educational, social, historical or political in nature. Therefore, it can be determined that the planned and operational curricula are closely related to each other. So, teaching practice and the official curriculum need to be aligned to ensure that both curricula are closely related. According to the researcher’s perspective, a well-articulated curriculum in the shape of schoolbooks will meet the diverse needs of the students, since schoolbooks are the major tools for the delivery of the curriculum. A well-ranged curriculum and schoolbooks will assist the teachers, who have restricted freedom and rely solely on teaching material, to address the needs of the students. Therefore, the curriculum alignment is vital to students’ successful progress and challenging that it is well aligned with the curriculum will help to evaluate the achievement of the curriculum aims in the form of students’ results and/or outcomes.

4.1.3.0 THE CURRICULUM REPRESENTATIONS

The different perspectives on the curriculum have led to the invention of different reproductions of the curriculum which offer a conceptual framework for organising a learning programme and help to make decisions about related issues, for example, policy, pedagogy and evaluation strategies. Curriculum models are different from each other, but their underlying purpose is to shape and guide the implementation and evaluation of an educational programme and they tend to overlap in terms of their elements and procedures. Various

curriculum representations have been developed with varying degrees of complexity. Different sets of curriculum reproductions have been referred to by different authors in their work programmes; for instance, Ross (2000) discussed content-driven curriculum models and process-driven curriculum models. Kelly (2009) also took a position very comparable to Ross's when he referred to the dichotomy of 'Curriculum as Content and Product' and 'Curriculum as Process and Development'.

Curriculum representations can be divided into four groups in Posner's (1998) view: the procedural approach, the descriptive approach, the conceptual approach and the critical approach. Marsh (2009), also follows the paths of Posner, and listed four curriculum models: procedural models, descriptive models, conceptual models and critical-exploratory theorists. Pinar *et al.* (1995, p. 26) noted that "the multiplication of definitions is not an urgent problem to be solved. It is rather, a state of affairs to be acknowledged. In a field comprised of various and autonomous discourses, it is inevitable". Oliva (1997) points out those definitions of a curriculum can be conceived in narrow or broad ways. He suggests that differences in the substance of definitions of curriculum are largely due to whether the emphasis is upon:

- purposes of goals of the curriculum (for example, a curriculum is to develop reflective thinking);
- contexts within which the curriculum is found (for example, a curriculum is to develop the individual learner in all aspects of growth); or
- strategies used throughout the curriculum (for example, a curriculum is to develop problem solving processes).

It can be argued that defining a curriculum from any one specific perspective always tends to miss other important aspects. The objectives and plans are as essential as what actually happens in the classroom and what is actually

achieved at the end. It can be asserted that there is no one comprehensive definition and one can adopt and define a curriculum in a way which better suits the situation. Within the framework of this study, the researcher's view of a curriculum does not adhere to any specific definition. The curriculum is to be conceived according to the specific needs of a society irrespective of following a single perspective; different concepts can be merged to create a suitable and contextual curriculum.

Tyler's model (1949) is generally considered the most influential model (Marsh 2009; Walker 2003). This outlines a model of curriculum planning as four aspects which curriculum makers have to take into account. These aspects are related to the selection of objectives, learning experiences, organisation of these learning experiences and evaluation. The first aspect to be addressed in the process related to the selection of curriculum making is the "[d]ecision about the objectives of the school". These must be given "[c]onsideration in planning any comprehensive curriculum programme" (Tyler 1949, p. 5). In the cases where the curriculum is formulated at the national level and schools do not have control over the curriculum making process, such as in the context of Libya, these objectives are derived from the mission statements, such as the national education policy, and the objectives of teaching reflect the broader goals of the education policy statement which has been stated earlier for the educational commitment of Libya.

Moreover, when the curriculum at the micro level is formulated by authorities like the Ministry of Education, the teaching objectives are directly related to the national curriculum. For example, Popham (1997) emphasised the need to develop clear behavioural objectives which are also measurable, and teachers decide what learning experiences they want to select for the attainment of objectives and what evaluation techniques should be used to measure the

attainment of these behavioural objectives. In the research context of Libya, the objective approach is followed and the curriculum is planned in the shape of student learning outcomes and it is clearly defined what is expected of the students after an academic year is finished and the curriculum implemented.

Another aspect to be discussed in the process of curriculum making is the selection of the different kinds of learning experiences which are going to be effective in the attainment of the objectives defined in the curriculum. The general principles for the selection of the learning experiences appropriate for the students to meet the learning objectives were given by Tyler (1949): *First*, the students must be given opportunities to be able to practise the behaviour expected of them. *Second*, the learning experience should be satisfying for the learners. *Third*, the learning experiences should be designed and selected while keeping in view the academic level of the students. *Fourth*, diverse learning experiences can be brought into play to attain a desired objective. *Finally*, a learning experience can result in different outcomes. These outcomes can be both positive and negative.

In the context of this particular study, the curriculum document tends to be designed around these principles. The curriculum document is for all the stages of schooling. The objectives are designed while keeping in view the students' entry behaviour, and the skills taught at the earlier grades are meant to be consolidated across different grades, creating a sequential development structure in terms of the fifth principle given by Tyler. The curriculum as presented by the official policy document clearly states that material should be selected which demonstrates the objectives. This is primarily to ensure that no undesirable outcomes are produced. In addition, different themes and topics are given and teachers may select any theme or topic to teach different skills.

However, for Tyler, the selection of learning experiences was basically a task set for teachers and the school organisation. In the case of this particular context of Libya, not only the objectives are set by the educational bodies external to schools, but the selection of experiences for the students is also carried out by the Ministry of Education, in the form of the materials, such as textbooks, which are supposed to be the reflection of the curriculum. It can be argued here that Tyler's rationale is not being followed in its true essence, where teachers are supposed to select learning experiences, keeping in view the needs and interests of students. It was evident in the interviews conducted by the researcher that the teachers are not fully equipped with new skills. The following extracts are given as examples from the current research data analysis:

Extract A: "Teachers' training would help teachers equip themselves with new skills".

Extract B: "Teachers should be trained to motivate the students".

Extract C: "Teachers should be provided opportunities on regular basis to participate in teaching training courses and workshops".

Extract D: "It is totally an utopian idea to demand from teachers the desired levels without giving them sufficient training and resources".

Tyler believed that no one learning experience can bring a big change in the learner's behaviour. The process needs to be consistent as the changes in the overall behaviour occur gradually. He believed that, "by the accumulation of educational experiences profound changes are brought about in the learner" (Tyler, 1949, p. 83). This means that educational objectives cannot be achieved dramatically; it is a long and continuous process. In order to produce such long and sustainable results, the learning experiences must be organised and aligned. A further aspect of Tyler's model are three criteria for effective organisation which are "*continuity, sequence and integration*" (p. 84). The principles of

'continuity' and *'sequence'* refer to the vertical organisation. This means that the important desirable outcomes need to be reinforced at different intervals using different learning experiences and the learning experiences should be built on the foundation of the previous learning experiences in increasing depth. The principle of *'integration'* refers to the horizontal organisation of the learning experience and activities. It means that the school-based learning activities should be coherent and related to each other. The outcomes of the objectives and the resulting change in the behaviour should not be isolated. In this research context, the curriculum document is organised and gives complete guidance and objectives starting from grade 1 up to grade 13. At all the developmental stages, the skills are based on what is introduced in the previous developmental level. However, the content analysis and the literature reveal that gender issues have not been addressed in the true spirit at any level. Sexism is a major problem (see Chapter Two for more details).

Evaluation is the final aspect in the process of investigating if the desired outcomes and objectives have been achieved after selecting, organising and implementing a learning programme. According to Tyler, evaluation helps to look into the effectiveness of a learning process and helps to identify “the strengths and weakness of the plans” (p. 105). One of the primary purposes of evaluation is to see if the objectives have been achieved, and if the objective is to produce change in human behaviour, then evaluation also involves judging the degree of any change (desirable or undesirable) in the behaviour of a learner.

The role of evaluation in this respect involves noting the student's entry behaviour and evaluating the degree and kind of change at the later stage of the learning programme. For this purpose, students need to be evaluated at the beginning of the programme as well as during the programme. Tyler refers to formative evaluation, which is done during the programme by the educators. He

does not disprove the importance of the summative evaluation. He thinks that the students' proceedings help to judge whether the desirable objectives have been realised or there are some aspects which need to be reconsidered. However, he emphasises that getting evidence of the change in students' behaviour is not possible by summative evaluation only, and a pen and paper test is not sufficient for that. By monitoring the students' learning during the teaching process, teachers and school authorities can also check the efficiency of the material and methods used to teach. If the students' outcomes are satisfactory in the formative evaluation, the teaching tools and learning experiences will be considered effective, but if the students are not producing the desired results, the learning experience can be reconsidered and amended.

In this particular research context, the curriculum under study throws light on the evaluation of students' proceedings that help to judge the whole programmes of teaching and learning at secondary school level in Libya. In the official curriculum, document evaluation is given importance in the curriculum and one section under the heading of 'Assessment' focuses on the types, purpose, marking criteria and a recommendation for allocating the proportions for different skills in the external examination at secondary level in Libya. The purpose of assessment, as described in the curriculum document, is to check the knowledge that the students already have acquired so that teachers know from where to start teaching (L.E.A, 1995).

This purpose refers to the accountability factor, which is an important role curriculum alignment plays. The performance of the school and teachers is measured by the students' outcomes and, if the students' outcomes are satisfactory, the objectives are achieved. The accountability function of alignment can only be accomplished if the assessments truly reflect the objectives developed by the formal curriculum. However, the teachers are given

a very prominent role in the assessments, and classroom assessments are mentioned as indispensable tools for measuring skills in practice. The curriculum document has clearly mentioned a few communication skills, but the research findings did reveal that aspects of language practice were absent. The curriculum document is self-contradictory in this respect. This absence emerges from the interview and questionnaire data collected for this research.

4.2.0.0 SECOND, INDIVIDUALS' GENDERED ATTITUDES AND THE SCHOOL ENVIRONMENT

Attitudes are important to us because they cannot be neatly separated from study: it is important to note that an attitude must be directed towards an attitude object. For example, in school education, attitudes may be directed towards the curriculum (subjects, teachers or themes being studied) or, indeed, 'authority' and most students from school will need to have attitudes which will encourage them to become life-long learners, whether at university, vocational training, and in the workplace. The importance of attitude perhaps lies in the way attitudes can influence behaviour. For example, in the school education context, negative attitudes may well hinder further study while these negative attitudes may linger with the student throughout life, influencing future views, decisions and activities.

Research suggests that students' attitudes, girls in particular, towards particular subjects will be very likely to impact on their success not just at secondary school level, but in higher education generally (Koballa *et al.*, 1999, cited in Osborne, 2003, p. 80). Thinking of science many years ago, students' attitudes towards science may well be more important than their understanding of science, since their attitudes determine how they will use their knowledge (Ramsay and Howe, 1969). This perception may well be important in many subject areas in the curriculum. The differing attitudes of boys and girls towards schooling is often seen as an important factor in determining educational

accomplishment (Clark, 1996; OFSTED and EOC, 1996; Pickering, 1997; Warrington and Younger, 1997). The quality of learning is also affected by attitudes (Reid, 2006). For example, a student might be considering taking a course in science. Possibly one of the strongest influences on such a decision would be the person's attitude to learning science, which might itself be influenced by past experiences, teachers or social environment, religious and cultural conditioning, plus mass media influence (Khan and Weiss, 1973; Rhine, 1958). There would be other factors: what the student considered would be the reactions of important other people (e.g. teachers, parents, peers and society) along with whether it was possible to take the course (e.g. cost, examinations, and previous successes) (Oskamp, 1991).

There is much discussion about the nature of attitudes but an important point was made by Oppenheim (1992) and Reid (2003) who offered a useful definition when they explained that: attitudes express our evaluation of something or someone. Attitudes are reinforced by beliefs (the cognitive component) and often attract strong feelings (the emotional component) which may lead to particular behavioural intentions (the action tendency component). This blending of factors is useful. Attitudes are not simply knowledge but they may involve knowing; attitudes are not simply feelings but they may involve emotions; attitudes are not simply behaviour but they may be influenced by behaviour and, indeed, may influence subsequent behaviour.

However, there is a marked absence of research regarding teachers' gendered identities in guiding students' choices within the context of Libya, particularly at secondary school level, which is a decisive phase in the students' growth from infants through their adolescence and can affect greatly the students' attitudes. Moreover, the lecture type instruction in most classrooms tends to be didactic which limits young people's capacity of asking questions or engaging

into dialogue. Some school curricula do specify some attitude aims: so that pupils develop and informed values and attitudes towards the environment through relating their learning to the real world and themselves. However, it is an individual experience as each student may have different reactions towards the external environment s/he came in contact with. It means that teachers have to plan and select the experiences, keeping in mind the overall interests and backgrounds of the group they work with.

Baker and Leary (1995) found differences in reported attitudes as students progressed from middle through high school. Eighth grade girls in the study reported that they thought girls, in general, liked science, but they thought that their friends would not be supportive of a girl's career choice in science. However, by eleventh grade, this trend was reversed, with girls indicating that friends would support a choice of a science career, but they believed that girls in general do not like science. Overall, girls reported that the science experiences they had with other people they loved or admired impacted their acceptance of science as a career option. Thus it is important in an educational system to be aware of all the key factors influencing students' and teachers' attitudes towards a subject (Ramsey and Howe, 1996; Rao, 2002). Accordingly, attitude is a determinant and a consequence of learning (Reid and Skryabina, 2002a).

The teachers in the Libyan context have a bigger responsibility for selecting an experience well-suited to the age, interest and the kind of behaviour expected of the students. While selecting these learning experiences, teachers have to be on their guard; they have to make sure that the learning experiences are tightly aligned with the objectives. By ensuring tight alignment, the role of the hidden curriculum can also be controlled. The learning experience that has been explained earlier in the section on the curriculum as experienced "refers to the interaction between the teacher, learner and the external conditions in the

environment to which he can react” (Tyler, 1949, p. 63). Selecting the learning experiences refers to the operational curriculum when the planned curriculum is implemented and executed. This explanation of the term ‘learning experience’ also implies that students are active learners and that the learning happens as a result of the interaction. All these are neither simply individual choices nor simply the results of belonging to the social category of “claims processor” (Wenger, 2008, p. 146). Instead, they are negotiated in the course of doing the job and interacting with others. It is shaped by belonging to a community, but with a unique identity. It depends on engaging in practice, but with a unique experience. This advantage may not be clearly seen by the student; it may be almost sub-conscious. Most school students will sooner or later become husbands, wives and parents. Therefore, education practice needs to prepare them for their demanding gender roles, and the quality of family life within their society, and may well influence the quality of the wider society.

It has been recognised that teachers and the classroom environment play important roles in affecting students’ attitudes as a manifestation of identity (Skryabina, 2000). Therefore, attitudes are a manifestation of something deeply embodied in us-our identities. An identity is neither narrowly local to activities nor abstractly global. Like practice, it is an interplay of both (Wenger, 2008). These expressions point to ways in which the young person's identity is disposed towards others and to other things in the individual’s world. Identity in practice is defined socially not merely because it is reified in a social discourse of the self and of social categories, but also because it is produced as a lived experience of participation in specific communities, just as the key aspect of a teacher’s sense of identity is expert knowledge.

For example, Beijaard *et al.*, (2000) investigated this in a sample of secondary school teachers in the Netherlands. They looked at subject-matter expertise,

didactical expertise and pedagogical expertise: the teacher not only as skilful in terms of what was taught, but also in terms of how it was taught and how the learners understand. They found that most of the teachers saw themselves in terms of a combination of these identities, although it was interesting to observe that many perceived a transition from subject expertise towards learning expertise as their careers developed. Although this speaks of concepts and skills, it could equally apply to attitudes, which are often largely ignored, as in the case of this particular research context of Libya.

Undeniably, the teacher is a key factor in the classroom, and a vital part of learners' learning. Only teachers with positive attitudes towards their subjects can create a good learning atmosphere in the lessons, be enthusiastic, motivated, stimulating and encouraging for learners. As Board (2000, p. 169) points out, "[t]he role of the teacher is to promote and develop autonomous learning in the classroom by facilitating, helping, counselling, and co-ordinating, proposing ideas, guiding, and fostering communication".

Furthermore, the personal qualities of individual teachers are vital, Loveless (1995, p. 149) makes the point that the teachers' beliefs and values about the nature of education and schooling affect how life in the classroom is organised and managed, and the background experience of the attitude to new technology will also affect the role it plays in the classroom. Thus, the personality of the teacher, his/her competence in the subject, the methods used in the classroom, and the ability to motivate and encourage learners will all influence learners' attitude towards the subject (Skryabina, 2000). It has been reported about the vital influence on many of today's leading scientists on school science teachers (see Devlin and Williams, 1992). It was confirmed also that a lack of teachers' interest is one of the barriers to effective science teaching (Collis, 1993).

Teachers must not just impart content knowledge. In order to teach effectively, teachers must fully understand the requirements of learners, know the syllabus, and be able to use appropriate teaching approaches. One important responsibility of the teacher is to help learners to process new material in meaningful ways in order to encourage its storage in the long-term memory in such a way that it is understood and is related to previous knowledge. Indeed, when the school learners can make sense of, and can apply, knowledge in meaningful ways, then there is an internal satisfaction which can lead to positive attitudes (Hussein, 2006).

Meaningful and challenging learning environments have been linked to both engagement and perceived competence, learning events and forms of participation are thus defined by the current engagement they afford (Wenger, 2008). When students are authentically engaged in meaningful, quality work, the likelihood increases that they will learn something new and remember what they have learned (Hancock and Betts, 2002; Willms, 2002). Student engagement can be defined as the level of participation and intrinsic interest that a student shows in school (Newmann, 1992).

Engagement in school work involves both behaviours (such as persistence, effort, attention) and attitudes (such as motivation, positive learning values, enthusiasm, interest, and pride in success) (Connell and Wellborn, 1991; Johnson *et al.*, 2001; Newmann, 1992; Skinner and Belmont, 1993; Smerdon, 1999; Turner *et al.*, 1998). Thus, engaged students seek out activities, inside and outside the classroom, that lead to success or learning. They also display curiosity, a desire to know more and positive emotional responses to learning and school (Newmann, 1992). Extensive evidence exists that engagement and motivation are critical elements in student success and learning (Dowson and McInerney, 2001; Hancock and Betts, 2002; Lumsden, 1994).

There is also no doubt that the teacher's attitude is critical in the formation of students' positive attitudes towards learning, towards the subject being learned and, frequently, towards aspects of the themes being studied. This can cause important consequences. For example, to encourage the development of more positive attitudes towards a subject (like maths), then it is of little value trying to influence the learners from outside the school situation. It is much more dynamic to seek to work with the teachers, to provide them with support, materials and encouragement. They have daily contact with the learners and are in the most powerful position to help and support the development of students' positive attitudes.

The influences of teachers' attitudes and behaviours are powerful and may affect pupils' subject choices and performances in different ways (Salisbury and Riddell, 2000). However, in the context of formal curriculum progress in Libya, where there is no room for teachers to choose instruction and take into consideration different genders, capabilities and needs of students, there is a danger that the teachers are not able to meet the learners' needs. It can be argued that this might contribute to students being unable to attain their high achievement levels. Accordingly, in this specific review of a curriculum context with state standards, it could help to provide improvement of equal opportunities for learning since state standards are planned to address individuals' needs and individuals' differences. It has been confirmed that "if students are to be held accountable for their learning, then schools must be held accountable as well by demonstrating that they provide students with opportunities to learn to meet the standards that have been set" (Baratz-Snowden, 1993, p. 317).

4.3.0.0 THIRD, RELIGION AND CULTURE INFLUENCES WITHIN THE CONTEXT OF LIBYA

Islam has played a significant and historical role in Muslim cultures, especially where Islam is and has been the predominant religion, such as in Libya. Because of the role that Islam plays in Muslim cultures, this makes it difficult to distinguish between cultural versus Islamic influences on the lives of Muslims. However, since Islam adapts to diverse cultures, it could be argued that culture influences the practices of Islam (see Read, 2008; Stones, 2002). Culture is an understandable word; however, it is difficult to define clearly. Although the word culture is manifested in everyday usage of language, it is still used loosely to express many different concepts (Dahl, 2004; Spencer-Oatey, 2008). “Culture is the sum total ways of living; including values, beliefs, aesthetic standards, linguistic expression, patterns of thinking, behavioural norms, and styles of communication which a group of people has developed to assure its survival in a particular physical and human environment” (Chisholms, 1998, p. 7).

The American Psychological Association (2002, p. 29) defines culture as “[t]he belief system and value orientations that influence customs, norms, practices, and social institutions, including psychological processes (language, care taking practice, media and educational systems) and organisations (media, educational system)”. Thus, culture at the societal level is manifest more in values and less in practice, while, culture at the organisational level is more likely to be more in practice and less in values (Hofstede, 1997). Therefore, in many business studies and training programmes that are now available, courses in cultural communications are included which generally provide models of culture and cross-cultural communication skills (Graf, 2004).

Strodtbeck (1996) argues that organisational culture contains a mixture of practices or artefacts, beliefs and values, and hidden assumptions that

organisational members have in common about behaviour. Krumbholz and Mailden (2000) also agree that organisational culture has been seen as holistic, traditionally decided, and socially built. Culture involves beliefs and behaviour, lives at a different levels and is apparent in a wide range of characteristics of organisational life. This study considers the definition of culture as the education systems, attitudes, social rules, economic systems, religious communities, habits, values, beliefs, morals, ritual practices, and forms which are all part of formal culture. Informal culture includes stories, rituals of daily life, and language, customs, resultant behaviour, norms, and artefacts shared by a certain society. These norms govern how people act, how they define themselves, how they differ from other societies' members. They also govern how these shared elements facilitate communication with others in effective and efficient ways.

Every cultural pattern and every single act of social behaviour involves communication, which is widely studied as a means of transmitting ideas and as a part of culture (Jandt, 2004). Communication is strongly related to culture, and culture cannot be understood without the study of communication and vice versa. Therefore, different cultures have different definitions and strategies of communication. Jandt (2004, p. 29) states that the philosophy of Confucius defines communication as “an infinite interpretive process where all parties are searching to develop and maintain a social relationship”. In communication in the place of work, social relations are as important as outside relations to overcome difficulties (Leant and El Kot, 2007) and they also influence a particular group of people's behaviours and their mental lives (Banks, 1999; Bradford, 2005; Christie *et al.*, 2003; Dahl, 1994, 2004, 2005; Hofstede, 1991; Shade and New, 1993; Twati, 2007; Williams, 1989).

Williams (1989) has famously defined culture as being ordinary and that is the first fact. Every human society has its own shape, its own purposes, and its own meanings. Every human society expresses these in institutions, and in arts and learning. The making of a society is the finding of common meanings and directions, and its growth is an active debate and amendment under the pressures of experience, contact, and discovery, writing themselves into the land. The growing society is there, yet it is also made and remade in every individual mind. The making of a mind is, first, the slow learning of shapes, purposes, and meanings, so that work, observation and communication are possible. Then, second, but equal in importance, is the testing of these in experience, the making of new observations, comparisons, and meanings.

A culture has two aspects: the known meanings and directions, which its members are trained to; the new observations and meanings, which are offered and tested. These are the ordinary processes of human societies and human minds, and we see through them the nature of a culture: that it is always both traditional and creative; that it is both the most ordinary common meanings and the finest individual meanings. We use the word culture in these two senses: to mean a whole way of life, the common meanings; to mean the arts and learning, the special processes of discovery and creative effort. Some writers reserve the word for one or other of these senses; I insist on both, and on the significance of their conjunction. The questions I ask about our culture are questions about deep personal meanings. “Culture is ordinary, in every society, and in every mind” (Williams, 1989, p. 4).

Human cultures vary considerably, one from the other, and although different in certain respects, cultures also resemble one another to a certain extent (Hofstede, 1991; Khalifa, 2000; Weiss, 1994). As Williams (1989) states, a culture is not, or should not be, what separates people, but what joins them in a

community. To understand the resultant behaviour of a culture, it is first necessary to understand the underlying beliefs, attitudes, and values that remain invisible to outsiders. This will help to predict the resultant behaviour of individuals when operating in different cultures, since a culture is what people do, the experiences they have, and the values, ideas and dreams they have in common (Leigh, 1995; Ross, 1993). This brings us to the conclusion that each culture seems to have its own characteristics which lead to various studies and approaches to communication. Thus, the understanding of the cultural background of the listener and the clarity of the message has an important role in facilitating communication (Jandt, 2004). The vital importance of paying attention to local contexts is a point that has been emphasised by many researchers in recent years, including Freed (1996), who points out that along with a social constructionist approach to gender, it is essential to take into account the particular context and any power relations that are taking place within such contexts when examining gender relations.

SUMMARY

The chapter discussed the educational context, the rationale and the researcher's personal perspective of this study. It highlighted the historical and educational commitment of Libya through its goals and general objectives of education. The preceding discussion has also highlighted the different factors which are likely to have a major impact on the development of students' attitudinal factors and gender patterns which have contributed towards the Libyan students' directions within the formal curriculum at secondary school level as it is today. The study of curriculum has uncovered limited presentation of women's roles and personalities. Even where education is free, the indirect costs of schooling and also the opportunity cost of girls' contribution to household labour may act against their participation. Gaps in equal opportunities support are noticeable, despite increased development of equal opportunities policies. These include

lack of: awareness among head teachers and classroom teachers of the range of policy and curriculum strategies available; and society awareness and involvement of parents and governors. The next chapter discusses the review of gender, language and power in organisations and its implications for individuals' gendered identities. How the gendered sites of knowledge impact on the women's division of knowledge at three levels: economic, political and social cultural is discussed as these are likely to have the major impact on students' or individuals' gendered subject directions towards the secondary school formal curriculum.

CHAPTER TWO

5.0.0.0 LITERATURE: GENDER, LANGUAGE AND POWER IN ORGANISATIONS

5.1.0.0 INTRODUCTION

This chapter discusses the review of gender, language and power in organisations. It illustrates key areas of current language and gender thinking and considers previous studies that have examined the complex interplay of language and gender interaction and its implications for individuals' gendered identities. The chapter discusses how the gendered sites of knowledge impacts on women's knowledge at three levels. The discussion focuses on the economic, political and social cultural contentious issues in a country where the society is highly stratified in terms of its religion and politics and its social cultural elites determine the formulation and execution of the curriculum and the education as a whole.

Through post-structuralism, there has been a growing recognition of the centrality of language in the development of subjectivity. Discourse contains normative views about how people should be and shape their actions. The process of identity formation in schools emerges from the interplay of expectations (roles that students are supposed to play in the future), attitudes (feelings toward them), and behaviours (practices in the classroom). A definition of gender identity establishes it as: “[a] person's own feeling about their gender—whether they are male, female, both or neither” (Paechter, 2001, p. 47). In the construction of gender identities, there is recognition of the interplay of several other factors, primarily race and social class; thus, certain students are positioned in schools in ways that can produce cumulative disadvantage.

At a more macro level, gender theories today see gender as encompassing both material and ideological dimensions. Fraser (1997) makes a distinction between

redistribution and recognition, affirming that both are needed to achieve social justice. The former involves equality of opportunity or the allocation of critical material resources; the latter implies an acceptance and respect of the differences among individuals. Socialization is a central concept social theorists use to explain both cultural maintenance and cultural change. Socialization links the individual to the collective life by melding members into compliance and cooperation with social requirements. At the same time, the process is not predetermined, because individuals may question and reject certain cultural features. In other words, the process is fluid and contingent on multiple factors; thus, some scholars consider that the term “identity formation” captures more the dynamic nature of the socialization process.

Socialization clearly occurs in multiple institutions and settings, some of which, such as the mass media and peer networks, are acquiring unprecedented levels of influence. Socialization in the schools, which touches substantially on the informal (hidden) curriculum is a critical dimension of schooling through which educational settings may introduce changes in social perceptions or, conversely, continue to reproduce traditional values and attitudes. This socialization covers a wide display of practices, ranging from administrators’ and teachers’ attitudes and expectations, language, textbook messages, peer interactions, and classroom dynamics, to the greater environment. In the context of the academic curriculum students’ gendered experiences and attitude development will focus heavily on the cognitive.

Therefore, students form beliefs about an attitude object (curriculum). Beliefs connect an attitude object with its different attributes that can be evaluated. For example, if mathematics, English and science as subjects are considered as attitude objects, the students’ attitudes to these subjects may involve many beliefs and these will have a strong cognitive aspect. By observing a student doing mathematics or speaking or writing English in the classes, it may be

possible to evaluate what kind of attitude towards the subject the student holds. Very often people's overt action can be the best demonstration of their attitudes. For example, a student may develop beliefs about sciences: they are difficult, interesting, relevant, badly taught, have poor textbooks but good laboratories. This might lead to an attitude towards the aspects of sciences. There is the possibility (indeed, perhaps probability) that the personal importance of a person's attitude toward an object may play an important role in knowledge acquisition. Personal importance and the amount of information a person has about an object have both been recognised for some time as attributes related to the strength of the person's attitude toward the object. "The more importance a person attaches and the more knowledge she or he has, the more likely the attitude is to be resistant to change, persistent over time, and influential in directing thinking and action" (Petty and Kronsnick, 1995, p. 97).

Attitudes cannot be neatly separated from study; indeed, they may affect study very significantly. Thus, within education, attitudes are very important. Negative attitudes towards specific subject areas can prevent further study or make it unproductive. Attitudes towards the processes of learning can also have very large effects, potentially stopping a student from further study (Reid, 2003). Over the years, social psychologists have suggested different classes of psychological goals which may be served by holding attitudes. However, social psychologists have not thought about how attitude functions in order to propose elaborate classifications, nor did they assume to capture each and every possible function in their system (Bohner and Wanke, 2002).

Another aspect is that social psychologists have traditionally assumed that people's evaluations of social policies and other things in their social environment have major consequences. In other words, attitudes have been claimed to motivate behaviour and to exert selective effects at various stages of

information processing (e.g. attention, perception, and retrieval) (Eagly and Chaiken, 1993). This emphasises that learners construct their own understandings and these may not be “correct” (in the sense that they are not the same as those held by the majority). Huge amounts of research have been conducted in relation to constructivism but little has emerged which is very clear cut. This situation is discussed by Kirschner *et al.*, (2006, pp. 77-78) and they have stated that the constructivist description of learning is accurate, but the instructional consequences suggested by constructivists do not necessarily follow. Earlier they explain why this is so: “any instructional theory that ignores the limits of working memory is unlikely to be effective” Kirschner *et al.*, (2006, pp. 77-78).

This leads on to the major insights offered by information processing. This led Johnstone to develop an information processing model which has been shown to be able to interpret the findings from large areas of learning research as well as be highly predictive (Danili and Reid, 2004; Hassan *et al.*, 2004; Johnstone, 1991; Johnstone *et al.*, 1993, 1994, 1998; Sirhan and Reid, 2004, 2006). Second, Ausubel *et al.*, (1968) offered two further major insights. They appreciated that what a person knows already has a powerful controlling effect in future learning. This was captured neatly in an information processing model (Johnstone, 1997) when he appreciated the way the long term memory controlled the perception filter.

Looking at various contributions in terms of what theorists offer to attitude development offers some interesting ideas. Firstly, there may be developmental features to attitude growth. Secondly, philosophers stress that the individual learner constructs attitudes. They will not exactly reflect the attitudes held by the teacher nor will they reflect what is transmitted in terms of knowledge, affect and behaviour. Thirdly, the work of Ausubel emphasises that the

knowledge, feelings and experiences held in the long-term memory will control new knowledge and this will mean that attitudes already held will affect all future learning. These held attitudes will also control the way attitude, relevant knowledge, affect and experience will be allowed to enter the working memory and interact. Finally, the limiting capacity of the working memory will be a rate determining step in enabling the learner to understand ideas, mentally ‘play’ with new and possibly inconsistent information and allow attitudes already held to interact with new input.

5.2.0.0 LANGUAGE AND GENDER INTERACTIONS

A number of studies have focused exclusively on men: these have looked at why teaching is not attractive to males (Drudy *et al.*, 2005); why men are more likely than women to drop out of initial teacher education (ITE) courses (Lewis, 2000; Moyles and Cavendish, 2001); what strategies might be put into place to encourage men into primary teaching (Mulholland and Hansen, 2003) and how ITE programmes can accommodate male students more effectively (Thornton, 1998). For those feminists who maintain that gender is a relational concept, there is little information about the gendered context within which male student teachers are recruited and trained.

A significant interest in researching issues of language and gender began with Lakoff's (1975) ground-breaking publication, *Language and Woman's Place* (1974). Kendall and Tannen (2002, p. 549) describe this work as 'the field's foundational text, and whilst it has been heavily critiqued on methodological grounds, Lakoff raised the profile of the complex interplay between language and gender, and it soon became a popular line of inquiry. Lakoff (1975, p. 4) defined the concept of “women's language”, characterised by a variety of linguistic forms which serve to weaken and mitigate the force of utterances. Her position has come to be known as the deficit model, with women's talk being

perceived as deficient when compared to the male norm. The deficit approach has been criticised as it has led to a belief that women need to learn how to talk like men if they are to become more accomplished speakers. In a loosely based chronology of language and gender studies, both Cameron (1995, 1996) and Talbot (1998) argue that the deficit approach is followed by the power/dominance approach, popular in the late 1970s and early 1980s. The culture/difference approach then developed in the mid-1980s and remained popular until the early 1990s. All three approaches assume that difference between male and female speech patterns pre-exists.

During the 1990s, a shift away from the view that gender difference should be taken as the starting point for language and gender studies can be observed. A new approach, which Talbot (1998, p. 150) entitled the dynamic mode, developed, thus completing a rather handy 'alliterative list': the deficit, dominance, difference and dynamic approaches to language and gender study. Coates (1998, p. 413) believes that the difference approach arose as a backlash to the dominance model. She states that whilst feminist linguists were not denying the existence of dominance and power, they had become tired of the negative portrayal of women in work following the dominance framework. She argues that many researchers thought the dominance model had actually become a deficit model, portraying male speech as the norm and female speech as deviant.

Researchers who follow the culture/difference approach draw on the work of Gumperz *et al.*, (1982) follow a theory of miscommunication based on Gumperz *et al.*, belief that, if cultural backgrounds differ, then lines of interpretation and the habitual use of linguistic strategies are likely to diverge. They claim that girls and boys are socialised into different subcultures, which leads to the development of diverging subcultural norms. As a consequence,

miscommunication occurs in mixed-sex interaction. Culture/difference researchers have been criticised for ignoring the power structures that operate in society, and Tannen's work in particular has been heavily critiqued (Cameron, 1997a; Crawford, 1995; Freed, 1992; Talbot, 1998; Tromel-Ploetz, 1991; Uchida, 1992). The dominance and difference approaches came to be perceived as dichotomous categories. Cameron (1995) believes that this dichotomy was a false one, and one that has had the negative effect of causing unnecessary conflict between language and gender researchers. In the early to mid-1990s, feminist linguistics began to move away from both approaches, arguing that they had become too simplistic in their explanations (Bergvall *et al.*, 1996; Cameron, 1996, 1997; Uchida, 1992). Cameron (1996, p. 49) attacks sociolinguistics for failing to provide feminist linguistics with the theoretical apparatus necessary to interrogate the relationship between gender and language. She argues that a theory is required that challenges 'academic renditions of received wisdom'. She advises sociolinguists to look outside of the discipline, advocating a more multidisciplinary approach by arguing that the more sophisticated theories of gender developed in critical social theory should be integrated with detailed linguistic analyses.

Cameron summarises her position by laying out a platform for researchers working at the interface of language and gender, arguing that we should be prepared to challenge our co-optation by those within our discipline who would set narrower agendas for 'sociolinguistic proper. Coates (1998, p. 460) claims that "the popularity of investigating language and gender in sociolinguistics studies has led to researchers posing more sophisticated questions about language and gender". Both the dominance and difference approaches have polarised gender, resulting in assertions that men speak one way, whilst women speak another: viewing females and males in this dichotomised way results in a gross over simplification of the complex interplay between gender and

language. It treats females and males as monolithic categories, thus ignoring intergroup differences that may be the result of age, class, sexuality, ethnicity, etc. Both frameworks also assume that gender is always the most salient category, when it is entirely possible that other social categories may have crucial influences on language behaviour (Crawford, 1995; Greenwood, 1996; Swann, 2002). Furthermore, Crawford (1995, p. 8) argues that both the dominance and the difference approaches are essentialist, as they view gender as a fundamental, essential part of individual.

Coates (1995, p. 13) makes this point, arguing that “the isomorphism of male discourse patterns and public discourse patterns is the result of the split between public and private spheres”. She documents that the separation occurred at the commencement of the nineteenth century when there was a change in the sexual division of labour. This clearly demarcated a division between the public business world of work for males, and the private, domestic world of work for females. Kendall and Tannen (1997) also make the crucial point that the vast majority of studies on gender and workplace interaction are based on the view that speech norms in the workplace are masculine norms, as historically men have made up the vast majority of the workforce.

However, the gender bias promoted by the masculine gender can be countered by the de-gendering of the language, that is “creating a new linguistic structure that places both the sexes on equal footing” (Renner, 1997, p. 4) replacing the gender-biased expression by ‘un-gendered’ terms. Renner gives the example of the male generic ‘man’, which can be replaced by ‘humanity’. Pluralisation is another solution for avoiding male generics in the sentences. Bergvall *et al's.*, (1996) publication aims to encourage language and gender researchers to move forward from the dominance and difference approaches and replace them with the view of gender as a social construct. Greenwood (1996) also demands that researchers pay more attention to other social variables and contextual factors

which could be affecting their data, rather than attributing every difference between male and female speech to gender differences.

5.3.0.0 LANGUAGE, GENDER, AND POWER IN THE WORKPLACE

Over the last three decades there has been a change in workplace culture, in that the more traditional form of hierarchy that draws a clear delineation between superior and subordinate is increasingly being replaced with flatter structures. Fairclough (1992, p. 7) points out that such changes have taken place at a transnational level, thus resulting in a new global order of discourse. He asserts that such changes in organisational cultures can be seen predominantly as changes in discourse practices, as language use is playing an increasingly important role in organisations. He defines the democratisation of discourse, whereby markers that overtly signal asymmetry are being eliminated (p. 203). As a result of this democratisation, employees' social identities are now being defined in terms that have been traditionally associated with the private sphere. This is manifested in the discourse practices of the workplace, where conversational practices traditionally associated with the sphere of private life "are being systematically simulated within organisations" (p. 8).

Fairclough (1992, p. 204) refers to this move as the conversationalisation of public discourse, as the breaking down of covert power leads to workplace interaction taking place in a more informal conversational manner. He argues that the simulation of such conversational practices is achieved through the process of the technologisation of discourse, whereby trainers teach specific communicative skills to workforces (1992, p. 3). Fairclough's observations are very interesting if interpreted from a feminist linguistic point of view. If conversational practices associated with the private sphere are being deliberately implanted in the public sphere, then it could be suggested that the conversational practices that are becoming current in the workplace are those

traditionally associated with a feminine speech style. It could, therefore, be argued that the new work ethic could suit females, who are perceived to be more adept at the discourse of the private sphere than their male counterparts. However, this view that females may now be better placed to interact in the workplace due to a change in workplace practices appears to be somewhat optimistic and simplistic. One result of the democratisation of discourse in organisational cultures is that power asymmetries manifest themselves in a more covert and/or subtle manner. It can be argued that the former refers to instances where power is exercised overtly, whilst the latter, refers to how consent can be manufactured, thereby exercising power in a more covert manner. Fairclough (1992, p. 4) points out that ideology works as a primary means of “manufacturing consent, and power relations depend on both aspects to differing degrees” (p. 4). The view of coercion and consent is very similar to Pateman’s (1980) belief that power can be exercised both in an oppressive and repressive manner, with oppressive corresponding with Fairclough's notion of coercion and repressive corresponding with his consent category.

Therefore, the changes in organisational culture have resulted in a change from power being exercised in a coercive or oppressive manner, to power being exercised through consent, in a repressive manner. Pateman (1980) argues that instead of oppressively emphasising hierarchical differences in a coercive manner, those in powerful positions gain compliance by using repressive discourse strategies to gain the consent of subordinates by minimising status differences. This transition in organisational culture which Fairclough (1992) observes has also been documented by Sarangi and Roberts (1999). They refer to this change in workplace practices as the new work order, following the work of Gee *et al.*, (1996).

Sarangi and Roberts (1999, p. 9) argue that the new work order empowers workers by creating “a core vision of culture” which is shared by both workers and management. Hierarchies are thus reduced, and as a consequence professional identities become destabilised. This destabilisation of identity is thought to be characteristic of the conditions of late modernity (Giddens, 1991). Graddol and Swann (1989, p. 140) claim that, as there are far more men than women occupying senior positions in institutions, the powerful style of interaction will be the male one, gender inequalities that work to govern female employment prospects ensures that “the majority of mixed-sex interactions at work will be those in which the woman is in a less powerful position than the man” (p.140). In order for women to reach powerful positions in such environments, Graddol and Swann (1989, p. 143) assert that they need to adopt the traditional values of patriarchy.

However, if we accept the view that the speech norms for workplace interaction are masculine norms, then professional women, particularly those who occupy positions of authority, are placed in somewhat of a predicament. Kendall and Tannen (1997) argue women in authority face a double bind in the workplace, and this concept of a double bind has been put forward by a number of feminist linguists, social psychologists and organisation studies researchers, including Alvesson and Billing, (1997); Brewis, (2001); Cameron, (1995); Coates, (1995); Crawford, (1995); Freed, (1996); Jones, (2000) and Lakoff, (1990).

The double bind is used to describe the dual constraint that females face when they interact in public arenas. If females adopt a more assertive speech style typically associated with masculine speech then they will be subject to negative evaluation, being viewed as overly aggressive and unfeminine. Alternatively, if women adopt the speech style typically associated with femininity, then they risk being negatively evaluated as ineffective and weak. As Freed (1996, p. 70) points out, when the linguistic behaviour of individuals “does not conform to

society's expectations, a set of judgements is formed about them. Their language is seen as marked and they themselves are often seen as deviant". Kendall and Tannen (1997, p. 86) also add that the predominance of men, not only in general, but particularly at the higher levels of professions, along with a stereotypical 'cultural interpretation' which dictates who is thought to be best suited to carry out a particular role, are further factors that operate to ensure the maintenance of workplace norms as masculine norms. Cameron (1985, p. 155) comments on the perception of cultural interpretations governing speech styles in a discussion of talk that takes place not only in the workplace, but also in public arenas in general. She claims that "whatever style a culture deems appropriate in the public arena, women are said to be less skilled at using" (p. 155).

Furthermore, Freed (1996, p. 145) argues that due to deeply embedded gender stereotypes that continue to operate in society, there exists "a well-organised set of social expectations about whom, women or men, should convey which social meanings". Therefore, whilst there are more women entering the field of management than ever before, social expectations kept in place by the firmly entrenched stereotypes governing appropriate gendered behaviour dictate that masculine speech styles should be used to convey meanings in the public domain of the workplace.

Graddol and Swann (1989, p. 160) argue that ideologies of gender work to ensure that the same speech style is given a different meaning and interpretation when used by a woman rather than a man. This perspective agrees with Bem's (1993) view that in society there is a lens of gender polarisation which works to maintain the view that male and female behaviour is inherently different. Therefore, when viewed through this gender lens, if female (or male) speakers diverge from the linguistic norms that are stereotypically deemed to be appropriate behaviour for their sex, and then they will be subject to negative evaluation.

Lakoff (1990, p. 206) argues that the double bind is a paradox that professional women face when they find themselves in situations where assertive behaviour is necessary. She argues that a female has two options: “she can be good woman but a bad executive or professional; or vice versa. To do both is impossible”. Jones (2000, p. 196) details the picture for female managers in particular, arguing that if a woman speaks like a manager, then she transgresses the boundaries of femininity; if she talks like a woman, then she is no longer representing her managerial identity. Kendall and Tannen (1997, p. 94) report that women in positions of authority who draw on strategies associated with motherhood (Stubbe *et al.*, 2000; Tannen, 1994; Wodak, 1997) are attempting to “resolve the double bind that exists between professionalism and femininity” (Kendall and Tannen, 1997, p. 94) by utilising a legitimated role through which women exercise power. Coates (1997, p. 289) argues that “as women move into more prominent positions in the workplace”, they are having ‘juggle’ their forms of ‘self-presentation’ in order to find ways to perform their identities in both a ‘competent’ and ‘feminine’ manner.

5.4.0.0 ORGANISATIONAL STUDIES, LANGUAGE AND GENDER

Jones (2000) argues that the fields of organisational studies and language and gender have much to offer one another in terms of moving towards the production of an interdisciplinary analysis of gender and language issues in the workplace. This attempt can be perceived as a step towards forming the interdisciplinary community of scholarly practice which Eckert and Sally (1992) claim. Jones (2000, p. 193) believes that detailed contextual analyses produced by linguists can bring much to organisational studies, and in return organisational studies offers a great deal in terms of framing communication that takes place in the workplace at a theoretical level and also at the level of organisational practice.

Before moving on to examine the developments that have taken place in the discipline of organisational studies with regard to gender in detail, it is important to highlight that a ‘linguistic turn’ has taken place in a number of social science disciplines, including organisational studies (Alvesson and Karreman, 2000; Grant *et al.*, 1998). Grant *et al.*, (1998, p. 1) document that the linguistic turn in organisational studies has taken the form of ‘discourse analysis’ which has led to the development of ‘organisational discourse’ as an area of research interest in its own right. Indeed, Mumby and Clair (1997, p. 181) focus on defining and illustrating organisational discourse as an independent research field. They argue that, as a discipline, it “allows us to get at the relationship between everyday organisational talk, and the larger issues of social structure and meaning”, and it can involve analyses of narratives, metaphors and rituals.

Grant *et al.*, (1998, p. 4) argue that there is a perception, particularly from within management studies, that organisational discourse is dominated by such post-modern analyses. They deny that this is the case, but they do acknowledge that such analyses have stimulated a great deal of interest in the topic of organisational discourse in recent times. At this point, it is useful to clarify the boundaries between the different disciplines in which organisational research is produced. Organisational studies can be perceived as a discipline in its own right (Alvesson, 1994; Alvesson and Karreman, 2000). However, Mumby and Clair (1997) examine the discourse of organisations from within the larger discipline of communication studies. Jones (2000, p. 194) argues that organisational communication has developed from a number of different sub-disciplines, including management studies. With particular relevance to management studies, she draws a distinction between ‘mainstream’ studies which view language simply as a managerial tool, and ‘critical’ management studies which follows a Foucauldian approach, focusing on how “power

relations and identities are created through organisational discourses” (Jones 2000, p. 194). Within the disciplines of organisational studies and organisational communication, gender has been a neglected research area until fairly recently. For example, Mumby and Clair (1997, p. 24) argues that feminism has practically been ignored by organisational communication. In Mumby and Clair (1997), reference is made to a handful of studies that examine gender and organisations, and they term these ‘critical feminist’ approaches to organisational discourse (Gherardi, 1994; Martin, 1990). Jones (2000, p. 199) identifies the field of ‘feminist organisational communication’ which she describes as being fairly small and marginal. She points out that it aims to focus on gender and power with the overall aim of devising an alternative account of organisational communication, and bringing about organisational change.

There is a clear link here between these aims and the general aims of feminist linguistics, which focus on examining gender and power with the overall objective of bringing about social change. Like much recent work in language and gender studies, Jones draws on the work of Butler (1990) to examine gender identity and power relations in the workplace. Jones argues that an important area of investigation is how women resist dominant discourses (see also Coates, 1997; Coates and Jordan, 1997) and Jones perceives the job of feminist organisational communication to be to generate ‘communicative models’ so that “issues of gender and resistance to change through conversations between men and women in the workplace” can be developed (Jones 2000, p. 205). She concludes that in order for change to occur, researchers need to be critical, reflexive, and engage in feminist organisational communication work collaboratively.

Other examples of studies on gender and organisations that have been influenced by the linguistic turn include Brewis, (2001); Brewis *et al.*, (1997); Garnsey and Rees, (1996) and Wilson, (1992). In particular, Wilson (1992, p.

883) examines how women are linguistically excluded from organisations by metaphors that constitute discourses of ‘battle’ and such powerful metaphors work to reinforce male domination, whilst at the same time rendering women invisible. Following Butler’s (1990) social constructionist view of gender being mapped onto the physical body, Brewis *et al.*, (1997) examine constructions of femininity and masculinity in the workplace on the basis of image and dress. Influenced by Foucauldian notions of discourse, they define a ‘discourse of gender difference’, which is used to reinforce dichotomies of gendered behaviour, including external appearance.

Brewis (2001, p. 287) draws heavily on Foucauldian in an examination of language, gender and organisational discourse. She argues that the discourses in a Foucauldian sense of the word “underpin and reproduce specific ways of knowing and behaving in the world”. Brewis (2001, p. 288) asserts that Foucauldian can be used to suggest that female experiences within organisations have been marginalised by a dominant perspective which has become accepted as the ‘truth’ for all organisations: “that they are neutral, non-discriminatory environments in which relations are governed by objectivity and rationality to ensure that there is no reward for anything other than individual merit” Brewis (2001, p. 288). Of particular relevance to this version for the organisational ‘truth’ is the ‘discourse of gender difference’ as used in Brewis *et al.*, (1997) and documented above. Also important is what Brewis (2001, pp. 288-293) terms ‘the discourse of scientific modernism’, which depicts the workplace as an arena where objectivity and rationality must prevail in order for success to be achieved. She argues that these discourses work together to ensure that the irrational is seen to be the ‘antithesis of organisational life’, and to produce both “understanding and representations of women as being less suited to organisational life, inevitably subjective in decision making” Brewis (2001, p. 288).

All human societies have their gender ideology. UNHCR (2003, p. 11) claims that gender could be defined as “the social characteristics assigned to men and women. These social characteristics are constructed on the basis of different factors, such as age, religion, national, ethnic and social origin. They differ both within and between cultures and define identities, status, roles, responsibilities and power relations among the members of any society or culture”. Gender determines what is expected, allowed and valued in a woman or a man in a given context. It intersects with race, class, and ethnicity, sexual and regional modalities, making impossible the distinction between gender and those intersections (Moultrie and Rey, 2003; Ridgeway, 2001; Turner, 2008; Warner, 1994) because ethnic and gender stereotypes are inextricably intertwined and the effects of each cannot be isolated (Moses, 1997).

As gender intersects with racial, class, ethnic, sexual and regional modalities of indirectly formed identities, it is quite impossible to separate gender from the political and cultural intersections in which it is always produced and sustained. Turner (2008) describes some of accounts of the interplay of gender and ethnicity or cultural differences that present challenges from racial and ethnic stereotyping, gender bias and cultural differences, and resultant feelings of dissonance in the workplace. For instance, Latina administrators discuss functioning in two distinct sociocultural environments. Native American leaders say tribal college leadership is inseparable from their culture; and Asian American women are stereotyped as not engaging in leadership behaviours, like displays of power, authority and fortitude.

The reflection upon this context worldwide and within the gender ideologies of diverse cultures is that the cultures of Muslim men are a group whose masculinity has been stereotypically defined by socio-political circumstances that have cast them as religious fundamentalists (Gerami, 2005). Since Muslim

men have not been included in the literature on the psychology of men and masculinity, there is a lack of knowledge regarding their religious identities, gender ideologies, and cultural backgrounds. According to Pleck (1995), men can experience gender role pressure as a result of being socialised to follow a rigid and stereotypical masculine ideology. Both gender role conflict and masculine gender role stress are two forms of gender role strain (Eisler *et al.*, 1988). These gender roles have been considered as being likely to have the major impact on young individuals' gendered identities of Muslims.

Hall (1996) acknowledges that reading identities only against the grain of modern interpretations will not lead to an improved understanding. For that reason, too, he argues that it is important that the subject of identity continues to be placed on the research agenda of the social sciences. Formulating the parameters of the context in which the contemporary study of identities is to be situated, he contends, firstly, that it is important to link the social and the psychological. In this context, he elaborates his definition of identity as an intersection of temporary attachments to different subject positions in various discourses and practices, by arguing that identities can also be seen as resulting from successful articulations of different discourses in different dimensions, notably social and psychological dimensions of reality.

The psychology of men and masculinity has acknowledged that gender socialization not only influences the lives of women, but also the lives of men. Whereas patriarchy certainly grants men privilege over women, it also contributes to the rigid gender ideologies that have negative implications for the lives of men and society as a whole (Levant, 2011). Gender could be seen also as an abstraction that impacts the biological reality (sex), creating a system that involves sex and gender. Sex, which is observable, gives meaning to gender, which is not empirical; as a result, difference is seen as identity.

5.5.0.0 SEX AND GENDER

In sociolinguistics, the distinction between sex and gender is based on the view that sex refers to the genetic code, physical differences in the body, whereas gender is the psychological social construction, social codes, and cultural differences which are influenced by bio-psychosocial experiences (Montgomery, 1995). On the other hand, the social constructivists' perspectives see meaning, including identities, as socially situated through social interaction (Baron and Kotthoff, 2001; Bucholtz *et al.*, 1999; Gergen, 1991; Kendall and Tannen, 2002; Kotthoff and Wodak, 1997; Litosseliti and Sunderland, 2002; Livia and Hall, 1997). However, there have been a number of significant advances in theorising gender, most notably in the following related areas. The first of these areas is the idea that a distinction can be drawn between a biologically-given 'sex' and a socially-constructed 'gender' and this has been widely discredited.

Historical studies, like Laqueur (1990), demonstrate that sex is historically and culturally variable, with the modern idea of two separate sexes representing a shift away from the longer-established western view that there is a single male sex, of which the female is an inferior manifestation. The 'sex and gender' model has also been undermined by a model of sex/gender as produced in and by social processes and performances (Butler, 1999) or as a form of 'social embodiment' (Connell, 2002). The latter view stresses the mutual constitution of body and social processes, such that it is impossible to prise them apart, whilst the former tends to reduce the bodily to the social.

The second area is that, rejection of the 'sex and gender' model is bound up with a rejection of the idea that there are 'two spheres' of masculinity and femininity or male and female. Cheshire (2002) examines the labels of 'sex' and 'gender' in variationist sociolinguistics research, pointing out that such studies still tend to rely on a broadly essentialist approach. In opposition to Bing and

Bergvall's (1996) position, Cheshire (2002, p. 424) makes a similar point to Wodak (1997) arguing that, as the binary opposition between female and male appears to be "a fundamental organizing principle", it is therefore reasonable to expect this "to guide our evaluations of our own and others' speech" (Cheshire, 2002, p. 424).

Cheshire (2002) asserts that this argument is solid enough to justify examining the speech of females and males as a methodological device. However, she goes on to make the fundamental point that most sociolinguists agree that adopting a male-female distinction will not result in providing any explanations for gender and language variation. In order to achieve this, researchers need to follow a local, community-based approach, and also look at the wider social forces that may be constraining linguistic behaviour (Bergvall, 1999). The use of sex as a methodological categorisation device thus retains its usefulness, but it needs to be accompanied by a study of local practices in order to examine gender and language.

A number of researchers (Baron and Kotthoff, 2001; Kotthoff and Wodak, 1997; Walsh, 2001) have interpreted Butler's approach in a rather extreme manner, advocating that speakers can be or do whatever they please, (see Mills, 2002a: 71 discussion on this point). To accuse Butler of ignoring the constraints of social structure seems somewhat unfair as she does openly state that repeated acts take place in a "rigid regulatory frame" (p. 33). Butler thus appears to be clearly acknowledging that there are norms that govern how speakers decide to perform traits of femininity or masculinity. As Cameron (1997, p. 49) claims, Butler "insists that gender is regulated and policed by rigid social norms". However, instead of viewing both women and men as trapped by these social norms, Cameron (1997, p. 50) makes the crucial point that Butler's perspective enables speakers to "engage in acts of transgression subversion and resistance", though this may occur at "some social cost" to the speaker who breaks the gendered norms typically associated with their sex. Butler (1999, p. 84) claims

that the sex of a body is created through repeated practices in which “discourse produces the effects that it names”. Therefore, the material body is inextricable from language: “Sexual difference is never simply a function of material differences which are not in some way both marked and formed by discursive practices” (Butler, 1999, p. 85).

Butler argues that both the materiality of sex and the effects of gender are constructed. Butler’s emphasis on the *performative* illustrates the relationship between the body and action in creating gender roles. She writes, “... it is productive, constitutive, one might even argue *performative* [emphasis Butler’s], inasmuch as this signifying act delimits and contours the body that it then claims to find prior to any and all signification” (Butler, 1999, p. 83). Therefore, according to Butler, the social role of gender functions to place the body within a sexed system. Consequently, gender is not something imposed upon a sexed body, but rather the process of gender construction produces the sexed body (Butler, 1999).

Bing and Bergvall (1996) draw on Butler’s perspective and argue that sex should be perceived in this manner, in order get beyond binary thinking and to avoid reinforcing gender polarization. Wodak (1997, p. 12) questions the rather ‘dogmatic’ perspective put forward by Butler (1990), whilst she agrees with some of the principles of Butler’s work. Wodak (1997) asserts that the role of feminist researchers is not to get bogged down in a discussion of whether the biological category of sex is real or not. Researchers instead should be aiming to expose the “arbitrary construction of this binary opposition” as sex is used as a “powerful categorization device” in society (Wodak, 1997, p. 13). She illustrates this with the example that, in many workplaces, women are paid less than their male counterparts for doing the same jobs and this can also applied in the case of this particular context of Libya. Sex in such contexts (workplaces) is perceived as a natural biological category, and not as a social construct.

Wodak and Benke (1996) provide an excellent discussion on the topic of sex and gender and I wish to follow their viewpoint on the interconnectedness between the two concepts. In addition, in perceiving gender as a social construct, Butler (1990, p. 17) also believes that sex is a cultural construct that is produced in discourse. There is a need to move away from categorical theories which emphasise that gender/sex relations are shaped by a single overarching factor. Rather, it has been suggested that these relations are multidimensional and differentially experienced and respond to specific historical contexts and social locations. Consequently, gender and sex categories can be seen to be shaped by, and shaping, the processes of colonisation, of racism, of class hegemony, of male domination and other forms of oppression. In short, gender can be seen as a crucial point of intersection of different forms of power, stratification, desire and subjective identity formation (MacGhail, 1994b).

Since in this view the construction of identity, or rather identities, is a never-ending process, always incomplete, unfinished and open-ended, Hall (1996) also proposes the term *identification* above the essentialist concept of identity and this idea has recently been corroborated by the influential philosopher Zygmunt Bauman (2001). Rather than being characterized by a singular and stable identity, in the contemporary globalised world, the subject is constantly 'suturing' itself to different articulations between discourse and practice, and this process, in turn, leads to multiple identifications (see also Cohen, 2000). Scholars highlight that there are multiple masculinities which are influenced by diverse socio-cultural statuses of men (Levant, 2011; Lui, 2006; O'Neil, 2008; Wester, 2008). Accordingly, understanding the worldview and gender ideologies of diverse men is an issue of multicultural competency within analysis psychology that deserves consideration (Lui, 2006).

Therefore, I briefly wish to re-engage the sex role theory, by suggesting a combination of more recent social and cultural theorising and refocusing to include broad social relations within and beyond the curriculum context that can offer insights into the possible dynamics in the development of individuals' gender identities in the research context of Libya. Thus, key arenas where the variation in gendered identities and division patterns of women's knowledge are created have also been identified. The following aspects: *the economic domain, political domain and societal domain aspects*, are likely to have a major impact on the development of individuals' attitudinal factors and gendered sites of knowledge, in particular women's knowledge, and are likely to contribute to their gendered differences within the formal curriculum directions at secondary school in Libya.

Gendered identities cannot be interpreted in isolation from other attributes, along with which they vary widely across cultures and change over time (Asher, 2007; Butler, 1993; Harding, 1991). From these perspectives, learning occurs through the continual creation of rules and hypotheses to explain what is observed (Brooks, 1990). The increasing recognition that identities are never singular, but always multiply constructed in different contexts, which, in turn, is intertwined with the prevalence of difference over similarity in their meaning, leaves unresolved the question of how we can understand the value of identity and how we may explain the emergence of the interest in identities in recent history.

5.6.0.0 GENDERED SITES OF WOMEN'S KNOWLEDGE

The fact that women from low-income countries (such as Libya) perceive their knowledge as holistic and multidimensional does not mean that it is specific to them, but rather it is a way in which they view their knowledge with regard to their relationship with their environment. Harding (1993, p. 97) argues that,

“Gathering food, and maintaining subsistence agriculture, herding and forestry-bring women into yet more distinctive interactions with natural environments. Women’s biology and their culturally distinctive activities enable them to have some different interactions with natural environments than those their brothers have”. Women’s knowledge plays an integral role in conservation, yet largely goes unrecognised. Joekes (1987, p. 63) argues that, “the ‘gender dimension’ is not a supplementary consequence of variation in agricultural practices but a fundamental organising principle in labour use...”. I would argue that knowledge production and similar aspect are related through the same organising principle.

The division of labour/secondary formal curriculum directions which shape experience also shape the knowledge of that experience. Through similar experience in agriculture and separation from the mainstream modes of production, women have developed an epistemology that is divided by their experience and is exclusive to their gender: “Gendered social structures are produced by assigning some work and activities to women and others to men” (Harding, 1993, p. 76). Gender refers to the social roles and responsibilities that are believed to belong to men and women within a particular social group. Gender roles are created by a society and are learned from one generation to the next as part of a society’s culture. On the basis of social groups’ understanding and knowledge, it could provide a special perspective on the processes of environmental regeneration, one that needs to inform our view of alternative approaches to development.

The sexism division of labour/workplace/secondary school formal curriculum directions is much more than a nature-culture hypothesis. Culture determines the duties and roles that women perform and how they are performed. What makes a ‘good’ woman varies according to time and space. The experiences of elite women, rural women, unskilled women and urban women ensure that there

are no universal or absolutes to what this ‘good woman’ is. However, we can see that a role such as ‘caregiver’ does not stop at raising children, ‘so called a women’s lot’. In some societies, as in the context of Libya, for example, it also means caring for elderly parents, according to the Islamic religion perspective (Abdul-Rauf, 1993; Barlas, 2002; Rahman, 2009; Stone, 2002).

A ‘woman’s lot’ refers to the reproductive activities of childbearing, caring, rearing and all associated housework that this requires (Rahman, 2009; Salleh, 1990). A women’s lot means that they “[r]eproduce the conditions of production’: something like setting a stage? Not seen as a player herself, not as a producer, the mothering labourer gives life to, and attends the material needs and emotional support of those who do ‘produce’. This reproductive sector, as Marxists call it is the realm of necessity par excellence and despised as such, But it is poorly understood by male theorists whose lack of activity in that sphere has given them odd notions about what women do” (Salleh, 1990, p. 76). There are many different theories on the role of reproduction and, in relation to this thesis, the role of how these ‘experiences’ affect knowledge creation.

According to space and time, this tends to ‘interpret’ and ‘organise’ motherhood in ways that focus on difference (Coontz *et al.*, 1986, p. 12). Nancy argues that the primary role of women in “bearing, nursing and socialising children leads to different psychological dynamic for each sex. Girls learn their gender identity by imitations... they become more present-oriented and subjective than boys, who can only do so by learning an abstract male role” (Nancy quoted in Coontz *et al.*, 1986, p. 13). I would also argue that women’s knowledge has been perceived on all levels, economic, political, within families and households, as well as at the international level, as being more ‘backward’ and ‘unscientific’ than men’s knowledge such as in Libya. The implication of this division of knowledge occurs at three levels; economic, political and societal. I am arguing

that the realities of the economic, political and societal structure divide and dismiss women's knowledge from the structure of power at every level because of the existing epistemological framework already at work, and 'other' epistemologies are held at bay. When I discuss structures of power, I am not divorcing any of these structures from the fact that political decisions are made at all levels. However, when I discuss the political level, I am referring to political activity.

5.6.1.0 FIRSTLY, THE ECONOMIC DOMAIN

5.6.1.1 WOMEN'S KNOWLEDGE MARGINALISED AT THE MICRO LEVEL

The factors of economics have contributed to the gendered division of knowledge in two ways: first, the gender division of labour contributes to the separation of women from modes of male production; therefore, women have developed different knowledge, innovations and practices. Second, this theory has some common links with the international division of labour as it is partly economic, since their knowledge often does not seem to have immediate economic benefit as it becomes invisible and excluded. On both the micro/macro level, women's knowledge is not recognised (Tamang, 1998). For example, the capitalist system within the internationalisation of production has set up a division of labour that has separated women and men into different modes and sites of production. As Mary (1996, p. 51) argues, "what is incorporated in the sphere of 'production' does not just represent the interest of capital, it represents the interest of men". Productivity is often associated with cash income, making most of women's hard work insignificant. Women's knowledge becomes different through this separation of production, as a women's productive role requires a closer relationship with nature, due to the responsibility of tending to food, collecting water and extracting fuel from the natural environment which surrounds them. Women's knowledge is then

unrecognised because of the male-controlled household, as the 'knowledge vilifying structure' (a structure of power has already validated knowledge, often men's knowledge is seen as the primary or accepted form of knowledge, therefore, women's knowledge is marginalised from input or from forcing change when involved with this structure, i.e. the household. A dominant epistemology is already in place), fails to recognise the women's role as a legitimate producer. Different patterns of knowledge production can occur and, because of women's unique circumstances, knowledge production is not a static process. Women are involved in knowledge creation due to their own circumstances and experiences.

Gender and development literature proves that there is a connection between women and their productive, reproductive and management responsibilities in the community. The way which women have claimed separate knowledge is only accepted when it is articulated in certain ways and within certain existing structures (economic, political, and societal) which do not validate women's knowledge. As Lucenzia concludes, this is because of western thoughts and western structures that have become so much a part of their societies that their knowledge and their positions as women are relegated to the background (Lucenzia, 1998).

Women's labour is still not accounted for in the majority of nations, yet it is becoming more analytically visible. One of the difficulties is the actual measurement of women's work, and how it should be treated as equal to other forms of labour (Lucenzia, 1998, p. 136). The issues are how you draw a line between what is perceived as economic and non-economic work, and the differences between housework and economic work (Lucenzia, 1998, p. 136). Women's worth on the micro level is vast. Gardiner (1998) argues that household human capital formation involves bringing together human effort time and skills with purchased goods and services. These human and purchased

resources are combined to provide nutrition, shelter, health and safety, personal care, personal development and sustainable interpersonal relationships. If these processes are effective, the outcome will be mature people who are psychologically healthy and equipped with a range of skills, knowledge and values, the capacity to work and to develop further, to care for themselves and others in the particular historical and cultural environment in which they live. Where these processes break down, major social costs will be incurred, not just in terms of economic competitiveness, but also in relation to the social infrastructure and quality of life (Gardiner, 1998).

Further Gardiner (1998) argues that raising children draws out all types of skills and relies on women's knowledge, yet these skills are not recognised by the macro or formal sector. In fact, women's skills are seen as "criticising during absences from the labour market and domestic labour is viewed as disinvestments, not investment, in human capital. Care-giving activity is seen to detract from performance at work, instead of enriching it and the interpersonal skills developed through it are viewed as natural, undervalue attributes, not skills acquired through a complex learning process" (Gardiner (1998, p. 6). Gardiner argues that the devaluation of skills acquired through domestic work reflects a masculine analysis of human capital which would recognise that skills acquired in unpaid work are transferable to paid work situations (Gardiner (1998, p. 7).

5.6.1.2 WOMEN'S KNOWLEDGE MARGINALISED AT THE MACRO LEVEL

Walby (1990, p. 185) claims that: "The main basic tension between capitalism and patriarchy is over the exploitation of women's labour. On one hand capitalists have interests in the recruitment and exploitation of female labour, which is cheaper than that of men because of patriarchal structures. However, there is resistance to this by that patriarchal strategy which seeks to maintain the

exploitation of women in the household”. One of the pushes of early development policy was to bring women into paid employment, which was meant to be the main means in which to empower them. Women in development focus on the need to increase women’s employment through legal and political means and to maximise women’s role in paid employment and minimise barriers or disadvantages.

This is based on modernisation theory, which is, as a starting point, extremely problematic for women. Rita (1995, p. 61) argues that: “The view of modernity as driven by the logic of productive forces gives way to recognition that consumer demand is not simply a passive reflection of economic interests, but is shaped by a variety of relatively independent cultural and ideological factors...”. Harvey (1990, p. 35) quoting Habermas, relates that the project of modernity was “to develop objective science, universal morality and law”. As Rita argues, these are very much male institutions. Modernisation theory recognised traditional communities as authoritarian and male-dominated and modern ones as democratic and egalitarian (Visivanathan, 1997). Certainly, neither view is exact.

Therefore, the starting point of modernisation theory, which focuses on getting women into economic employment, is not a ‘neutral process’ (Beneria, 1997). This means that being drawn into a system of capital accumulation has an effect on women’s knowledge. Arun (1998, p. 4) argues that there are two concerns that need to be looked at: the ethical and the managerial. “Ethical tensions arise because indigenous knowledge resources lie mainly in marginal environments, in developing countries, with poverty-stricken populations, and are being lost at a rapid pace”. It is an economic agreement divorced of human rights. Women’s rights are separated by an immense gulf. Possibly after years of women’s knowledge being discredited, any protection for women’s knowledge may come too late.

One example of macro decisions having serious implications for women is policy making that comes out of the development apparatus. Agencies come in, make changes and rarely implement women's knowledge. Although development agencies claim to have taken women's knowledge on board, it is still only a brief note often added in on the end of a program. There are countless examples of how macro structures discount knowledge on the micro level and how economic decisions affect women. These economic decisions are made without any thought of how they may affect women. Only when the damage is done will it be recognised that macro decisions do affect women differently from men.

5.6.2.0 SECONDLY, THE POLITICAL DOMAIN

Walker (1998, p. 48) states that "Women are effectively absent from the centres of powers everywhere". This is especially true within positions of decision-making, particularly in developing countries, on local, national and also international conceivably. As Sen and Grown (1998, p. 31) argue, "It would take a considerable time for a re-orientation of political structures in post-colonial world". It is important to recognise that 'politics' within microstructures (especially the household) and institutions also affect, and are affected by, gender differences. The introduction of gender and division theory and gender planning tries to address the issues of redistributing political power to women. The political structures within developing societies are tightly embedded with an accepted epistemology. Therefore, women's epistemologies that exist outside these structures are excluded. On all levels, the political structures (where it is decision-making at community or international levels) concerning policy or law-making exclude women's knowledge and this has consequences for women and their communities, as in the case of this context of Libya. One of the policy criticisms of gender and division is that it is still "dominated by economic

perspectives on development” (El-Bushra, 2000) which means that development agencies still try to adopt “women’s economic empowerment as their main strategy for achieving gender equality” (El-Bushra, 2000). Unfortunately, it is their political roles that are not addressed. The reason for this case is that women and their ability are underrepresented in all levels of local, national and international politics generally. However, in Islamic developing countries, for example, Egypt and/or Libya, women have a higher representation rate in local rather than national government, although this rate is still much lower than that of men.

One reason related to this issue is the lack of political connections and networks; another issue is the demands of job and time away from the family. Culture, religion, tradition and patriarchy are all elements that have kept women out of powerful roles. When I asked a female interview participant, in particular, how important female representation and decision-making are in the current formal curriculum, this was her response: “Everything is so political and women do not have proper access. When a man is making a decision for you, then how much you do and how you should do it is greatly affected that is why indigenous women need to have access to decision-making. This is so difficult because we are marginalised” (Extracted from the current interview data analysis).

However, the politics of identity can be a trigger for wider civil and political participation, and thus support integration to some extent. At the same time, an Islamic discourse can be used to support isolation and resist integration. Given the limited involvement of women in formal political activity, their participation in non-governmental and informal organisations and activities is of considerable importance. Women’s organisations have had antagonistic relationships with the state in some periods, and been tolerated or even promoted at other times, depending on the overall project of the government at the time and its pragmatic

interests. Formal political rights have been gained by women in most Muslim countries, but their importance is diminished in some cases by the lack of democratic institutions and processes. Varying degrees of democratisation are occurring in some countries (e.g. Egypt) which may lend greater importance to these rights in the future. However, even where women have exercised voting rights, this has not necessarily been translated into significant female representation. For example, in Libya's neighbouring country of Egypt, generally thought of as a country where women are relatively politically active, women were only 4 percent of deputies in the parliament in 1987 (Khalidi and Tucker, 1992, p. 6). Therefore, the Islamic religion has its influence, not just on the personal life of the individual, but also on the different aspects of human social life, including the cultural, economic, and the political (Nasrabadi, 2006). Consequently, women still have limited participation in leading public and private organisations (Donno and Russett, 2004).

5.6.3.0 THIRDLY, THE SOCIETAL DOMAIN

The effects of societal background may operate through the peer group in the attended school environment. Peer group effects on learners' achievements in school have been widely reported (Hoxby, 2000; Robertson, 2003). These effects on achievement may have spill over effects on subject choice within the formal school curriculum. Peer groups, often single-sex groups, can possibly have an influence on individuals being in favour of, or against, particular subjects or areas of interest in school settings. If a child's same-sex friends all enthuse about or decry a subject, the individual might find it hard not to follow suit. Subjects or areas can possibly thus become stereotyped as 'feminine' or 'masculine', making it increasingly difficult for learners to make known an 'atypical' preference. However, those flexible groupings, sometimes by gender, can boost achievement and motivation, depending on the teaching and learning context in which they are situated. In addition, a student's choice of subject may

be influenced by the aspirations of their peer group or through the expectations that schools have for that peer group (see Table 2.1 in Chapter Three). School managers may believe that certain subjects are more appropriate for the type of learners that attend their school (Davies *et al.*, 2003). Therefore, various societal changes have occurred over the last 30 years and the barriers placed in front of girls in the past have been removed, especially through termination of the tripartite system (Epstein, 1998; Kirby *et al.*, 1997).

In addition, numerous equal opportunity proposals have been established, encouraging female confidence and giving them greater expectations (Gallagher, 1997). In this research context, the planned communist public systems are adopted in many sectors, such as education, health, and other social and political organisations (Abubaker, 2008). Organisational success in developed countries leads many organisations in developing countries to adopt Western models without considering local cultural values. This leads to conflict between organisational values and national values (Al-Hamadi *et al.*, 2007). Consequently, the attraction of globalisation has affected most organisations in developing contexts, such as Libya. It has also created huge debate and challenge about organisational values and the methods of dealing with social issues.

The national curriculum in most different nations contains reference to awareness of gender and acceptance of different cultural values, and other related issues, for example, nationalism and religious inclusion. According to much of the previous research, gender has proved the most powerful single influence on high achievement (Freeman, 1998). It could be argued that a school's policy on learner grouping is contributing to gender issues. I prefer to define gender as a cultural social structure, as key components of social structure, statuses and roles allow us to organize our lives in consistent, predictable ways.

According to the theory of gender as a social structure, several distinct social scientific theoretical traditions have developed to explain gender, ways in which gender has come to be defined in contemporary social science. The first tradition focuses on how individual sex differences originated, whether biological (Udry, 2000) or social in origin (Bem, 1993). The second tradition, perhaps described best in Epstein's *Deceptive Distinctions*, emerged as a reaction to the first and focuses on how the social structure (as contrasted with biology or individual learning) creates gendered behaviour. The third tradition, also a reaction to the individualist thinking of the first, emphasizes social interaction and accountability to others' expectations, with a focus on how "doing gender" creates and reproduces inequality (West and Zimmerman, 1987).

As Butler (1990, p. 25) claims, "gender can be perceived as a performative social construct because it is 'always a doing' and there is no gender identity behind the 'expressions' of gender identity is performatively constituted by the very 'expressions' that are said to be its result". Therefore, Butler believes that masculinity and femininity are effects we perform by the activities in which we participate, not predetermined behaviours we possess (see Cameron, 1996, p. 47). England and Browne (1992) argued convincingly that all structural theories must make assumptions about individuals, and individualist theories must make presumptions about external social control. While we do gender in every social interaction, it seems naive to ignore the gendered identities and cognitive schemas that children develop as they become cultural natives in a masculine world (Bem, 1993).

The more recent integrative approaches (Connell, 2002; Ferree *et al.*, 1999; Lorber, 1994; Risman, 1998) treat gender as a socially constructed stratification system. Finally, these developments have reduced talk about 'sex roles' - a term which implies a sex and gender model - to being problematic. Both gender role conflict and masculine gender role stress are two forms of gender role strain

(Eisler *et al.*, 1988). The idea that individuals are socialised into sex roles in childhood has been supplemented by the idea that sex/gender differences are continually negotiated throughout the life-course, in a process which is active as well as passive. The social and cultural meaning given to biological sex differences is reproduced in practices and influences the outcomes of these practices. The statuses of male and female are often stereotyped according to the traits they are assumed to possess by advantage of their biological makeup. Women are stereotyped as flighty and unreliable as they are seen to possess uncontrollable raging hormones that fuel unpredictable emotional outbursts.

In combination with established norms, the social and cultural meaning prescribe our behaviour and ease interaction with people who occupy different social statuses, whether we know these people or not. There is an insidious side to this kind of predictable world. When normative role behaviour becomes too rigidly defined, our freedom of action is often compromised. These rigid definitions are associated with the development of stereotypes—oversimplified conceptions that people who occupy the same status group share certain traits in common. That is to say, gender roles and stereotypes are the pillars of gender socialisation. Through them, males and females are assigned the norms, roles, expectations and social spaces for male and female identity. The gender perspective recalls that in equalities between men and women are the result of a different socialisation process based on gender and, thus, that they do not arise from innate biological differences.

From the gender perspective, primary socialisation is when individuals acquire the basic elements of their gender identity, while secondary socialisation confirms and legitimises the adoption of that identity and adherence to pre-established gender roles (Brullet, 1996). Although stereotypes can include positive traits, they most often consist of negative ones that are then used to

justify discrimination against members of a given group (Andrews and Ridenour, 2006). The assignment of negative stereotypes can result in sexism, the belief that the status of a female is inferior to the status of a male. Males are not immune to the negative consequences of sexism, but females are more likely to experience it because the status sets they occupy are more stigmatized than those occupied by males. Gender stereotypes affect how information is processed, in this case, whether behaviour is perceived as demonstrating effective leadership.

The nature of stereotypes is influenced by historical and cultural contexts, and leaders are perceived as effective when they adopt roles congruent with expectations. Compared to males, for example, females are more likely to occupy statuses inside and outside their homes that are associated with less power, less prestige, and less pay or no pay. Beliefs about inferiority due to biology are reinforced and then used to justify discrimination directed toward females. Sexism is continued by systems of patriarchy, male-dominated social structures leading to the oppression of women. Patriarchy, by definition, exhibits androcentrism-male-centred norms operating throughout all social institutions that become the standard to which all persons adhere.

Sexism is reinforced when patriarchy and androcentrism combine to maintain the beliefs that gender roles are biologically determined and, therefore, unalterable. For example, throughout the developing world, beliefs about a woman's biological unsuitability for roles other than domestic roles have restricted opportunities for education. As such, gender is a social 'stratifier' (Holtmaat and Naber, 2011). Consequently, it impacts, both in so called 'private and public' life, the distribution of resources, work, power, decision making, and enjoyment of rights and entitlements generally within the society, and probably also towards the context of the secondary school formal curriculum in Libya, in particular.

SUMMARY

This chapter has demonstrated how important globalisation is as a dominant paradigm; one that is structured in a patriarchal way. It has shown that gender is a concern of global analysis and women's knowledge must be analysed within this context (within levels of economics, politics and society). It is a process that often makes things more difficult for women. This occurs locally, nationally and internationally. The consequences of a gendered dissection of knowledge mean that women are removed from controlling their knowledge due to the fact, that in certain circumstances, they have limited control over the global economics that influence their lives. Politicians, at all levels, their knowledge is marginalised or rather excluded by different forces; patriarchy, officials and development agencies. This is also occurring in policy and law-making when the neglect of women's knowledge can often mean the erosion of women's knowledge, whether intentionally or unintentionally. This also ties into society itself, especially when society recognises women's knowledge as being inferior.

The implications of the arguments here are that women's knowledge, and how it is disseminated, needs to be understood before it can be repackaged. Therefore, we need to rethink gender constructions and how we think about development as a whole. Without understanding how women's knowledge is excluded globally, it is difficult to know what structures of power hinder women from becoming the active owners of their knowledge. Women own their knowledge, but do they have control, or is control evaded because of epistemic privilege that exists within the structure of power that confronts women and their knowledge on a daily basis? Cultural, demographic and labour market changes have influenced the way students and teachers think about the schooling of women and men, such that most now consider women's education to be equally important. Since gender is a socially learned perception (for instance, learned in the family or in school), anything associated with it can be

changed to achieve equity and equality for both women and men (Bryant, 2003; Katz *et al.*, 2004; Rose, 1994; Stake, 2007). In particular, if all students are expected to study the same subjects, then the influences of ‘habitus’ and teachers’ expectations is overtly challenged. Thus, there is scope for these patterns to change as norms in society (e.g. in relation to gender), occupational patterns (Francis, 2000) and the structure of the curriculum (Gamoran, 1996) change over time.

All these factors cannot be divorced from one another, as they cross over and influence the construction and distribution of knowledge. The outcome is that women’s knowledge as a valuable resource is excluded from these structures and local communities are the ones that are directly missing the benefits. The aforementioned perception of gender may lead to a reification of gender relations that splits human beings into women and men without any other possibilities of identity. However, there are ways to control and tackle any negative results of the globalisation process and gender is not so fixed; it is a flowing and changing variable (Butler, 1990). Incorporating women’s knowledge into development projects such as gender improvements towards the formal secondary curriculum, can only be a healthy conclusion to getting beyond modernist ideals. The next chapter will discuss the methodology and statistical techniques used for this study.

CHAPTER THREE

6.0.0.0 METHODOLOGY: DESIGN AND LOGISTIC CONSIDERATIONS

6.1.0.0 INTRODUCTION

The study has been carried out with the intention of exploring the students' gendered experiences and attitudes towards the formal academic curriculum at the secondary school level in Libya, in order to generate an exploration and understanding of how effective the teaching and learning processes are in delivering the school formal academic curriculum and their suitability for achieving its objectives. This aim can be investigated by keeping in view the gendered perceptions and opinions of both the students and teachers who experienced the curriculum at secondary school level in Libya. There are different methods and techniques employed to explore, elaborate or explain different angles of the phenomena.

This chapter presents the chosen methodology and justifies these particular statistical techniques and the methods adopted for the collection of data in this study. The structure of the questionnaire, interviews and the piloting along with difficulties encountered in self-completed questionnaires and the ethical considerations arising in the planning of the major process of data collection were taken into account. The final distribution of surveys, the field of research and sampling were also discussed.

This chapter further discusses the philosophical assumptions and the design strategies underpinning this research study. Common philosophical assumptions were reviewed and presented; positivism, interpretivism and critical paradigms were identified for the framework of the study. Methodological pragmatism is an emerging research paradigm in educational and social research. It is also referred to as mixed methods research. Social research aims to find out truths and reality about certain social phenomena. Some have argued that the

reluctance to combine qualitative and quantitative data has prevented researchers in the humanities and social sciences from answering research questions in a holistic way (Johnson and Onwuegbuzie, 2004).

I discuss in this chapter different research methods, namely quantitative, qualitative and mixed methods research and their strengths and weaknesses. The purpose is to provide background knowledge to methodological pluralism approach with reference to the available literature. In addition, it highlights the ontology and epistemological considerations. Then I evaluate why the methodological pragmatism/pluralism approach was necessary for this study and what are the strengths of methodological pluralism by providing a rationale for this choice. Now, before the concept of methodological approach is discussed in detail, it seems appropriate to understand the research paradigms as an understanding of research paradigms may lead to a better discussion of mixed methods research. Grix (2004) argues that methods should be viewed as mere tools for data collection and they should not be looked upon as being rooted in epistemological and ontological assumptions.

6.2.0.0 PHILOSOPHICAL AND HISTORICAL FOUNDATIONS OF PARADIGMS

Paradigms refer to a worldview that guides decision-making, encompassing one's views on the nature of reality and of knowledge, its origins and foundations. Greene (2007) viewed paradigms to be primarily philosophical; however, Leonard (2008) argued that paradigms include a researcher's practical experiences and subjective predispositions. Despite the difference, both authors agree that paradigms dictate a comprehensive worldview that guides decision-making. The literature on research processes points out that a researcher has to set out with a clear vision with regard to paradigms or worldviews, which generally provide researchers with philosophical, theoretical, instrumental, and methodological foundations that underpin the paradigms of their studies. These will shape decision-making and enable the researcher to successfully carry out the research process (Myers, 2000; Schuh and Barab, 2007).

More specifically, Dills and Romiszowski (1997, p. 11) stated: "Paradigms define how the world works, how knowledge is extracted from this world, and how one is to think, write, and talk about this knowledge. Paradigms define the types of questions to be asked and the methodologies to be used in answering them. Paradigms decide what is published and what is not published. Paradigms structure the world of the academic worker, provide its meaning and its significance". A paradigm, according to Neuman (2007, p. 41), is an "integrated set of assumptions, beliefs, models of doing good research, and techniques for gathering and analysing data". On the other hand, positivism (objectivism, and realism); interpretivism (constructivism, naturalism, idealism, and rationalism); critical theory (transformativism, and relativism); and pragmatism (functionalism) comprise the main educational research paradigms (Grix, 2004; Henn, *et al.*, 2006; Luo, 2011; Mackenzie and Knipe, 2006; Neuman, 2007;

Schuh and Barab, 2007; White, 1999). Education research is conducted to achieve different purposes and functions, such as describing, comparing, evaluating, explaining, designing, and developing elements of the teaching and learning process (Plomp, 2007). These purposes and functions can be accomplished by using different research methodologies, which refer generally to “principles, procedures, and practices that govern research” (Marczyk *et al.*, 2005, p. 22). The purpose of the following sections is to define the paradigm variety and the relationship of specific research methods to paradigms, especially for the research method used for this thesis. Many mixed method authors used the terms quantitative and qualitative in a way that conflates the concepts of data type, methods and paradigm.

For example, a closed-ended survey conducted under a post-positivist paradigm would be referred to as quantitative, while an interview conducted under an interpretive paradigm would be referred to as qualitative (Jick, 1979; Reichardt and Rallis, 1994a; Smith, 1997). This use of the terms quantitative and qualitative act as a rough proxy for the concept of a paradigm. The undefined way in which the terms quantitative and qualitative are used reflects, in part, the broad nature of the mental models, as described by Greene in her recent (2007, p. 12) book on mixed methods. Greene described mental models as “a set of assumptions, understandings, predispositions, and values and beliefs with which all social inquirers approach their work”. These models are shaped by a wide range of factors, including educational and professional experiences and personal beliefs and values.

6.3.0.0. DEFINING THREE KEY PARADIGMS ALONG A CONTINUUM

This section defines three key paradigms and situates them on a continuum. Gephart (1999) classified research paradigms into three philosophically distinct categories, as *positivism*, *critical postmodernism* and *interpretivism*. Logical positivism, post-positivism, and interpretivism are examples of paradigms which may be considered on a continuum (see the drawn line below which illustrates this more). Anchoring one end is logical positivism. Introduced by French philosopher August Comte (Yu, 2006), logical positivism holds that truth is represented by measurable, naturally occurring phenomena. In fact, logical positivism asserts that measurement is proof of existence, so if a phenomenon cannot be measured, than it does not exist (Potts, 1998).



Further, logical positivism argues that all naturally occurring phenomena can be broken down into measurable moments, which when considered together, form the whole of the phenomenon of interest and reproduce ‘truth’. Logical positivist researchers use deductive reasoning to generate theory from which specific hypotheses evolve and are tested. Inferences from experiments are then employed in theory construction and the development of natural laws (Benofske, 1995; Yu, 2006). Contemporary researchers universally agree that logical positivism consists of numerous opposing fallacies, and is dead (Reichardt and Rallis, 1994a; Shadish, 1998).

Post-positivism is a softening of the logical positivist position that has been evolving since the 1930s (Popper, 1959, as cited in Reichardt and Rallis, 1994). The post-positivist philosophy asserts that truth may be discovered, and is best

understood through objectivity, standardization, deductive reasoning, and control within the research process (Yu, 2006). Causality is a central concern of post-positivist research techniques, and is established by research design, statistical hypothesis testing, and energetically assessing alternative possible explanations for findings. The validity of inferences from findings is assessed by internal validity, external validity, reliability, and objectivity. The strengths of post-positivist research are precision, generalizability, reliability, and replicability. Post-positivist research focuses on addressing causality in research questions and is commonly considered to be well suited for confirmatory research (Shadish *et al.*, 2002). Logical positivism is recognised as the most important in the explanation of different phenomena and forms the basis for scientific evaluations where programmes and policies require realistic outcomes (Pawson and Tilley, 1997).

Mary (1994) carefully considered the shortcomings in both quantitative (post-positivistic) and qualitative (interpretive) research and suggested areas for substantive improvement in each realm. She argued that quantitative research could be enhanced and refined by considering its applicability in highly complex, unpredictable situations. She also urged quantitative researchers to consider the impact of research over-design on program development, and to avoid technically correct but sterile studies. Perhaps most convincingly, she pointed out the need for additional consideration of over-analysis and the impact of attrition on study findings.

I would argue that another area for consideration in educational research is the assumption of the independence of the subjects that underlies all inferential statistics, especially in studies where students in classrooms are considered to be the object of study. While the emergence of hierarchical linear modelling techniques and the use of mean studies address this concern, much quantitative

educational research focuses on student-level outcomes, but fails to address the inter-dependence of subjects. Overall, there is a strong and complicated relationship between theory and practice in educational research (Moore, 1982). Theory, according to Neuman (2007, p. 24), is “a system of interconnected abstractions or ideas that condenses and organises knowledge about the social world”.

Hence, Pring (2004) emphasised that educational research should generally contribute to building up the theory and, then, this theory should be put into practice. Recently, the majority of educational research literature has acknowledged that educational research is often divorced and isolated from our educational issues and daily practices (Juuti and Lavonen, 2006; Sari and Lim, 2012). Indeed, different reasons have been advanced to explain this issue; one of these reasons is that much educational research concentrates mainly on “research about education” (Juuti and Lavonen, 2006, p. 54) that aims at “understanding educational problems, rather than research for education” (Juuti and Lavonen, 2006, p. 54) that aims to bridge the gaps between the theoretical aspect and the practical aspect of research within the educational environment (Henn, *et al.*, 2006).

The third paradigm considered here is pure interpretivism, which may be found on the opposite end of the paradigm continuum from positivism. In its most extreme form, interpretive research contends that reality is constructed and that no universal truth exists. More broadly, interpretivism asserts that multiple truths exist, as determined by individuals’ unique perspectives on the world. Interpretive research, then, illuminates individuals’ perspectives and experiences. In interpretive approaches, truth is best understood through research conducted in natural settings where the researcher is close to the research participant, and through critical subjectivity and inductive reasoning (Bednarz, 1985; Smith and Heshusius, 1986).

Interpretive approaches emphasize thick description, and utilize the researcher as the chief instrument in data gathering and analysis (Van Manen, 1990). Interpretive researchers prioritize exploring the ontological, epistemological, and axiological aspects of their inquiry; as such, specific methodologies (i.e., phenomenology, social interactionism, and ethnomethodology) may be considered to have their own paradigms (Creswell, 1998). Validity may be assessed by the credibility, transferability, dependability, and conformability of findings (Lincoln and Guba, 1985). The strengths of interpretive research include a strong understanding of context, rich detail, and flexibility to address emerging issues. Interpretive research is commonly considered to be well suited for exploratory research, especially uncovering the “how” and “why” of phenomena.

Exploration of an educational phenomenon needs a blend of methods to produce rich and perceptive outcomes. Design-based research has emerged as a reaction against the failure of some traditional research methodologies to link theory and practice within educational research, and as a means of generating useful knowledge to guide educational practice (Dix, 2007; Lai *et al.*, 2009; Ma and Harmon, 2009). In addition, Parker (2011, p. 1) stated that design-based research “is being used more and more in education”, because it “combines research, design, and practice into one process, resulting in usable products that are supported by a theoretical framework” (Bowler and Large, 2008, p. 39).

Finally, there is total agreement across the research literature that design-based research is a research methodology (Herrington *et al.*, 2007; O’Donnell, 2004; Wang and Hannifin, 2005). Likewise, the Design-Based Research Collective (2003, p. 8) supported this agreement by indicating that design-based research is “a coherent methodology that bridges theoretical research and educational practice”. As philosophical advocates for mixed methods research, Patton (1990) and Tashakkori and Teddlie (1998) emphasise focusing on the research

problem in social science research and using pluralistic approaches to draw out knowledge about the problem. We can say, therefore, that mixed-methods research is a third research paradigm which legitimises “the use of multiple approaches in answering research questions, rather than restricting or constraining researchers’ choices” (Johnson, 2004, p. 17).

According to pragmatism, researchers should use an outcome-oriented rule with regards to methods; in other words, “research approaches should be mixed in ways that offer the best opportunities for answering important research questions” (Johnson and Onwuegbuzie, 2004, p. 16). This paradigmatic stance most accurately represents research that is carried out in practice, since “in real world practice, methods can be separated from the epistemology out of which they emerged” (Patton, 1990, quoted in Tashakkori and Teddlie, 2003, p. 18) and this is often what researchers do (Greene and Caracelli, 2003). These ontological and epistemological aspects are different ways of seeing the world have repercussions in most academic areas; yet, none of these views is considered to be superior to the other. Both may be appropriate for some purposes and insufficient or overly complex for other purposes. Also, a researcher may change his/her view depending on the situation.

For example, this study makes use of elements from both views and considers them as complementary. Thus, the educational researchers (Creswell, 2003; Steckler *et al.*, 1992; Tashakkori and Teddlie, 1998) have realised that educational practices are dependent on the cultural and social framework in which they function, and they are not neutral to educational policies and politics. Consequently, it is now broadly recognised that no one research paradigm can answer all the questions which crop up in educational research and, instead, there is an inclination, mainly in academic research, to merge

qualitative and quantitative methods (Blaxter *et al.*, 2001; Bryman, 1998; Cresswell, 2003; Hammersley, 2008; Johnson *et al.*, 2007).

The majority of writers in the literature on research methodologies agree that pragmatism is an appropriate paradigm for underpinning design-based research (Barab and Squire, 2004; Juuti and Lavonen, 2006). Furthermore, the term pragmatism “is derived from the Greek words ‘*pragmeîn*’ and ‘*pragma*’ (thing and fact) which literally mean ‘to do.’ The emphasis is on what is done; on outcomes rather than ideas or ideals” (Mouton, 1996, p. 8). In addition, pragmatism “was first introduced through the works of Peirce (1839–1914), and then further developed by James (1842–1910), and Dewey (1859–1952)” (Given, 2008, pp. 671-672). The pragmatic paradigm was founded by the above philosophers “in order to provide an answer to the mind-body-problem: how our immaterial mind can acquire knowledge of a material world” (Juuti and Lavonen, 2006, p. 57). This indicates that the philosophy of pragmatism is concentrated on the neutrality of truth. Thus, the pragmatists believe that “truth is found in ‘what works’ and that truth is relative to the current situation” (Given, 2008, p. 672).

6.4.0.0. THE RELATIONSHIP BETWEEN METHODS AND PARADIGMS

This section defines the relationship of methods to paradigms. The relationship between methods and paradigms is complex. On one hand, some data types and methods strongly lend themselves to best use under a specific paradigm. For example, the context, thickness of description, and richness of data required by phenomenological interviewing (an interpretive research strategy) is unobtainable through closed-ended surveys. Likewise, the reliability, validity and objectivity required by post-positivist research is impossible to obtain through phenomenological interviewing. Although the relationship of methods to paradigms is not constant, the paradigm-guided implementation of the specific

methods used in this thesis, as described previously, may be mapped onto the paradigm continuum. The 6-months follow-up questionnaire surveys embody a primarily positivistic or/and post-positivistic paradigm, while the phenomenological semi-structured interviews embody an intensive interpretive paradigm.

In contrast to the complexity of paradigms and the multiple meanings of quantitative/qualitative, the term *method* is much more straightforward. Methods are most commonly defined simply as strategies for collecting data, such as interviews, paper and pencil surveys, participant observation (Greene and Caracelli, 1997; Creswell, 2003). It is important to note that methods are not synonymous with data type. For example, a structured interview may be conducted using closed ended items under a positivist paradigm. Similarly, under a phenomenological (interpretive) paradigm, a researcher may augment experience-driven interviews with a survey that includes both closed- and open-ended items. The key point is that neither the method nor data determine paradigms, and vice versa (Greene and Caracelli, 1985; Shaffer and Serlin, 2004).

In the 1950s and 1960s, post-positivist researchers conceded that although multiple realities exist in the social sciences, and research is influenced by the values of the investigators, that there still exist some universal and knowable relationships among social phenomena. Thus, a serious research work ought to be relevant to the research questions and should be applicable to the research setting. Therefore, the pragmatism approach is used in this thesis: the 6-months follow-up surveys, and phenomenological interviews. The relationship of method to paradigm is discussed below for each of these methods.

The Surveys: The 6-months follow-up surveys used in this thesis were administered for treatment and comparison between gendered groups towards the formal academic curriculum directions at secondary schools in Libya. The

surveys were guided by a positivistic paradigm. The goal of the surveys was to obtain valid and reliable estimates of participants' gendered perceptions and experiences in the context of the formal academic curriculum. It also assessed associated attitudes in a standardized format. The aim was to draw conclusions about the impact of gender, culture and social regulations upon students' subject choice towards the formal curriculum subject directions. The focus was also designed to gather the opinions and personal indications from a larger group of populations from different geographical regions reflected in Libya's society. The goal of reaching a larger number of participants to achieve greater representation from the population reflected a more positivist approach could be obtained through interpretive methodologies such as interviews.

According to Onwuegbuzie (2000), logical positivism (i.e. objective verification of systematic data collection using statistical procedures to explain, predict and control phenomena) dominated scientific philosophy up until the late nineteenth century. Positivists lay more emphasis on explanation in social research. The real purpose of explanation is prediction (Rubinstien, 1981). The proponents of this paradigm place an emphasis on empirical theory in the production of knowledge and believe that reality can be captured by our senses and they are more concerned with fact than with value (Grix, 2004; Hughes and Sharrock, 1997).

Positivism is concerned with variables, which embrace a number of assumptions about the social world and how it should be investigated. Positivism is concerned with uncovering truth and presenting it by empirical means (Henning *et al.*, 2004, p. 17). According to Walsham (1995b), the positivist position maintains that scientific knowledge consists of facts, while its ontology considers reality as independent of social construction. Positivism produces highly specific and precise data. It provides interacting links between reality and "knowledge obtained from the links with independent assumptions

underpinning it and methods used to obtain it” (Oliver, 1992, p. 106). However, positivism lacks detailed explanation of the causes and processes of a research phenomenon. Therefore, it can be argued that the positivists’ idea about atomizing and quantifying social phenomena in society is flawed. Positivists fail to acknowledge that the world is fragmented with disorganised units that are distinct from each other and can only critically be understood through interactions. Cicourel (1964) and Kuhn (1961) argued that the weaknesses of positivism have paved the way for a new paradigm which suggests that “all knowledge is socially constructed and a product of particular historical context within which it is located” (Oliver, 1992, p. 106). Lincoln and Guba (1994) argue that positivism has some limitations, which could be doused with the use of supplementary descriptive methods, such as the interpretivist methodology (Phenomenological Interviews).

The phenomenological interviews in this study were designed to gather in-depth qualitative data about participants’ experiences of gender, culture and social regulations upon their subject choice towards the formal curriculum subject directions. Interviews were guided by a descriptive phenomenological paradigm (Giorgi, 1997; Polkinghorne, 1989; Van Manen, 1990) and addressed the phenomena that been obtained and identified in the former positivist approach. Data were analysed according to the descriptive phenomenological strategies outlined in Giorgi (1997) and Polkinghorne (1989). Parker (1969) described that phenomenology is the science and art of understanding what being human means through language and is a quest to understand the meaning of a phenomenon for those who experience it (Van Manan, 1990).

As being human is to be concerned with meaning, phenomenology is best poised to answer inquiries into the meaning and the significance of phenomena. The Human Science of Phenomenology developed in reaction to the tradition of

positivist philosophy and science that flourished and expanded to encompass both physical and social sciences in the nineteenth and twentieth centuries. Phenomenology provides an opportunity to reconceptualise the criteria for research quality and validity. In phenomenology, precision and exactness are fulfilled by interpretive description that exacts the “fullness and completeness of detail” that is discovered through closeness to the phenomenon of interest – a subjectivity realized by acute perception, insight and discernment that reveals the phenomenon in its “full richness and greatest depth” (Van Manan, 1990, p. 17).

In phenomenology, objectivity refers not to the researcher’s degree of influence on the phenomenon of study, but to the extent to which he or she remains true to the phenomenon (Van Manan, 1990). Finally, two overlapping yet distinct forms of phenomenology may be practised: descriptive and hermeneutic. Descriptive phenomenology was practised in the interviews for this thesis and is designed to elicit lived experiences, usually through interviews or written accounts, and explores the meaning of a phenomenon through a general structure and its constituents (Giorgi, 1997). While the goal of descriptive phenomenology is to discover meaning through deep and profound description, hermeneutic phenomenology uses a more interpretive approach that includes exploration of other texts, including but not limited to etymological inquiry, literature, and the experiences and reflections of the author. Despite the differences between descriptive and hermeneutic phenomenology, the two approaches share many features and are not mutually exclusive. Indeed, the primarily descriptive phenomenological approach used for the interviews in this thesis included an etymological analysis more typical of a hermeneutic approach.

However, quantitative research methods criticise interpretivists for being “soft science,” exploratory and subjective. Nevertheless, these criticisms fail to address essential issues raised by the interpretivist paradigm. In view of the

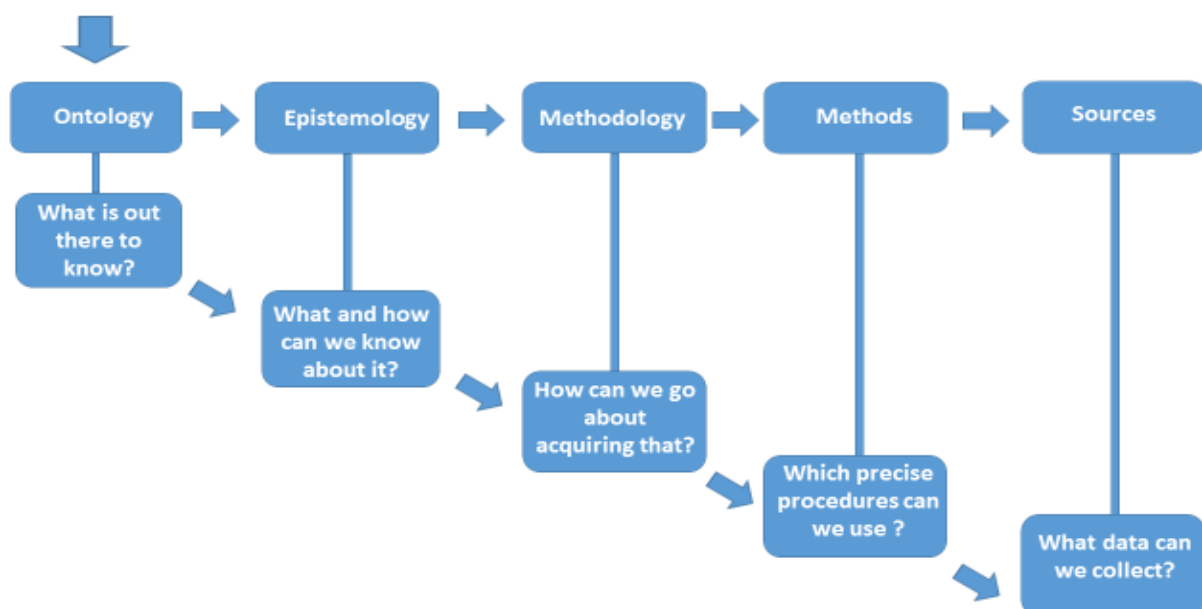
seeming shortcomings of interpretivism, it is important for any researcher to know that no single research methodology is fundamentally better than the other. Most authors have sought for a middle position (mixed approach) to research (Kaplan and Duchon, 1988). Since mixed methods research to some extent involves philosophical assumptions that guide the direction of the data collection and analysis of qualitative and quantitative approaches (Creswell and Clark, 2007), then it seems appropriate that those philosophical assumptions be outlined as they apply. This means taking into consideration the complexities of the real world, such as the varied interests, and different political settings and socio-cultural conditions.

Critical realist scholars have attempted to combine some standpoints of positivism and interpretivism (May, 2001). Social sciences can use the same methods as natural science regarding causal explanations (as in positivism) and move away from them by adopting an interpretive understanding (Sayer, 2000). Critical realists not only tend to understand, but also explain the social world (Grix, 2004). Robson (2002, p. 89) argues that critical realism is “critical in the sense that it provides a rationale for a critical social science; one that criticizes the social practices that it studies...hence adopting a critical realist stance not only provides a third way between positivism and interpretivism, but might help fulfil the emancipator potential of social research”. It can be argued that critical realists may help people change conditions and build a better world for themselves. In order to understand and explain social phenomena, we cannot avoid evaluating and criticizing societies’ own self-understanding (Sayer, 1992, p. 39).

A paradigm hence implies a pattern, structure and framework or system of scientific and academic ideas, values and assumptions (Olsen *et al.*, 1992, p. 16). Methods refer to the techniques or procedures used to generate and analyse data (Cohen *et al.*, 2007; Grix 2004). Sources are the responses to the methods

used in a study. These may be responses to a questionnaire or semi-structured interview transcripts. If we look at the following diagram below on interrelationships, it seems that ontology is the starting point of research. Views about reality define epistemological assumptions and the methods to be used in the study. My purpose of presenting the building blocks of research is that each paradigm of research has some distinct assumptions about the nature of reality and how it may be known and what types of methods may be used to find out the reality.

FIGURE 1.3 BELOW ILLUSTRATES THE INTERRELATIONSHIP BETWEEN THE BUILDING BLOCKS OF RESEARCH (Grix, 2004, p. 66).



All research paradigms are based on certain ontological and epistemological assumptions. Now, before describing the concept of mixed methods research design utilized in this study, it is helpful to provide the philosophical assumptions that guide how the direction of the data collection and analysis of mixed methods designs has evolved. Creswell and Clark (2007) stress that it is important for mixed methods researchers to discuss the philosophical foundations of the methodological approach at the beginning of their study. Thus, this is presented in the following section.

6.5.0.0. ONTOLOGICAL AND EPISTEMOLOGICAL CONSIDERATIONS OF MIXED METHODS RESEARCH

Ontology is concerned with the nature of reality. It tries to answer ‘what is real?’ The central point of orientation here is the question of whether social entities can, and should, be considered objective entities that have a reality external to social actors, or whether they can, and should, be considered social constructions built up from the perceptions and actions of social actors (Bryman 2008, p. 18). Ontological assumptions lead to the epistemological standpoint. Blaikie (2000, p. 8) elaborates epistemological assumptions, as “the possible ways of gaining knowledge of social reality whatever it is understood to be In short, claims about how what is assumed to exist can be known”. In contrast, epistemology is the theory of knowledge, especially about its validation and methods used (Walliman, 2005, p. 432).

An epistemological issue concerns the question of what is, or should, be regarded as acceptable knowledge in a discipline (Bryman, 2008, p. 13). It is trying to answer the questions of ‘what we know’ and ‘how can we know the reality?’ A particular central issue in this context is the question of whether the social world can, and should, be studied according to the same principles, procedures and ethos as the natural sciences. An understanding of epistemology is, therefore, necessary in order to recognise what different kinds of knowledge there are, generated by different kinds of research strategies and in different paradigms (Hindley, 1999, p. 69). Thus, Williams and May (1996, cited in Walliman, 2005: 188) suggest that all philosophical positions and their attendant methodologies, explicitly or implicitly, hold a view about social reality. This view, in turn, will determine what can be regarded as legitimate knowledge. Thus, the ontological shapes the epistemological.

While ontological positions demonstrate researchers' view about the nature of social reality, the epistemological position, on the other hand, reflects their opinion of what can be known about the world and how it can be studied. In fact, the main concern of epistemology is to understand social reality, to take a position, and to identify ways of studying it (Marsh and Furlong, 2002). For example, a particular researcher may argue that there is no such thing as a "real" world existing independent of the conception and meaning actors attach to their actions and inactions. Thus, this kind of view would apparently suggest that no researcher can be 'objective,' because he/she lives in a social world and is affected by the social construction of reality.

The other related epistemological issue is, if a researcher can establish a relationships between social phenomena, can it be done through direct observation or are there some relationships which cannot directly observed? Hence, answers to these questions shape a researcher's epistemological position concerning the best methods of studying a "real" relationship existing in a social reality. The main ontological questions, according to Ritchie and Lewis (2005), include: whether or not social reality exists independently of human conceptions and interpretation; whether there is a common-shared-social reality or just multiple context specific realities; and whether or not social behaviour is governed by "laws" that can be seen as unchallengeable or generalizable.

In similar phrasing, Norgaad (2008) explicitly further questioned whether it is really possible to establish common standards for good social science research. Do such decisions about standards not merely become a positioning of certain perspectives on the philosophy of science, ontology, and epistemologies? Broadly speaking, all of these are similar questions. Although these methodological and philosophical issues can create tension due to methodological dilemmas, they can also serve as the basis for addressing such anxieties.

Importantly, it helps in avoiding being trapped into self-delusion, as critical understanding of one's ontological and epistemological perspectives is the beginning of a strategic confrontation with the monster. For example, Marsh and Furlong (2002, p. 17) argue that each social scientist's orientation to his/her research or subject discipline is shaped by his/her ontological and epistemological position. These positions either implicitly or explicitly shape the approach to theory and the methods employed by his/her students. This is the simple reason why such researchers should be able to conduct a very good research study that provides new insights and contributes to policy, theory building and/verification. What constitutes acceptable knowledge underpinning epistemology and the status of knowledge is two broad traditions, namely positivism and phenomenology, which both offer contrasting epistemological approaches (Haralambos and Holborne, 2008).

According to Smith (2008, p. 682), "Positivism is a methodological position reliant on an empiricist epistemology which grounds our knowledge of the world in justification by experience and thereby licensing methodology and ontology in so far as they are empirically warranted". Therefore, there is no way of choosing between different systems of classification and seeing one as superior to another. There is a link between ontological and epistemological assumptions. Our views of reality are likely to define our epistemological standpoints. Grix (2004) presents a somewhat mechanistic interrelationship between ontology, epistemology, methodology, methods and sources. It is for the purpose of clarity which may help the researcher to understand his stance. Methodology translates the principles of a paradigm into a research language, and shows how the world can be explained, handled, approached or studied (Grix, 2004).

6.6.0.0 METHODOLOGICAL ORIENTATION

Ontology, epistemology, methodology, and methods characterise any research paradigm (Creswell, 2007; Guba and Lincoln, 1994). In this context, ontology is “the starting point of all research” (Grix, 2004, p. 59). “Epistemology should inform methodology, which in turn, informs methods” (Henn *et al.*, 2006, p.18). Therefore, the preceding sections of discussion have been started with an overview of building blocks of research. I did so because all research is based on some underlying philosophical assumptions about what constitutes ‘valid’ research and which research method(s) is/are appropriate for the development of knowledge in a given study. As with any other research methodologies, design-based research faces different challenges that might threaten the rigour of its findings (Design-Based Research Collective, 2003; Dix, 2007; Juuti and Lavonen, 2006; Plomp, 2007). These are reflected in data collection and analysis techniques, which represent “the heart of rigour” (Hoadley, 2004, p. 203).

Accordingly, the Design-Based Research Collective (2003) indicated that design-based research is ‘empirical research’, so the objectivity, validity, and reliability are all necessary to make the findings of design-based research meet acceptable standards. Therefore, the current research data has been collected by a pragmatism approach/mixed methods approach, because positivism and interpretivism methods complement each other. While an interpretive approach explicitly allows for the discovery and discussion of multiple truths, the theory underlying the mixed methods is that diverse data collection methods and approaches more fully capture the latent truth(s) of a phenomenon, and provide better evidence for decision making. In the synthesis of results from this thesis, I did search for the most meaningful evidence that explicates the multiple truths that I believe underlie a more optimized practice of mixed methods.

In the context of mixed methods evaluation, it may be useful to consider alternative criteria by which the quality and rigour of mixed method studies may be judged. Patton (2002) suggested *The Program Evaluation Standards* (Joint Committee, 1994) as a criterion. As the mixed method studies utilized in this thesis were conducted as policy evaluations for a non-profit organization, the *Standards for Program Evaluation* are relevant to the studies explored in this project. Patton (2002) described the development of the standards from the inception of the field of evaluation in the social programs developed by the Great Society in the 1960s. The Standards are the most widely used criteria for evaluation quality within the field. However, in 1995, the American Evaluation Association developed a set of five guiding principles for evaluators. These principles include systematic inquiry, evaluator competence, integrity / honesty, respect for people and responsibilities for general and public welfare. These principles are often used jointly with the Standards.

The extent to which the mixed method studies adhere to the Standards of Program evaluation mirror the summary above. This is because the pragmatic mixed method study combines the qualities of a self-completion survey and phenomenological interview methods, because the surveys stay constant in both mixed method studies. Pragmatists argued that a false dichotomy existed between qualitative and quantitative approaches, and researchers should utilize the strengths of both paradigms to provide a more complete understanding of educational and social phenomena. Pragmatists held that objective reality might exist, but that the human mind was incapable of the objectivity required to discover such reality. They utilized both inductive and deductive logic and valued both objective and subjective points of view. The advocates of this argument present mixed methods research as the third research paradigm, with pragmatism as its underlying philosophy (Johnson and Onwuegbuzie, 2004; Tashakkori and Teddlie, 2003). The concept of mixing methods was introduced by Camp-

bell and Fiske in 1959 to study psychological traits (Cresswell, 2003; Johnson *et al.*, 2007). Researchers are increasingly advocating that mixed methods research be viewed as a third approach along with qualitative and quantitative designs.

6.6.1.0. MIXED METHODS RESEARCH

The purpose of this section is to introduce the development of mixed methods methodology in order to illustrate the role of paradigms in the field and the development of the pragmatic approach to mixed method research and evaluation. Tashakkori and Teddlies' (2003) review, in addition to the review of other authors (Datta, 1994), suggested that researchers employing mixed methods in the early to mid-20th century did not identify their work as belonging to the field of mixed method research, nor did they critically reflect on how, or under what circumstances, methods from different research traditions might be mixed. The intentional use of mixed methods and research in the methodology has only recently coalesced into a field of study. Use of mixed methods has been most prominent in applied fields, such as evaluation (Greene, 2007; Greene and Caracelli, 1997); health sciences (O'Cathain, 2009); and, more recently, education (Day *et al.*, 2008), as researchers seek to meet the information needs of a stakeholders with diverse opinions about the credibility of different evidence types.

Over the past three decades, a greater acceptance of qualitative methods has emerged and resulted in a recognition of the value of using diverse research strategies to answer research questions and guide decision making. Mixed methods has become a valuable tool in this context. Explication of the methodology of mixed methods has primarily occurred in academic journals concerned with evaluation, especially *New Directions in Evaluation* and *The American Journal of Evaluation*. However, the last five years has seen an explosion of

scholarship on the topic. Tashakkori and Teddlie published their handbook on mixed methods in 2003, followed by Creswell and Plano (2007) and Greene (2007). Also in 2007, the first issue of the *Journal for Mixed Methods Research* was published. At the same time, the field is struggling to identify a philosophical framework to guide it. While post-positivism and interpretivism draw from rich traditions of theory and practice, the practice of mixed methods has yet to develop a coherent theory driving it, despite claims that mixed methods is the third research paradigm (Johnson and Onwuegbuzie, 2004).

The primary theoretical approach to mixed methods has been the dialectic approach (Greene and Caracelli, 1997), which seeks to gain insight by juxtaposing methods conducted using clearly defined and diverse research paradigms. An evolving and growing body of work is focusing on a pragmatic approach to mixed methods which challenges the primacy of Greene and Caracelli's dialectic stance. The lack of a coherent philosophical framework for mixed methods has left the field straddling the domains of quantitative research methodology, qualitative research methodology, evaluation, and the content of fields such as health sciences and education.

A coherent theory for mixed methods research is a necessary step in the growth of the field. Johnson and Onwuegbuzie (2004, p. 56) present a definition: "mixed methods research is formally defined here as the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study". This definition goes beyond quantitative and qualitative data or methods or techniques. The use of a mixed method approach facilitated the researcher to produce quantifiable data and, at the same time, enabled him to enrich and validate the research with the qualitative study. This study uses the definition as described by Creswell and Clark (2007, p. 5), since it represents one of the more

current writings in the field: “Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process. As a method, it focuses on collecting, analysing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone” (Creswell and Clark, 2007, p. 5).

Since mixed methods research is an integration of different research methods, it looks reasonable in timing to first introduce the quantitative and qualitative methods ‘sequentially’ as they have been applied in this study. The mixed method research design used in this study most closely resembles what Creswell and Clark (2007) describe as an Exploratory Sequential Mixed Methods Design. Many mixed methods researchers have contributed to the emerging mixed methods design classifications (e.g., Creswell, 1999; Creswell *et al.*, 2003, 2004; Greene and Caracelli, 1997; Morgan, 1998; Morse, 1991; Patton, 1990; Sandelowski, 2000; Steckler *et al.*, 1992; Tashakkori and Teddlie, 1998, 2003b) Studies such as those from Tashakkori and Teddlie (2003) and Johnson and Onwuegbuzie (2004) offer evidence that mixed methods research is increasingly viewed as a third stream along with its qualitative and quantitative counterparts.

In education, two mixed-methods researchers (Fitzpatrick, 2008; Lee, 2007) have discussed the philosophical underpinnings and pragmatic world-view. One of the ways to assert the significance of methodological pragmatism is to discuss how mixed methods can be useful in a study to give us a better and whole picture of the social world. There are various trends of mixed methods (Teddlie and Tashakkori, 2003). One definition of mixed methods research is

that it is “the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study” (Johnson and Onwuegbuzie, 2004, p. 17). In the recent literature, the definition is widened to a multiple set of studies (see, e.g., Creswell and Plano Clark, 2007); they also add to this definition that “Its [mixed methods research] central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone” (p. 5). Therefore, mixed methods research is quiet being defined and defined by the researchers who conduct such research and by the specialists who write about it (Tashakkori and Teddlie, 2003).

The formative period (1959-1979). By the late -950s the social sciences community was receptive to mixing methods as a means to triangulate data. They valued using multiple (quantitative) methods with offsetting strengths and weaknesses to examine the same phenomenon. According to many accounts (Creswell, 2009; Creswell and Clark, 2007; Greene, 2007; Onwuegbuzie, 2000), it was Campbell and Fiske (1959) who first introduced the idea of using multiple quantitative research methods as a source of triangulation. Later in the formative period (1960s and 1970s), researchers began combining surveys and interviews and, finally, qualitative and quantitative techniques.

Paradigm debate period (1985-1997). During the mid-1980s to the mid-1990s researchers continued discussing whether qualitative and quantitative data could be combined (Creswell and Plano Clark, 2007). Prior to this time, many qualitative researchers maintained that the two approaches assumed different worldviews and thus, were incompatible. Rossman and Wilson (1985) referred to those who believed the two methods to be incompatible as purists, those who adapted their methods to the situation as situationalists, and those who believed

that research problems could be addressed using a variety of lenses as pragmatists. Pragmatic researchers (e.g., Bryman, 1988; Caracelli, 1997; Reichardt and Rallis, 1994) challenged the notion of incompatibility, suggesting connections between the two paradigms, and urging researchers to move beyond the paradigm debate.

The procedural development period (1989-2000). In the 1980s and 1990s, researchers began to define types of mixed methods systems and describe procedures for conducting mixed methods research (Creswell and Clark, 2007). For instance, Morse (1991) described simultaneous and sequential triangulation. With simultaneous triangulation, quantitative and qualitative data is collected independently. The findings complement one another at the interpretation stage. With sequential triangulation, the results of one method inform the planning of the next method, as in the case in this study. Later researchers, such as Creswell (1994), elaborated on this classification system.

Advocacy as a separate design period (2003-present). Creswell and Plano Clark (2007) point out that there has recently been a surge of mixed methods studies. Further, mixed methods researchers are increasingly advocating that mixed methods research be viewed as a third approach along with qualitative and quantitative designs. Studies such as Tashakkori and Teddlie (2003), and Johnson and Onwuegbuzie (2004) offer evidence that mixed methods research is increasingly viewed as a third stream along with its qualitative and quantitative counterparts. In his research design text, Creswell (2009) illustrates qualitative, quantitative, and mixed methods research as three separate approaches throughout the book.

Some researchers prefer to use the mixed methods approach by taking advantage of the differences between quantitative and qualitative methods, and combining these two methods for use in a single research project, depending on

the kind of study and its methodological foundation (Bryman and Burgess, 1999, p. 45). Creswell (2003, p. 165) attempts to define a mixed methods study as “the collection or analysis of both quantitative and/or qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process of research”. Since exploration of an educational phenomenon needs a blend of methods to produce rich and perceptive outcomes. Johnson and Onwuegbuzie (2004) promote methodological multiplicity to carry out effective research; every method of research has certain limitations, and the use of mixed methods can help in balancing the negative aspects of one with the positive aspects of the other.

Foster (1996, p. 9) has pointed out “the rich, detailed, meaning-centred accounts produced by qualitative methods must be supplemented by information on frequency, duration and intensity produced by quantitative methods, and vice versa”. This trend of blending qualitative and quantitative methodologies has given rise to a third paradigm, ‘mixed-methods research’. By positioning itself in pragmatism, mixed method research “attempts to fit together the insights provided by qualitative and quantitative research into a workable solution” (Johnson and Onwuegbuzie, 2004, p. 16). Furthermore, mixed methods research encourages researchers to use multiple approaches to collecting and analysing data within a single study (Creswell and Clark, 2007), recognising the limitations of using a single method. Nonetheless, it is the researcher’s task to examine the specific contingencies and make the decision about which research approach, or which combination of approaches, should be used in a specific study.

Quantitative methods are generally based on a positivist paradigm and qualitative methods are based on an interpretive paradigm. In this study, research methods associated with quantitative research were questionnaires,

whereas methods associated with qualitative research were semi-structured interviews. This means that the researcher studies things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to him (Denzin and Lincoln, 2000, p. 3). Qualitative information can be explained in quantitative terms and the quantitative data can be explained in qualitative terms (Blaxter *et al.*, 2001). The researchers who use a pragmatism approach use both qualitative and quantitative methods in their research and have the advantage of integrating the potential of both the quantitative and qualitative methods. Bell (1991) argues that selecting the appropriate instrument depends on the nature, context, aims and the number and kind of respondents in the study. In the context of this particular research, the implementation of both qualitative and quantitative methods is important because quantitative research enabled the researcher to set up a relationship amongst the variables under study. Qualitative approach can shed light on the lived experiences of Libyan secondary school students and the relationship between their religious identities, gender role beliefs, and cultural backgrounds.

A qualitative study can also be a useful methodology to use for studying populations and phenomena that have yet to be examined. Therefore, the descriptive information provided in the current study can provide useful data that can inform quantitative studies on gender, culture and religion among secondary school students in Libya. Gender, culture and religion were addressed in the current study from a social constructionist paradigm that recognises the importance of understanding the meaning that is given to social constructs by populations of interest.

The value of this study is also that it explores the two competing theories of mixed methods currently in the field (pragmatic), in an effort to guide further theoretical development of mixed methods methodology. It is hoped that an

empirical comparison of the two theories based on a real-world evaluation would assist researchers and evaluators to optimize their use of mixed methods. In this quest, this study also probed the underlying assumptions, strengths and weaknesses of mixed methods research.

6.6.1.1. STRENGTHS AND WEAKNESSES OF MIXED METHODS RESEARCH

An advantage of using mixing methods is the flexibility that the evaluator has in choosing the most appropriate methods for obtaining information during the evaluation process. On the other hand, mixing methods provides both statistical data, which are easier to remember and to use into the rhetoric of the decision makers, and qualitative analysis that capture the depth of the studied phenomena, which constitutes a base for the discussions of the experts and practitioners, in refining the adapted interventions to the specific or typical cases and strengthening the credibility of using qualitative methods of data collection and their customization in context. One of the requirements of evaluation is related to data credibility and the conclusions generality: "the evaluator is forced to offer both reliability and generality" (Chen, 1997, p. 69); that is why, mixing methods can be an evaluation strategy that helps in meeting those demands of scientific rigour. This should also help in understanding why the two approaches should be combined.

Thus, the reasons for combining methodological approaches in evaluation and exploring gender in education researches include: (a) using one method does not allow the researcher to address all aspects of the research questions and objectives; and (b) using a variety of methods may increase the validity of research as one method serves as a check on another (Johnson and Onwuegbuzie, 2004; Read and Marsh, 2002). The major issue in combining is to note that the quantitative approach is about breadth while the qualitative approach is about depth. Thus, the three ways to combine the two approaches

for complementarities in poverty research are: (a) integrating the quantitative and qualitative methodologies; (b) examining, explaining, confirming, refuting and/or enriching information from one approach with that from the other; and (c) merging the findings from the two approaches into one set of policy recommendations (Carvalho and White, 1997; Johnson and Onwuegbuzie, 2004). Moreover, Johnson and Onwuegbuzie (2004, p. 21), strong proponents of mixed research, present the strengths and weaknesses of mixed methods research. If we analyse those strengths and weaknesses of mixed methods research, it is clear to us that this type of research has all the strengths of quantitative and qualitative research. Interestingly, the weaknesses are not those types of weaknesses which cannot be minimized. All the weaknesses are concerned with time, resources and training. These weaknesses are not important ones as compared to quantitative and qualitative methods. These may be overcome by the researchers or the organization which is conducting the research. Jick (1979) states that the use of multiple methods can minimize some of the disadvantages of qualitative and quantitative methods. Greene and Caracelli (1997) argue that mixing different types of methods can strengthen a study. In my view, it has more advantages than disadvantages.

The disadvantages seem to be of a strategic nature. The greatest weakness may be the tension between the paradigms. It may be difficult for researchers (particularly those who hold rigorous philosophical standpoints) to accept methods from competing paradigms. There seems to be a consensus among a number of important writers to use multiple methods in a single study. However, there is still an ambiguity regarding the mixing of paradigms. Although the concept of 'pragmatism' is supported by various writers (see Davis, 2009; Grant, 2009; Johnson, 2004; Moren, 2006; Morse and Chung, 2003), the debate is still going on as to whether it is reasonable to mix paradigms or not. In sum the using of methodological mix for the program

evaluation offers several advantages, capable to overcome difficulties and rhetoric in terms of quantitative and qualitative dispute. In the next section, I will discuss the rationale of methodological pluralism: mixed methods research.

6.6.2.0. THE RATIONALE FOR USING THE METHODOLOGICAL APPROACH OF MIXED METHODS RESEARCH

Creswell and Clark (2005) argue that it is important for mixed method research to be driven by the research questions, and for this reason it is especially important for researchers to address the rationale for collecting both types of data and using a mixed methods design. When methods are used without a clear rationale, researchers can end up answering the wrong question, or failing to answer a question at all. Providing a rationale allows the reader to see how the research questions drove the research design. Developing a well-structured rationale stating the need for collecting quantitative and qualitative data is an important part of designing and conducting mixed methods research (Creswell and Clark, 2007).

The exploration of gendered attitudes and experiences of students' towards the formal academic curriculum is a complex issue and the use of either quantitative or qualitative approaches by themselves is argued to be inadequate to address this complexity. Additionally, there is more insight to be gained from the combination of both qualitative and quantitative research than either form by itself. Their combined use provides an expanded understanding of research problems and helps to address them comprehensively and adequately (Creswell 2009, p. 203). The following reasons exist for collecting both types of data using a mixed methods design in this study.

1. Using mixed methods research provides both statistical data, a quantitative analysis which is easier to remember and to use in the rhetoric of the decision makers, and a qualitative analysis that captures

the depth of the studied phenomena, which constitutes a base for the discussions of the experts and practitioners in refining the adapted interventions to the specific or typical cases (Cresswell *et al.*, 2008; Martens, 2003; Newman and Benz 1998). That is why the methodological mix offers both the opportunity to meet the requirements of the generalization of results (based on the use of probabilistic samples) and strengthening the credibility of using qualitative methods of data collection and their customization in context.

2. Using a positivist analysis and an interpretive analysis informs one another. This refers to the sequential application of various research methods that has different purposes and functions. Interpretivist and positivist analyses, as we define them, are not only compatible within the same set of data; but also they may each help to achieve the goals of the other. An interpretive understanding of communities is always informed by a number of hard, objective facts, which help the analyst make sense of the subjective viewpoints of their respondents. Basic background information about the political climate, culture or social change in a community is necessary to provide an informed account of the respondents' views on those same matters (Newman, 1988).
3. Therefore, the quantitative and qualitative approaches were used in the exploration of the research phenomena because of the following elements: Subject evaluations and comparisons to identify trends and patterns in whatever dimensions are measured; cross-section evaluations between different individuals of gender groups across regions of the country. It estimates the prevalence and distributions within populations.
4. One of the requirements of evaluation is related to data credibility and the conclusions' generality: "the evaluator is forced to offer both reliability

and generality” (Chen, 1997, p. 69); that is why mixed methods used, as an evaluation strategy, helps in meeting those demands of scientific rigour.

5. The use of a mixed method approach facilitated the researcher to produce quantifiable data and at the same time enabled him to enrich and validate the research with the qualitative study. As Shih (1998) notes that combining research methods is important to increase the validity of data. Freshwater (2007, p. 78) also argues that “perhaps it is important to cross-validate results (Read and Marsh, 2002), but I believe that the rationale and significance of cross-validation is also highly dependent on the motivation for research and the energy moving the desire for accuracy”. Yes, of course, motivation is necessary but I think it is required for the whole research process, not only for using mixed methods. Cherryholmes (1992) is of the view that researchers need to find out the practical solutions of the problems. Hence, the use of both quantitative and qualitative methods is a way to best understand research problems.
6. Methodological pluralism and linkages with qualitative data provided results whose reliability is measurable, including: richer data for the formulation and implementation of curriculum policies and programmes; clear understanding of the multidimensionality and complexities of curriculum issues; insight into how individuals conceive and understand curriculum directions; understanding the contextual nature of gender and curriculum policies; more accuracy and depth of information on certain questions; and accurate evaluation of curriculum policies (Greene and Caracelli, 1997, p. 7).
7. Using one method does not allow the researcher to address all aspects of the research questions and objectives; and using mixed methods is likely to increase the validity of research as one method serves as a check on the

(Read and Marsh, 2002). One of the strengths of conducting mixed methods research, as opposed to two separate studies, is that the methods (should) be mixed to provide complementary strengths and non-overlapping weaknesses (Johnson and Turner, 2003).

8. The major issue in combining is to note that the quantitative approach is about breadth, while the qualitative approach is about depth. Thus, the three ways to combine the two approaches for complementarities in curriculum education research are: (a) integrating the quantitative and qualitative methodologies; (b) examining, explaining, confirming, refuting and/or enriching information from one approach with that from the other; and (c) merging the findings from the two approaches into one set of policy recommendations (Carvalho and White, 1997).
9. Morse and Chung (2003) argue that adding data collection strategies clearly increases the scope of the project. For instance, combining qualitative and quantitative methods provides a more balanced perspective, moving toward holism. Recognition of the relevance of paradigmatic and epistemological pluralism in cognitive behavioural work would, it is argued, offer considerable advantages to our practice communities and clients (Grant 2009, p. 368). If such studies include both quantitative and qualitative strategies, we have more chances of revealing their deep structure and characteristics, consequences and other experiences.
10. Given the increasing usage of the combination of qualitative and quantitative approaches, today there is a general drive towards complementarities as a way of dousing the tension created by the false dichotomy and maximising the utility of the two approaches. Creswell (2009) observes that today with the development and perceived

legitimacy of the two approaches, mixed methods has now gained wider popularity.

11. Mixed methods offers a solution to reduce conflicts between positivism and constructivism. The social reality is extremely complex, therefore, its investigation requires the use of combined methods to capture as accurately as possible this complexity. Regardless of the chosen research method, using only one of these limits the data collection and their diversity; any method individually used introduces a series of errors, and the perspective of mixed methods aims to reduce these (Greene and Caracelli, 1997) and the clarification of evaluation limits (House, 1994).
12. Methodological pluralism is an appropriate basis for the study of human behaviour and experience. It is open to the full range of human experience, combining quantitative and qualitative research methods, valuing phenomenological reports as a key source of data, and provides a systematic means to evaluate the adequacy, truth-value, consistency, and neutrality of research. Methodological pluralism avoids the limitations of a narrow scientism with its exclusionary dependence on natural science methods, yet it furthers the basic goals and values of science (Davis, 2009, p. 21).
13. Combining different research methods overcomes the classical logic of the rivalry between quantitative and qualitative methods, and Datta (1994) considers that mixed methods will be the future dominant methodology, because it combines the strengths of each method (quantitative and qualitative). In the same tone, Chen (1997) affirms that when we combine different methods, their weaknesses are reduced, and this evaluation strategy can help to extend the purpose of evaluation using the triangulation of methods.

Several mixed method theorists have argued that integrating single methods in a mixed method study generates fresh insights above and beyond the side-by-side presentation of findings from two or more single methods. (Barbour, 1999; Greene, 2007; Sandelowski, 1995; Tashakkori and Teddlie, 2003). The pragmatic mixed method studies produces unique conclusions on important research questions, above and beyond single methods presented side-by-side. It is not surprising that post-positivistic surveys produce more narrow and precise findings, while interpretive methods produce more findings on a greater variety of topics and illuminate how and why relationships occur (O’Cathain *et al.*, 2007; Johnson and Onwuegbuzie, 2004).

Additionally, mixed methods appears better able to more fully elaborate complex phenomena than single methods. Single method findings (both post-positivist and interpretive) fail to produce patterns of findings with the same complexity as mixed methods. Taken together, this study illustrates the advantages mixed methods may have over single method studies. Moreover, by using mixed approaches, a researcher can overcome the weakness of one approach by utilising the strengths of the other, thus enhancing the validity of a piece of research. As the role of culture is also difficult to capture using only quantitative methodologies, a qualitative study can, in this matter, help to explain the reasons behind the broad relationships that are developed.

Religion, gender and culture are multifaceted phenomena that should be explored through multiple methodological lenses (McFarland, 1984). Using a positivist approach to answer questions about a contested event, that ‘breaches’ social norms, can also serve as a window into otherwise hidden viewpoints. Deeper cultural understandings or social cleavages may reveal themselves in those explanations about the events’ causes. Conversely, an interpretivist analysis can inform a positivist analysis by providing a more complete

understanding of the social milieu in which individuals live. The subjective perspectives of actors can point to direct factors. These are actions that are guided by socially constructed understandings of meaning, and it is these systems of meaning that the interpretivist analysis helps us to clarify. Furthermore, mixed method research attempts to fit together the insights provided by qualitative and quantitative research into a workable solution. As Foster (1996, p. 9) has pointed out: “The rich, detailed, meaning-centred accounts produced by qualitative methods must be supplemented by information on frequency, duration and intensity produced by quantitative methods, and vice versa”.

THE FIGURE 1.4 BELOW ILLUSTRATES THIS TREND OF BLENDING QUALITATIVE AND QUANTITATIVE METHODOLOGIES HAS GIVE RISE TO THIRD PARADIGM, ‘MIXED-METHODS RESEARCH’.

Pragmatic Claims	Implications
No one system of philosophy and reality	Engage in both qualitative and quantitative methods in research.
World is not an absolute unity	Use many approaches to collect and analyse data.
Truth is what works at the time	Use of qualitative and quantitative data for comprehension of problem.

Since this research is also focused on the improvement of professional education practices, a mixed-method approach has been followed which enables the use of different and appropriate methods to answer the current research questions (see p. 25 of this thesis). We can say, therefore, that mixed-methods research is a third research paradigm which legitimises “the use of multiple approaches in answering research questions, rather than restricting or constraining researchers’ choices” (Johnson and Onwuegbuzie, 2004, p. 17).

The researchers who use a pragmatic approach use both qualitative and quantitative methods in their research have the advantage of integrating the

potential of both methods. Thus, in the context of this particular study, the implementation of both qualitative and quantitative methods was important because quantitative research enabled the researcher to set up a relationship patterns amongst the variables under study. A qualitative study could, in this matter, help to explain the reasons behind the broad relationship patterns that are developed. The preceding discussion makes a strong case for the popularity of mixed methods research in future. The following summary description shows the differences in the quantitative and qualitative approaches and views the strengths and weaknesses of both types, quantitative and qualitative methods.

SUMMARY DESCRIPTION OF DIFFERENCES IN QUANTITATIVE AND QUALITATIVE APPROACHES

Orientation	Quantitative	Qualitative
Assumption about the world	A single reality, i.e., can be measured by an instrument.	Multiple realities
Research purpose	Establish relationships between measured variables.	Understanding a social situation from participants' perspectives
Research methods and processes	Procedures are established before study Begins. A hypothesis is formulated before research can begin. Deductive in nature.	Flexible, changing Strategies. Design emerges as data are collected. A hypothesis is not needed to begin research. Inductive in nature.
Researcher's role	The researcher is ideally an objective observer who neither participates in nor influences what is being studied.	The researcher participates and becomes immersed in the research/social setting.
Generalizability	Universal context-free generalizations	Detailed context-based generalizations

6.6.2.1. STRENGTHS AND WEAKNESSES OF QUANTITATIVE RESEARCH

- It aims to classify features, count them, and construct a statistical model in an attempt to explain what is observed;
- A researcher knows exactly what he/she is looking for and where to get it;
- It is employed during latter stages of research;
- All stages of the research are carefully designed before data is collected;
- It employs instruments such as questionnaires, or equipment to collect numerical data (Johnson and Onwuegbuzie (2004);
- Data are in the form of numbers and statistics (Abbas, 2006; Punch, 2004);
- It seeks precise measurement and analysis of target concepts, such as use of survey and questionnaires (Read and Marsh, 2002, pp. 231-248);
- Quantitative data is more efficient to test hypothesis accurately; and
- It is value-free and objective.

In spite of its distinguishing strengths, quantitative research methods are attacked for their lack of rigour, ignoring the reality of the social world of the researched, lying with figures and numbers, neglecting socio-cultural contexts of phenomena, employing ad hoc procedures in defining, counting and analysing variables, as numbers themselves need qualitative explanations, and so on. For instance, numbers do not provide any detailed explanation of a research phenomenon. Even where numbers are used, they need qualitative explanation to adequately flesh them out. While qualitative research tends to take the socio-cultural settings and orientations of research objects on board, quantitative research hardly does it this way. Silverman (2000) sharply stresses that quantitative research suggests a “quick-fix” for the following reasons: it (a) involves virtually no contact with the participants; (b) statistical correlations

might be only based on variables that are arbitrarily defined; (c) it relies on after-the-fact speculation of the meaning of correlations; (d) unperceived values may creep into the research due to over-dependence on measurement; and (e) over-reliance on the test of hypotheses can make the development of hypotheses a trivial matter and consequently fail to help in generating hypotheses from the data.

6.6.2.2. STRENGTHS AND WEAKNESSES OF QUALITATIVE RESEARCH

Qualitative methods are generally based on the interpretive paradigm. Positivism and interpretivism have fairly different viewpoints about the nature of social reality and knowledge of reality. Therefore, qualitative research has different types of strengths and weaknesses as compared to quantitative research. Maxwell (1998:66) enumerates the following five strengths of qualitative research purposes for which qualitative studies are particularly useful:

- Understanding the meaning that participants in a study give to the events, situations and actions that they are involved with; and of the accounts they give of their lives and experiences;
- Understanding the particular context within which the participants act, and the influence this context has on their actions;
- Identifying unanticipated phenomena and influences, and generating new, grounded theories about them;
- Understanding the process by which events and actions take place; and
- Developing causal explanations.

However, Johnson and Onwuegbuzie (2004, p. 19) present some weaknesses of qualitative research as follows:

- Knowledge produced may not generalize to other people or other settings (i.e., findings may be unique to the relatively few people included in the research study).
- It is difficult to make quantitative predictions.
- It is more difficult to test hypotheses and theories.
- It generally takes more time to collect the data.
- The results are more easily influenced by the researcher's personal biases and idiosyncrasies.

Undoubtedly, treating qualitative and quantitative research methods, both theoretically and in application, for the study of any social science phenomena as two separate entities would create serious and seemingly incompatible tensions. Silverman (2000, p. 11) argues that the dichotomy which exists between qualitative and quantitative approaches, and indeed, any dichotomies that exist in social science disciplines in general, are 'highly dangerous', resulting in researchers being unwilling to learn from each other. Instead, he advocates that researchers should be seeking to build bridges between different social science traditions in an effort to move disciplines forward by sharing ideas (Silverman, 1993, 1997, 1999, 2000, and 2001). Each of methods has its major strengths and weaknesses. Counting on the strengths of one research method might not necessarily nor completely disprove its weaknesses, nor would it utilise the strengths of its counterparts. In other words, no amount of qualitative techniques would address the utility of quantitative research and vice versa. In fact, based on this understanding, most empirical research today has acknowledged the two methods' indispensable role in social sciences and that they can best be combined to an advantage (Read and Marsh, 2002).

The using of a methodological mix for the program evaluation offers several advantages, capable of overcoming the difficulties and rhetorics in terms of quantitative and qualitative dispute: (a) the flexibility that the assessor has in choosing the most appropriate method for obtaining information in the evaluation process; (b) provides both statistical data and qualitative analysis; (c) provides conditions of generality and credibility of the evaluation conclusions; (d) refines the interpretations built on the statistical data and qualitative analysis models. Beyond these advantages, the methodological mix requires that the evaluators have a series of skills and abilities from the two areas of analysis and interpretation, knowing and assuming different epistemologies and also assuming proper research methods associated with a design that will allow, in a reasonable context, the mixing of methods and the hybridization of theories.

6.6.3.0 DATA COLLECTION TOOLS:

6.6.3.1 SELF-COMPLETION QUESTIONNAIRES

Questionnaires are the most widespread method of collecting information (Cohen *et al.*, 2000). In this study, questionnaires have been used to evaluate some of the perceptions and positions of students and teachers with respect to the suitability of the prescribed curriculum activities at secondary level in Libya. Since questionnaires are appropriate and a useful data collection strategy to survey opinions and attitudes (Fraenkel and Wallen, 2000; Nunan, 1992, p. 142). A relatively large scale survey can provide insights into students' reproductions of reality, their thinking, and the way in which they evaluate situations and experiences at the point in time when they make their responses (Reid, 2003). Questionnaires can be used to research almost any aspect of teaching or learning (Nunan, 1992). They are familiar to most people and they are less intrusive than other research methods (Seliger and Shohamy, 1989, p.172).

The choice of a questionnaire is appropriate in this case because it is very efficient in terms of researcher time and effort because a researcher can obtain data from thousands of respondents a cross the population at various ages and stages in a relatively short time (Brown, 1988; Robson, 1994). Also, if well-designed, questionnaires are comparatively easy to analyse and most statistical analysis software can process them, for example, Statistical Package for Social Sciences (SPSS) (see Figures; 0.1, 0.2 and 0.3 in Appendix B, pp. 397-399 for more details). This is especially true for studies involving a large sample size. There are some difficulties in the use of questionnaires, including the need to keep the questions fairly simple and uncomplicated to avoid misunderstanding, lack of opportunity of penetrating beyond the respondents' answers, and, most commonly, a low response rate (May, 1993). However, all these problems were taken into account and are explained later in this Chapter.

Despite these difficulties, questionnaires are the most frequent data collection tool (Cohen *et al.*, 2000). Thus, questionnaires were considered as the most convenient tool to apply to address the research topic. Other methods such as observation of practice were not used because of time limitations and, more importantly, it would have been difficult to explore students' attitudes through observation alone. Documentary analysis is not possible for this particular research context because policy and evaluation procedures are not well established in Libyan schools. Focus group discussion is less usual in Libyan school culture and students may have been less forthcoming in their responses, especially half way through a course.

6.6.3.2. STRUCTURE OF THE QUESTIONNAIRE

Speaking about the importance and careful structure of the questionnaire, Oppenheim (1992) points out that it is an important instrument of research, a tool for data collection. The questionnaire has a job to do, and its function is measurement (Oppenheim, 1992, p. 100). Questions used in a questionnaire can be closed or open. A closed questionnaire is one in which the respondents are offered a choice of alternative replies (Oppenheim, 1992, p. 112). A closed questionnaire is quicker to answer and easier to analyse because the list of the responses is already given, as compared to an open questionnaire, in which the respondents are free to compose their answers.

However, a limitation of a closed questionnaire is that it controls the respondents' freedom of expression by restricting them to pre-set answers and the data collected is quantitative. Open questions are sometimes called free-response and are not followed by any kind of choice, and the answers have to be recorded in full (Oppenheim, 1992, p. 112). The open questionnaire gives more freedom to the subject to express their opinions fully. Ideally, a mixture between these two kinds of questions has been given to the respondents in this

particular research project to evaluate some of the perceptions and positions of students and teachers with respect to the suitability of the prescribed curriculum activities at secondary level in Libya and to offer their perceptions for changes or improvements towards the formal academic curriculum. A questionnaire that is properly designed can provide precise insights into how participants (students and teachers) who are part of a survey think and the way they evaluate situations and experiences (Reid, 2003). However, the analysis and interpretation of the data collected using the open questions can become hard.

In order to assess participants' attitudes, opinions and preferences, two methods, those developed by Likert (1932) and Osgood *et al.*, (1967), which have been widely used in educational research for many years, were applied, in order to make it easier for a participant to respond. Firstly, a five-point scale was used where participants respond to various statements using '*strongly agree*', '*agree*', '*neutral*' '*disagree*' or '*strongly disagree*'. Secondly, the participants were asked to select their priorities from a list of given options as a variety of approaches for the questionnaire strategy. There might be some respondents who really feel neutral, ambivalent, undecided or unconcerned about a particular issue.

Then a mid-point seems (from a realist perspective) to be an important thing to maintain. This means that by omitting the neutral point, one tends to exclude a significant number of respondents who have a different perspective. This is equivalent to imposing your choice on the free will of people and demanding a certain response from them (discussed with my Director of the studies in 2009). Consequently, the researcher made a decision to use a five-point rating scale. In instruments measuring attitudes, beliefs, and opinions, a Likert-type scale is often utilized because of its usefulness (De Vellis, 2003). This follows the recommendation proposed by Reid (200, p. 20), when he said that, "There are numerous paper-and-pencil approaches: based on Likert, Osgood as well as

rating questions and situational set questions; interviews can offer useful insights” For example, Reid (2003, p. 41) offers a set of guidelines:

- “(a) Write down as precisely as possible what you are trying to find out;
 - (b) Decide what types of questions would be helpful;
 - (c) Be creative and write down as many ideas for questions as you can;
 - (d) Select what seem the most appropriate from your list-keep more than you need;
 - (e) Keep the English simple and straightforward, avoid double negatives, keep negatives to a reasonable number, look for ambiguities, watch for double questions;
 - (f) Find a critical friend to comment on your suggested questions;
 - (g) Pick the best, most appropriate and relevant questions, thinking of time available;
 - (h) Layout is everything;
 - (i) Try your questionnaire out on a small sample of students (e.g. a tutorial group) ask for comments, criticisms. Check time required;
 - (j) Make modifications and only then apply to larger group;
 - (k) Analyse each question on its own”
- (Reid, 2003, p. 41).

Denscombe (1998) proposed the development of a list of written questions, selecting such questions which closely relate to the aims of the study. It is useful to consult experts to offer advice on the final question selection. It is important that ambiguities are avoided and that the students who read the questions gain the meaning intended by the designer. This allows for consistency and precision in terms of the wording of the questions, and makes processing the answers easier. This consistency and precision will encourage reliability and validity in the questionnaire. Ravid (2000) argued that there is much in the literature about reliability but most of it describes measures of internal consistency, using correlation techniques. However, if the questions are designed to measure numerous different features, then internal consistency is not necessarily important and traditional methods are inappropriate. If questions are designed carefully, and the questionnaire is of a reasonable length and care taken is in its use, then reliability will not be a major issue (see Reid, 2003). It is also possible

to have themes explored in several ways to relate the responses to the various questions. Issues relating to the theory of validity and reliability have been discussed in more detail in the following sections with respect to the actual questionnaires used and the way they were constructed.

6.6.3.3 RELIABILITY AND VALIDITY IN QUANTITATIVE RESEARCH

Seliger and Shohamy (1995, p. 245) state that “An important factor in reporting any type of research is to include information about the reliability and validity of the procedure used to collect the data, so that another researcher attempting to relocate the research is able to do so”. For this reason, it is important in reporting results from quantitative research to include descriptions of the process of conducting the research, the different procedures used to collect the data, the research site, and the exact conditions applied. When any measurement is made, it is important to know whether the measurement reflects what is intended to be measured and whether the measurement is accurate.

For example, if a test of mathematics is set, then it is important to know if the questions asked reflect the mathematical skills which the tester wants to measure. It is also important to know if the test will give similar results when used on different occasions. This is equivalent to a measuring tape being used to measure the height of people. It is obvious that it can be used to measure the height, provided the person stands vertically and the tape is used vertically as well. It is also obvious that a metal tape is likely to give an almost identical result on two different occasions. The former is known as validity and the latter is known as reliability.

The reliability of the measurement is partly a reflection of the accuracy of the measurement (Bryman, 2004). Osgood *et al.* (1957, p. 126) state that: “The reliability of an instrument is usually said to be the degree to which the same scores can be reproduced when the same objects are measured repeatedly”. It is

important to know the conditions under which reliability is more likely. For example, in the case above: the two occasions are not too far apart allowing the person to grow and that the measurements are made at approximately the same time of day as people often shrink slightly throughout a day. There are different factors of reliability. For example, Bryman (2004) cites three elements, named as stability, internal reliability and inter-observer consistency.

Cohen *et al.*, (2000) also give almost similar types, termed as stability, equivalence and internal consistency. *Stability* refers to the consistency of a test or instrument to produce similar results from the same respondents over a period of time. It means that there will be a little variation in the results with the passage of time. *Internal Reliability* deals with the issue that the indicators which make up a scale are consistent. To explain, this means that one indicator's response or score can be related to the scores of other indicators. *Inter-observer Consistency* relates to if more than one researcher is involved or the study is highly subjective; reliability can be achieved through inter-rater reliability (Cohen *et al.*, 2000).

Validity refers to the degree to which an instrument actually measures what it is intended to measure (Cohen *et al.*, 2000; Reid, 2003). This is much more important and more difficult to achieve (Eagly and Chaiken, 1993, p. 42). The validity of an attitude scale refers to the extent to which the measure truly measures the attitude it is intended to assess (Eagly and Chaiken, 1993, p. 28). Ideally, validity is found by seeing how the measurement relates to alternative measures of the same attitude. Bryman (2008, p. 151) and Oppenheim (1992, p. 162) have outlined the following types of validity: *Content validity*, do the items in the measurement test or reflect some kind of balanced coverage of the issues, skills or knowledge to be measured ?; *Concurrent validity*, for this kind of validity the data gathered from the measurement of one instrument must

correlate to some other well-validated measures of the same issue; *Predictive Validity*, do the outcomes of the measurement relate to some future criterion such as job performance, recovery from illness or future examination attainment?; *Construct Validity*, when a researcher has strong theoretical grounds and makes a few predictions based on those grounds, and if the tool used for measurement correlates with the assumptions, it is said to attain construct validity.

In looking at questionnaires, the issue of validity is not easy. Clearly the questions used must reflect accurately the issues being explored. There needs to be clarity and absence of ambiguity. At the most basic level, there is concern about the construct validity of questionnaire measures. There is an issue of honesty. Participants who are not honest in their responses may confound the data in unknown directions. This is considered as a particular problem for research into sensitive topics. The ability of respondents to produce fake answers is well-documented (Furnham and Henderson, 1982). Evidence suggests that deliberate faking is increased under conditions of high face validity (Bornstein *et al.*, 1994). However, socially desirable responding is not necessarily a deliberate behaviour; it may also reflect an unconscious inclination to create a positive impression, to avoid criticism or gain positive approval (Crowne and Marlowe, 1964) or may betray self-deceptive tendencies (Paulhaus and Reid, 1991).

In designing, constructing or adapting the questionnaire items, a large number of questions were carefully structured and developed. Care has been taken to be clear about the objectives of the study so that each item is directly referenced against one or more of the research objectives mentioned previously. The issue of validity was considered by subjecting the questionnaire to careful scrutiny (Bennett *et al.*, 2001). These were considered critically by a number of other researchers and much of the questionnaire aspects does not investigate

particularly sensitive topics in general. All questions used in the questionnaires and interviews were standard and were translated from English to Arabic to assist the students' cognitive understanding, since not all Libyan students would read, speak or understand English (see Figures: 7.0 and 8.0 of questionnaire and interview versions were written in Arabic and English in Appendix D, pp. 414-429). Ideally, questionnaire and interview piloting was useful, to have feedback from respondents about the clarity, and to check if the questions were being understood in the way intended (Helsby *et al.*, 1998; Seidman, 1998; Shah, 2004; Oppenheim, 1992).

In this particular study, the questionnaires were designed by the researcher and assessed by the supervisory team. The feedback received was taken into consideration and the questionnaires were amended. The questionnaires included all aspects of the curriculum to ensure the face validity and to check the alignment at all levels mentioned in the curriculum. The concurrent validity has been checked by the use of another method: open-ended questions. It was hoped that obvious ambiguities and lack of clarity would be removed. It was also hoped that the questionnaire had a reasonable length and administered under circumstances where honesty was likely (the respondents did not feel that there was any pressure to give 'desirable' answers).

Given that the sample size was large, the correlate reliability was likely to be good (Osgood *et al.* 1957). The use of statistical tools, such as Cronbach's alpha test, also was applied for internal reliability. Cronbach's alpha test calculates "the average of all possible split-half reliability coefficients" (Bryman, 2004, p. 72). The researcher adopted this method to ensure that the questionnaires were reliable. In this case, the students' gendered experiences and attitudes were explored and compared (e.g. by comparing the statistical measure of the significance of the differences in their gendered responses), using independent

t-test statistics which gave an indication of Libyan students' gendered experiences and attitudes towards the aspects of the formal academic curriculum.

One of the most noteworthy criticisms of questionnaires is that the researcher is unable to collect additional information, to probe the respondents and allow them to elaborate on certain answers. This reduces the researcher's ability to explore answers and make sense of them from the respondent's perspective (Bryman, 2004) and raises questions as to the 'richness' of the data. It is for this reason that the questionnaires were followed up sequentially with the more qualitative approach in the form of 16 semi-structured interviews to enrich and enhance the validity of the questionnaire evidence (Gomm, 2008; Oppenheim, 2003) and to give a prepared explanation of the purpose of the study and elaborate any questions (Silverman, 2005).

6.6.4.0 SEMI- STRUCTURED INTERVIEWS

Utilising the method of interviews in order to gain social research data is a very common practice in a multitude of disciplines throughout the social sciences (Hester and Francis, 1994). Oppenheim (1992) asserts that no other skill is as important to the survey research worker as the ability to conduct good interviews. He adds that an interview, unlike most other techniques, requires inter-personal skills of a high order, for example, putting the respondent at ease, asking questions in an interested manner, noting down the responses without upsetting the conversational flow, giving support without introducing bias. Compared to questionnaires, the interview can give more freedom to both the interviewer and the interviewee to express their opinions freely and fully (Oppenheim, 1992). As a consequence, there are a number of different forms that interviews can take. Distinctions have been drawn between two basic types of interview. These divisions show the different points of view of different

educationalists. There is what is commonly referred to as: “Standardised interviews: these are essentially designed for the purposes of data collection. Examples include public opinion polls, research and government surveys” (Oppenheim, 1992, p. 45). The purpose of the standardised interview is to collect the data where researchers ask exactly the same questions in exactly the same manner to every interviewee to avoid contaminating the answers that informants produce. This might be seen as something like a verbal questionnaire.

In contrast, there is the more exploratory interviews (active interviews) (Holstein and Gubrium, 1995). These are also called in-depth interviews, or free-style interviews (Oppenheim 1992, pp. 65-67) where the interviewers take a more flexible approach to questioning and may ask more open-ended and less structured questions. “The purpose is to develop ideas and research hypotheses rather than to gather fact. It is concerned with trying to understand how ordinary people think and feel about the topic of concern to the research” (Oppenheim 1992, pp. 65-67).

It has been pointed out that in the loosest sense of term, interviews are being constantly conducted in ethnography, with field workers frequently posing questions to their informants. However, on specific occasions, informants will be presented with a series of “more or less structured, partly pre-planned questions” (Duranti, 1997, pp. 102-103). Hamersley and Atkinson (1995) point out that a key difference between ethnographic and standardised interviews is that ethnographic interviews do not have a set of questions prepared beforehand. Instead, they usually have a list of topics that need to be covered, but there will be variety in the manner in which each question is asked. Schwartzman (1993, p. 58) documents that “an ethnographic interview is often characterised by open-ended questions which on some occasions can be deliberately

ambiguous”. Interviews can be highly structured, totally open or anywhere in between. Interviews can thus be ‘semi-structured’, with some fairly well defined questions, but with freedom to expand and explore in many directions. This can allow the respondents some freedom. The type of interview to be conducted depends very much on the purposes of the research. In some cases, interviews will be exploratory because the need is to explore. Others will be confirmatory in that the need is to confirm other data. Looking at questionnaires and interviews, the interviews are much more time consuming to undertake and the data may take many hours (for just one interview) to analyse and collate. However, interviews offer very rich data and are often used in conjunction with questionnaires.

Reid (2003) describes a totally open interview and suggests that some preliminary questions may be needed to develop the levels of confidence and trust to enable the student to talk freely and openly. This type of interview is unpredictable and can be lengthy. However, the insights gained can be very rich with an experienced interviewer who can encourage the students to talk freely (Reid, 2003, p. 29). In the context of this particular study it was decided that the interviews I would conduct with participants would be semi-structured interviews to explore, assess and triangulate the data and issues that arose from the data collected from the content analysis of the questionnaires. Therefore, I would have a set of questions to use for interviews. It was important that interview questions were open-ended to allow participants to respond freely. However, it was also crucial that participants provided complete responses that permitted the researcher to collect in-depth evidence for analysis (Hill *et al.*, 1997). Therefore, my interviews could not be classified as being purely ethnographic, as their format was somewhat standardised.

The reason for this is that I had a specific topic that I wished to investigate, namely, interviewees' perceptions of gender, culture and religion influences in

relation to the formal secondary academic curriculum aspects, in order to observe wider gender discourses operating in these particular formal curriculum explorations. The decision to devise a fixed set of interview questions was also due to time constraints, both within the study as a whole in terms of time available for data collection, and the time constraints that I perceived the schools would impose on the interviews. In order to convince busy teachers to be interviewed, it was thought that having a clear interview structure would assure them that I would not take up too much of their time. Moreover, the interviews were conducted in the Arabic Language: this was considered necessary because not all Libyan secondary school students can speak and understand English Language.

6.6.4.1. RELIABILITY AND VALIDITY IN QUALITATIVE RESEARCH

In qualitative research, there are approaches similar to validity and reliability for assessing the process of analysis. The four factors are: credibility, transferability, confirmability and dependability (Healy and Perry, 2000). Patton (2001) also confirms that qualitative research should uphold validity and reliability at every stage and, as identified by Healy and Perry (2000), each research paradigm should use its own parameters to maintain the quality of the research, just like the quantitative parameters of validity and reliability.

Credibility is equivalent to validity and demands that the researcher identifies all significant factors in the research question and correctly describes how these factors are reflected in the data collected. *Transferability* is a judgment as to whether the findings from one situation can be applied to another. *Confirmability* relates to the conventional notion of objectivity. It can be explained as whether the data collected in qualitative research is confirmable or not. The emphasis is on the data the research findings have established, by

seeing the consistency between the data and the conclusions drawn. *Dependability* in qualitative research corresponds to the concept of reliability in quantitative research.

Lincoln and Guba (1985, pp. 305-316) have suggested different methods of maintaining the dependability and state that: “Since there can be no validity without reliability, a demonstration of the former is sufficient to establish the latter”. They have identified triangulation as a method of increasing the credibility of research findings. Triangulation refers to the assessment of data gathered by different methods and diverse research tools. Triangulation can also be achieved within one research strategy (Bryman, 2004): for example, the researchers frame different questions and ask the same thing in different ways. According to Robson (2002, p. 174), triangulation “involves the use of multiple sources to enhance the rigour of the research”. Patton (2001, p. 247) also reinforces that: “triangulation strengthens a study by combining methods. This can mean using several kinds of methods or data, including using both quantitative and qualitative approaches”.

Therefore, in designing this study, the researcher also avoided relying on a limited range of tools. The researcher tried to select data collecting tools that can complement one other. The rationale was that by examining the same topic from different angles and using different sets of information about one issue, it would help to produce a more reliable picture. Hence, this particular research has ensured that it meets the criteria described, by applying the technique of triangulation. The content analysis has been validated by the findings of the questionnaires and interviews. Robson (2002) and Cohen *et al.*, (2000) advocate triangulation on the grounds that it helps the researcher to validate their findings.

6.6.5.0 QUESTIONNAIRE AND INTERVIEW PILOTING

Borg and Gall (1996) view piloting as an initial trial of research instruments and techniques in the progress of a sound research plan. Every researcher faces the potential difficulties involved with data collection tools. To counter these issues, researchers regard a pilot study as an important part of the process of research. Along with helping to try out the instrument, it gives the researcher supplementary knowledge that guides them towards improved research and can help to maintain the validity and reliability of the data collection tools. Bryman (2004) expresses the opinion that piloting helps to ensure the workability of a research instrument. Thus, the information obtained provides the researcher with the opportunity to discover whether the questions are producing the type of data required and, where essential, to amend or remove any questions which may be vague or bewildering to the informant.

Therefore, prior to running the research, a pilot study was carried out in two different cities with two steps. In the first step, the initial questionnaire was piloted on 8 undergraduate students at Nottingham Trent University in the UK (2009), in order to refine the questions in the questionnaire and hone the selected research instruments. The participants were encouraged to make comments about the questionnaire to help with its development. Changes were minor: some questions were re-phrased and others removed as they repeated the same information within the questionnaire. The rephrasing brought the questions more in line with the researcher's intention of collecting relevant information from participants.

In the second step, the questionnaire was piloted on 50 secondary school students in Libya in order to inform revisions and refinements in the original translation of the questionnaire, written in the English language, into Arabic. This was considered necessary because not all Libyan secondary school students can read and understand English. Given that students' attitudes to

particular issues in education are often nuanced, complex and culturally located within particular discourses, it was considered important to ensure that the same sense of the items had not been lost in translation. In other words, the aim was to check if the questions were likely to reflect the issues under consideration. All participants were informed that any data provided would be solely for the use of this research and any analysis of the data would not identify them as individuals in any way.

This was not purely for ethical reasons, but also to minimise the failure to answer honestly. This revealed both a willingness to complete a detailed questionnaire and the questionnaire's validity before it was administered. Some amendments were made as a result of this pilot study. During the pilot study, the researcher also followed the recommendation of his supervisors. In the light of the comments received, the list of questions was reformulated and reduced and this aimed to cover a wide variety of aspects of secondary school life, social contexts and aspirations for students' perceptions.

The use of statistical tools, such as Cronbach's alpha test, was applied to check the internal reliability. Cronbach's alpha estimates the internal consistency by determining how the items used in the instrument are related to each other. The Cronbach's alpha coefficient of 0.87 can be considered as reliable with the current study sample. This showed high reliability as, according to Pallant (2007), a figure above 0.7 is acceptable. Cronbach's alpha examines the average inter-item correlation of the items in a questionnaire (Cortina, 1993). With the purpose of achieving comprehensive responses from participants, interviewers are advised to progress standard probes and use unstructured probes that will elicit more information. It is important that the probes do not reveal or reflect interviewer bias or display the message that the interviewer is looking for a specific answer (Hill *et al.*, 1997).

Six participants from Libya were involved in the interview piloting; four students at the secondary school level completed interviews which lasted 45 minutes. Also, two teachers completed the interview pilot, which lasted 50 minutes, to finalise the interview protocol. Unstructured probes and previously developed probes were used during the pilot interviews. During the briefing process, participants were informed that the goal of the interview was to understand the meaning and role of the formal secondary curriculum in their lives and the role that culture and religion may or may not have in shaping their gender role beliefs.

All interviews were audio recorded with the participants' permission. Upon completion of each interview the participant was given the opportunity to discuss any matters not addressed during the interview pilot and to reflect on the interview experience. Six pilot interview questions were developed. Further revisions were made to the questions, based on participants' feedback. The final draft of the interview protocol consisted of four major areas for all participants (teachers and students): the area of subject study; examinations; applications relevance; and suggestions for curriculum changes (see Figures: 8.0 and 8.1 of the interviews, versions were written in English and Arabic, in Appendix D, pp. 428-429 for more details).

6.6.5.1. DIFFICULTIES ENCOUNTERED: RIGHTS AND RESPONSIBILITIES OF RESEARCH ETHICS AND AN INSIDER AS A RESEARCHER

The ethical issues are summarised in the following. *First, the purpose of a work based project:* When considering the overall moral and ethical implications of the project, ethical issues or issues of value concerning the nature and aim of a work based, practitioner led project are of particular significance. The aim is likely to be beneficial more to a particular organisation or community of practice. *Second, the methodological approach to work based project:* This justification requires asserting why the particular approach and methods are the best ones to use, giving an account of the efforts to ensure that the methods of the research are appropriate and reasonable from the point of view of all participants. *Third, focus of attention:* What sources of data are relevant and accessible: where, to whom or what should intervention be applied (Costley *et al.*, 2010, pp. 26-29).

Fourth, organisational/professional and University contexts: Insider-researchers are usually experienced workers involved in research that may use colleagues as subjects in the research. For social researcher normally involves participants understand the nature of the research and their involvement; and they remain anonymous; data is treated with confidentiality; participants voluntarily consent to be involved. The University usually requires research proposals to be approved with the ethical standards and codes of good practice where relevant. *Finally, personal perception:* There are ethical implications relating to the particular ideological position in doing work based research. There is usually a process of reconciliation with these large structures and conflict between your personal position and the ideological structures around you, for example, organisational values and personal values (Costley *et al.*, 2010, pp. 26-29).

The questions of how best to design both the questionnaire and the logistics of collecting the data need to be considered. Difficulties in the recruitment of participants might be expected if the questionnaire was over-complicated, and/or the participant may decide that the questions are too long or not answerable meaningfully and fail to provide data. The data available to a researcher is the end point of a complex social process, which may fail at a number of steps. For instance, the distribution of questionnaires, particularly when targeted or directed to the specific groups, requires the research student to undertake not to begin any data collection until it has been agreed either that the project does not require ethical approval, or a favourable ethical opinion has been received from an official College Research Ethics Committee. Another example would be that the distribution of questionnaires may involve the consent approval of both participants' parents and the headteachers in an organisation, who may not wish the questionnaire to be circulated, due to a poor design or for other reasons.

Moreover, even the return of completed materials may involve some logistical difficulties, due to time and the place where materials are to be collected. My own position regarding the construction of methodology and the practical and time constraints may also affect how I do this. Therefore, ethical and logistical considerations were taken into account earlier and discussed before the final distribution of questionnaire and conducted interviews took place. With regard to data collection, the study's exclusive reliance on a semi-structured interview is a limitation, because the type and amount of information that is gathered is based on open-ended questions on the prior quantitative data analysis and any spontaneous probes that may be used by the interviewer. Thus, participants may have perspectives that were not captured by the questions. Additionally, interviewer biases may have influenced the types of probes that were used. The male identity of the interviewer was also a limitation. Female participants may

have felt compelled to give socially desirable answers. They may have also experienced increased discomfort discussing gender-related issues with a male interviewer, potentially limiting the amount of information shared. Therefore, the following summary of considerations were taken into account in advance when conducting the interview piloting. An overall summary of these ethical considerations has been presented in the later section of this research methodology chapter.

THESE CONSIDERATIONS WERE TAKEN INTO ACCOUNT IN ADVANCE WHEN CONDUCTING INTERVIEW PILOTING STUDY.

Before the interview	During the interview	After the interview
Unpressurised decision-making about taking part	Being able to exercise the right not to answer a question or to say more than they want to	Right to privacy and anonymity respected in storage, access and reporting of the research
Research is independent and legitimate	An unpressurised pace, time to think	Unbiased and accurate research and reporting
Knowing why they were selected to be approached	Feeling comfortable and at ease, valued and respected, not intimidated or judged	Opportunity for feedback on findings and use
Clear and worthwhile objective, purpose and intended use	Opportunity for self-expression and for own views to be recorded	Use is actually made of the research for wider social benefit
Knowing what to expect and being able to prepare especially in terms of the coverage and questioning style. ----- Openness, honesty, and correcting misunderstandings	Questions are clear, relevant, and not repetitive. ----- Left without negative feelings about participation	Freedom to give any further comments on subjects.

There were clear differences in how much people recalled about what they had been told, and when, before they took part in the main interviews. Having multiple opportunities for information acquisition emerged as important. However, the dominant pattern was of quick decision-making about participation, at the point when people were first approached. This was generally not problematic, although some people felt on reflection that they had made the decision too hastily. The speed of decision-making is particularly significant, as once people had said they would take part, they generally felt a high level of commitment, despite knowing they could change their mind.

Six participants of both genders were identified based on the speed of their decision and the factors on which it was based. These were those who had completed the questionnaire and had a clear motivation to participate when they had been asked. The information people received played an important part in their decision-making. However, decisions were also taken in part based on assumptions formed about the research, which were not checked out in advance. This highlights that the research relationship is based to a large degree on trust.

The interview interaction, and in particular the relationship with the interviewer, was central to participants' experiences. People looked to the interviewer to help them to feel 'comfortable'. Being interviewed was an unfamiliar experience and people had little sense of what to expect. Being at ease was also important for the quality of the data – it helped people to answer honestly and influenced how much information was shared. It was also important to participants to feel that they and their input were valued by the interviewer, that the pace of the interview was unhurried and that the interviewer was non-judgemental. Participants generally constructed a somewhat passive and circumscribed role for themselves.

Alongside the interviewer's behaviour and characteristics, as an insider researcher, reactions to questions and the questioning style were an important component of the interaction. Key issues were the extent to which the interview gave scope for self-expression, and the relevance of the questions asked. A skilful inter-viewer could mediate more negative reactions to the questions and style. There was very limited awareness of, and engagement with, what happens to the data after the interview, particularly what analysis and reporting might involve. What was clearer was an understanding that findings would be shared with whoever commissioned the research and would be used to bring about changes. There was a strong interest in feedback, particularly to demonstrate that the research had been used, but also to compare their own responses with those of other people.

The sensitivity of the questions was also involved. Barriers and facilitators to controlling information giving during an interview work in subtle ways. Some factors that make it easy to withhold information, such as awareness of the voluntary nature of giving information or a good rapport in the interview, can also encourage people to say more. People understood confidentiality in a variety of ways, but most did not have a wide and detailed understanding. The picture seems to be one where people were much reassured by the confidentiality assurances, without having particularly clear requirements themselves. Both negative and positive footprints were experienced as a result of research participation. Positive footprints were generally described in stronger terms, and negative ones as usually milder and short lived. The footprints experienced were largely driven by participants' experiences of three things: how enjoyable the interview interaction had been; the perceived value of the research; and the presence or absence of any concerns about confidentiality.

6.6.6.0. FINAL DISTRIBUTION OF QUESTIONNAIRES

6.6.6.1 THE RESEARCH FIELD AND SAMPLING

One of the most central questions a survey researcher faces is: what is the population covered by the survey? Cohen and Manion (1994, p. 86) regard the specification of the population as a precondition to survey design, as it affects the decisions related to the selection of the sample as well as the resources required. They have also pointed out that, while designing research the accessibility of the population must be kept in mind. Nunan (1992, p. 141) states: “Perhaps the most comprehensive type of survey is the national census, which aims to obtain data on every individual in the nation”. However, he upholds that collecting data from the whole population in conducting large-scale survey research is not practical, and, therefore, the researcher has to opt for a representative sample from the population. As this research covers a large population, and due to the limitations of time, practicality and manageability, it is inevitable to select samples considered as representatives.

Bryman (2004, p. 87) defines that two methods of sampling are usually used: probability samples “a sample that has been selected using random selection so that each unit in the population has a known chance of being selected” and non-probability samples: “a sample that has not been selected using a random selection method, this implies that some units in the population are more likely to be selected than others” (Bryman, 2004, p. 87). This means that in non-probability samples, the likelihood of selection of each respondent is predictable, whereas in the probability sample, the probability of selection is indefinite. In this particular survey, the researcher selected a non-probability sample. The participants were students in Libyan secondary schools who were currently studying the formal academic curriculum.

All participants who are indispensable had been directly consulted with regards to their involvement as subjects of the research context. The rationale for choosing these organisations was in the secondary schools, students were almost all of the same age group, which is 15 to 19 years old. Also, information available from research on other individuals could not answer the questions posed in relation to the study of teenagers (ages 15-19). The selection of these organisations was also on the basis of social, cultural and geographical diversity. Despite students studying the same state curriculum in all public secondary schools in Libya, the educational situations in those organisations may be quite diverse. For instance, the students in the urban schools are more likely to have experienced greater opportunities and exposure to a wider range of skills and socialisations compared to the students studying in the rural schools.

Among the research aims was to explore students' gendered experiences and attitudes towards the key aspects of the formal academic curriculum at secondary school level. It was also to gain a picture of what was happening and to explore students' perceptions about their gendered learning experiences and how they saw themselves in relation to their studies. This included attitudes towards: the school organisation at the secondary school levels; teachers and teaching approaches; study directions (Arts, Sciences, Technology and Mathematics), and reasons for subject choices. A number of other aspects were also explored: the areas of student interest and how the students see things at secondary school in relation to their future aspirations and careers.

The main stage of the research involved the meaningful and effective management of 1000 questionnaires with a mixture of questions, being distributed among the secondary school students (ages 15-19) in four different secondary schools, with mixed genders in urban and rural Libya over a period of four weeks in 2009 (see Figure 6.0 for a map for the school locations in

Appendix C, p. 412 for more details). My colleagues in the four different institutions were happy to take on the responsibility of the distribution and collection of the materials and were not keen on the disruption that having the researcher on campus would encourage. For this reason, the questionnaire was designed so that the researcher's presence was not essential. It was difficult to ensure that the ethical requirements of research were fulfilled. Partly to overcome this, an attached statement was put at the start of the questionnaires.

The questionnaire consisted of five pages of written entities (see Figure 7.0 in Appendix D, pp. 414-418 for more details). At the start of the questionnaire, there was a short briefing paragraph for the participants to read. This paragraph introduced the research and gave instructions about completing the questionnaire. The questionnaire design incorporated three broad areas: Demographic information; Questions relating to subject directions and reasons of study; Questions exploring individuals' gendered scale agreements on related aspects of formal academic curriculum.

Sixteen people were also interviewed. Two were students who had completed the questionnaires in each of the four schools and who were selected according to the stage or level, subject and gender. In the case of teachers, two from each school were selected according to the gender, subject and the level of their experiences. The interviewees agreed to the recording of the interviews, both electronically and in shorthand. Oppenheim (1992) argues that it is essential for the exploratory interviews to be recorded on tape. For subsequent analysis it may be important to pick up on essential details.

6.6.6.2. THE RESEARCH CONTENT DATA ANALYSIS

Content analysis was referred to as the methods that produced quantifiable data and it was also defined as: “a statistical technique for obtaining descriptive data on content variables” (Crotty, 1998; George, 2009: 144-145; Neuman, 1994, p. 261). The content constitutes words, meanings, symbols, ideas, themes, illustrations or anything that can be communicated, and the text is anything verbal, written or illustrative that can serve as a medium for communication. Content analysis, or textual analysis, is a standard methodology in the social sciences regarding content used for communication. Overall, there are three approaches for collecting and analysing research data, which involve, (a) quantitative, (b) qualitative, and (c) mixed methods approaches (Collis and Hussey, 2009; Migiro and Magangi, 2011). As mentioned above, the pragmatic paradigm underpins design-based research, so from the point of view of pragmatism, a researcher “should use whatever works” (Fraenkel and Wallen, 2009, p. 559).

Therefore, MacDonald (2008, p. 430) states that design-based research “pragmatically employs qualitative [and/]or quantitative research methods that are congruent with the research questions”. This indicates that a researcher who uses design-based research can use any research approach; quantitative, qualitative, or a combination of the two. Indeed, the majority of design-based research literature agrees that the mixed methods approach is an appropriate one for collecting and analysing design-based research data, because it can maximise the validity as well as increase the objectivity, and reliability, of ongoing research (Bell, 2004; Wang and Hannafin, 2005).

In the context of this study, the researcher used mixed approaches for the content analysis. For the open-ended responses, the frequency of occurrence was measured in the open-ended questionnaires and the themes emerging from the responses were arranged according to their frequency. The themes of

inclusion were extracted from the curriculum document, for example, gender representation, cultural issues, inclusion of social attributes, inclusion of religions, the authenticity of materials and the different activities, with the frequency of occurrence noted. These themes helped to investigate the content of the formal secondary academic curriculum. Mixed methods research is built on both quantitative and qualitative approaches. In the quantitative approach, the investigator relies on numerical data to test the relationships between the variables (Charles and Mertler, 2002). The researcher tests the theories about reality and uses quantitative measures to gather data to test the hypotheses. The researcher related the variables to determine the magnitude and frequency of relationships.

Quantitative studies are descriptive. A descriptive study establishes associations between variables. Hence, the goal of quantitative research is to describe the trends or explain the relationships between the variables. The sample size is large and is representatively selected from the larger population to be able to generalise the results to the population. In the current study, quantitative content analysis was adopted for analysing the formal secondary academic curriculum. Through this analysis, the different aspects of the inclusive formal curriculum- for example, selection of activities and aspects of language, gender, religion, social attributes, culture, authentic materials- were explored to determine the alignment with the aims of the national formal secondary academic curriculum.

One important aspect of quantitative content analysis is that it is more focused towards the 'frequency of occurrence'. This concept of just looking at the surface content was extended and the latent meaning and messages were also seen as an important part of content analysis. Bryman (2008) suggests that quantitative research can be interpreted as a research strategy that emphasises

qualification in the collection and analysis of data and requires a deductive approach to the relationship between theory and research; has integrated the practices and norms of the scientific model and positivism in particular; and represents a view of social reality as an external objective reality (see Leedy, 1999, p. 173 where similar thoughts are shared).

In contrast to the quantitative approach, qualitative research approaches reality from a constructivist position, which allows for multiple meanings of individual experiences (Denzin and Lincoln, 2005). In this approach, the researcher develops a complex, holistic picture, analyses words, reports the detailed views of the informants, and conducts the study in a natural setting (Creswell, 2007). The goal of qualitative research is to explore and understand a central phenomenon in a qualitative research study (Cresswell, 2005). The research questions are general and broad, and seek to understand participants' experiences with the central phenomenon. The sample size is often small and purposefully selected from those individuals who have the most experience with the studied phenomenon (Patton, 2002). The major qualitative research designs include phenomenology, ethnography and narrative research (Creswell, 2007).

The main types of qualitative data include transcripts from interviews with participants, observations about the studied phenomenon, audio-visual materials and artefacts (that is, material objects used by the people). Interpretation involves stating the larger meaning of the findings and personal reflections about the lessons learned (Lincoln and Guba, 1985). Qualitative content analysis comes from a humanistic and not a positivistic approach. The humanistic approach considers the entire context and complexity of the situation under study. Qualitative content analysis, being humanistic, also takes values and the cultural context into consideration (Cohen and Manion, 1994; May, 1993; Philipp, 2000). The focus of qualitative content analysis is on making an

image of a given phenomenon that is always rooted within a specific situation, not an unfolding objective truth. Krippendorff (2004, p. 87) believes that: “For the analysis of texts, both [qualitative and quantitative analysis] are indispensable”.

Another perspective for analysing written and verbal communication has been termed Critical Discourse Analysis (CDA). Critical Discourse Analysis has been defined as “a type of discourse analytical research that primarily studies the way social power abuse, dominance and inequality are enacted, reproduced and resisted by text and talk in the social and political context” (Van Dijk, 1998, p.78). As discourse in society is the representation of the beliefs, cultures and values of a particular society, Fairclough (2010) also asserts that discourse is not an independent unit, and to create an understanding of the discourse, its relations with the social units must be analysed. Critical Discourse Analysis, according to his point of view, is an effort to bring forth the implicit relations between the discourse, and the entities of other disciplines, for example, politics, anthropology and linguistics; hence, Fairclough (2010, p. 4) identifies Critical Discourse Analysis as a “trans disciplinary form of analysis”.

In contrast to other forms of textual analysis, Critical Discourse Analysis not only focuses on oral and written forms of communication for interrogation, but additionally focuses on: “social processes and structures which give rise to the production of text, and the social structures and processes within which individuals or groups as social-historical structures subjects create meanings in their interaction with texts” (Wodak, 1995, p. 204). Critical Discourse Analysis also throws light on how different societies uphold the values required for an ideal society, and evaluate what actually happens in practice. Where gaps exist between the ideal and reality, it seeks to identify ways of filling the gaps based on the set of the values.

This current research also revolves around the alignment between the curriculum as proposed and the curriculum as experienced. In the context of Libya, these are the manifestation of power structures and dominant ideological forms. The research context, as explained previously, has clearly highlighted that those in power to fulfil their agendas have used the educational discourse in Libya. Therefore, it needs to be analysed to correct the wrongs and setting the right direction.

This research has also adopted an approach based on content analysis, rather than Critical Discourse Analysis. Since the research has adopted the theoretical framework of the curricular alignment (see Chapter One for more details), which focuses on aligning the theory and practice in the classroom context, the selection of the content analysis over Critical Discourse Analysis is justified, as the research adopted the mixed methodology. The curricular document, along with the policies and plans, can be fully analysed to bring forth the inequalities and gender discrimination in the society, created through the formal educational curriculum discourse in the context of Libya.

The application of mixed methods in a single study is a difficult issue since, as has been suggested, the rationales for methodological decisions are often justified by the questions addressed and the way data have to be analysed. However, mixed method designs (that is, explanatory, exploratory, triangulation and embedded) have common features, such as the sequence of collecting and analysing quantitative and qualitative data in a study (concurrent or sequential), and the way quantitative and qualitative data and results are mixed or integrated during the research process (connected or compared) (Creswell and Clark, 2007). Mixing can occur at different stages in the research process: the data collection, the data analysis and interpretation of the study results. Deciding on how to mix depends on the purpose of the study, its design and the strategies

used for data collection and analysis. For example, in an explanatory mixed design used for the purpose of explaining the quantitative results, mixing occurs at two stages: first, by selecting the participants for the qualitative follow-up and, secondly, by developing the interview questions grounded in the quantitative results (Ivankova *et al.*, 2006). Then the results from the two stages are integrated at the interpretation stage of the study. In an explanatory design, mixing occurs at the qualitative data analysis stage. At this stage, the data collected via interviews is analysed for codes and themes, which are then used to develop the items and scales of the survey instrument to be used in the second, quantitative, phase of the study. And, lastly, the results from the entire study are integrated during the discussion of the study findings. In this thesis, this integration is in Chapter Four and is further summarized in the final Chapter Six.

6.6.6.3. OVERALL SUMMARY OF THE ETHICAL ISSUES RELATING TO BOTH THE DISTRIBUTION OF QUESTIONNAIRES AND INTERVIEWS

All research involves ethics, and educational research includes direct or indirect involvement of human beings, and, therefore, ethical principles are followed in every stage of the research. The structure of the current research was, therefore, influenced by these considerations. It is important for the researcher to obtain consent from the participants in the research. For this particular research, the researcher added a cover letter with the questionnaire and interview documents which included the necessary information about the research. The issues of privacy, confidentiality, the right to withdrawal and anonymity were also explained.

The first part of the documents gathered demographic information, such as the age and gender of the participant, when decisions about curriculum choice were taken at the first stage of secondary school level. The questionnaires allowed participants to be completely anonymous as the names were not required. Therefore, complete anonymity was assured in any analysis. Items on the questionnaire were standard for research and did not investigate any sensitive information. The middle part of the questionnaire was comprised of the items relating to subject choices and reasons of study for various formal curriculum directions. The final part of the questionnaire investigated individuals' gendered scale agreements on related aspects of the formal academic curriculum at secondary school level, by reflecting on their gendered experiences and attitudes towards the academic curriculum during their education journey.

Ethics should be taken into consideration from the planning stage of the research until the results are obtained. Beyond the consideration of ethics for the individual sections of the questionnaire, overall ethical considerations on general design and procedure were also taken into account. The British

Educational Research Association (BERA, 2004, 2011, pp. 5-8) publishes ethical guidelines for researchers. One of the most important guidelines is the “Responsibilities to Participants”. Some principles that come under the responsibilities include “voluntary informed consent, right to withdraw, privacy and disclosure” (BERA, 2004, 2011, pp. 5-8). Therefore, this research conformed to BERA’s revised guidelines in relation to obtaining informed consent and all participants who are indispensable were directly consulted with regards to their involvement as subjects of the research context. My submission on ethical issues, which outlined the research and the participant’s rights, was made to the ethics Committee at Nottingham Trent University, was approved in November 2009 (see Figure 9.0; the version copy of Ethical Clearance Checklist in Appendix D, p. 432 for more details).

I confirmed that in all actions concerning these young people I was responsible for ensuring that the best interests of these young participants are protected and respected. Participants freely gave their consent. The consent for the young peoples’ participation in the research was obtained formally from; the authority of the school organization which sponsors my PhD research, the school headteachers where I have regular and legal access as a member of staff; and from participants’ parents. As is conventional, participants were clearly informed of their right to withdraw from the research for any or no reason, and at any time. The researcher’s e-mail addresses were also provided on the questionnaire. This was to allow the participants the option to contact the researcher with any concerns that they may have about the distributed questionnaires or the research in general.

One of the normally unexpected concerns relating to the ethical issues of conducting interviews is cultural sensitivity. Silverman (2000) argues that the relationship between the researcher and the subject during an interview

needs to be considered in terms of the values of the researcher and cultural aspects. Therefore, appropriate steps were taken in advance (see p. 181 for more details on how the interview piloting was conducted) to adhere to strict ethical guidelines in order to uphold participants' privacy, confidentiality, dignity, rights, and anonymity. In view of the foregoing discussions, the following section summarises how ethical issues in the conducted interviews of the current research project have been addressed.

❖ INFORMED CONSENT

The Researcher informed the participants – the students and their tutor- of the purpose, nature, data collection methods, and extent of the research prior to commencement.

❖ HARM AND RISK

The Researcher chose the school environment to guarantee that no participants were put in a situation where they might be harmed as a result of their participation, physically or psychologically as stated by Trochim (2000a).

❖ HONESTY AND TRUST

Adhering strictly to all the ethical guidelines serves as standards about the honesty and trustworthiness of the data collected and the accompanying data analysis.

❖ PRIVACY, CONFIDENTIALITY AND ANONYMITY

The Researcher ensured that the confidentiality and anonymity of the participants would be maintained through the removal of any identifying characteristics before widespread dissemination of the information. The Researcher made it clear that the participants' names would not be required, or used for any other purposes, nor will information be shared that reveals their identity in any way.

❖ VOLUNTARY PARTICIPATION

In addition to all the above mentioned precautions, it was made clear to the participants that the research was only for academic purpose and their participation in it was absolutely voluntary and that they were free to withdraw at any time if they desired.

As the researcher has explained his personal attachment and experiences with this research study, it becomes ethically inevitable to explain how the objectivity of the research was maintained when designing the data collection tools and analysing the raw data collected. According to Ratner (2002, p. 124): “Subjectivity guides everything from the choice of topic that one studies, to formulating hypotheses, to selecting methodologies, and interpreting data”. This reflects that subjectivity cannot be disassociated from any research topic; however, it can be argued that by expressing ones’ subjective stand, it assists in maintaining objectivity through a conscious effort. Objectivity demands, “...being fair, open to all sides of the argument” (Eisner, 1992, p. 9), and the use of the mixed-method approach for this research ensured that the objectivity was maintained while designing different tools and analysing the data from different respondents.

Reliability and validity are considered as two of the most important characteristics of a research instrument (Ary *et al.*, 2001; Mason and Bramble, 1989), whether in the form of a questionnaire or an interview. All these important issues were taken into account earlier and discussed before the final administration of the questionnaire and conducting interviews took place. It has been discussed in the previous section that the researcher has ensured the validity and reliability of the research by applying the technique of triangulation. This current educational research involves young people and it is important that the data collection tools take into consideration the cultural sensibilities of participating in the current research. Participants’ ethical

requirements are not fundamentally in conflict with researcher's conceptions of ethics. However, there are different emphases, and sometimes a tension, between participants' preferences and data quality or response rates. Research practice needs to reflect participants' perspectives, but it also needs to reflect the requirements of robust research data. The findings suggest that good ethical practice requires reflexive approaches to research that consider the impact on participants, rather than prescriptive or bureaucratic procedures.

In the context of this particular study, where the researcher has investigated the inclusive related-aspects within the formal academic curriculum – for example, gender and religion - the aspects of the questionnaires and interviews were designed after taking into consideration cultural values and respect for religious beliefs. As a researcher, I also came from the same religious and cultural background and this helped me to frame questions that fit the cultural norms without compromising the research objectives/questions. In addition, the questionnaires also reflected the curriculum document developed in 2005 by the Ministry of Education in Libya, as alignment between the planned curriculum and the curriculum as experienced was intended. Therefore, all the aspects were included and confidence in the objectivity of the research remained secure. The selection of the five-point Likert rating scale was also based on ethical considerations and to maintain the objectivity of the research.

SUMMARY

I started my discussion from the building blocks of research. Grix (2004) gave a mechanistic interrelationship between ontology, epistemology, methodology, methods and sources. It was just for understanding the complexity of how paradigms are established. Positivism looks upon natural sciences as a model to study human beings. Interpretivism came as a criticism of positivism. Both

these paradigms hold differing views about the nature of reality and how it can be explored. The discussions of paradigms and quantitative and qualitative approaches presented a background and comparison to discuss methodological pluralism or mixed methods research. Both quantitative and qualitative research methods have strengths and weaknesses. Because these are two competing approaches, the strengths of one type of research are the weaknesses of the other methodology.

An alternative viewpoint, which is typically based on a pragmatic approach, emerged as a result to minimize the weaknesses in the social research methods. This is called methodological pluralism or mixed methods research. The main feature of this research is to use and integrate a multi-methods approach to obtain a holistic and deeper understanding of the social world. It uses both quantitative and qualitative methods for data collection and analysis. There is a consensus among the majority of writers that the methods of different research approaches or paradigms may be integrated to have a holistic view of the social reality. However, some writers are cautious about this integration, particularly if the integration is across paradigms.

Mixed methods research has all the strengths of both quantitative and qualitative methods. When different methods are combined together, they are likely to increase the validity of research findings. Sometimes, the evaluations do not present values directly and neither the theoretical models, that guide the collection and analysis processes, nor the theoretical perspectives, are discrete while the evaluations are made using combined methods; and these methods are chosen depending on the context and the evaluation purposes, and the degree of access to relevant data (Caracelli and Greene, 1997).

Today, social science, and indeed education, researchers have not only come to accept the mixed method approach, but also appreciate its complementarities. However, this development does not negate the very utility of using individual

research approaches separately where necessary. To achieve a safer landing, in the choice of any methodological approach, a researcher should be essentially guided by (a) the researcher's ontological and epistemological perspectives about social reality; (b) the research phenomenon under investigation; (c) the aims and objectives the researcher is seeking to achieve in a particular research context; (d) the research questions; (e) the theoretical framework of analysis; (f) the time and resources available to the researcher; and (j) the research audiences.

This chapter has presented and discussed the methodologies and statistical techniques used in this study. It justified these particular statistical tools and the methods adopted for the collection of the data. The structure of the questionnaires, interviews and the piloting along with the difficulties encountered in self-completion questionnaires and the ethical considerations arising in the planning of a major survey process of data collection have been taken into account. The final distribution of the questionnaires, the field of research and sampling have also been discussed. The following chapter presents and discusses the measurement of attitudes the research data analysis has gathered.

CHAPTER FOUR

7.0.0.0 DATA MEASUREMENT, ANALYSIS AND DISCUSSION

7.1.0.0 INTRODUCTION

This research set out with the broad aim of investigating the alignment between the formal curriculum and gender-related issues at the secondary school level in Libya. As has been discussed in the introduction, within this broad aim, the research has several specific goals, including a review of the implementation of the curriculum in terms of inclusive aspects mentioned in the curriculum. The results obtained from the questionnaires and interviews administered to the students and teachers at the secondary level in Libya have been gathered and analysed. The analysis has assisted the researcher in reflecting on how well the aims set at the beginning of the research have been achieved. The qualitative and quantitative data have been categorised under themes which have been utilised to make inferences about the alignment between the curriculum as planned and students' gendered experiences towards the curriculum as experienced at the secondary school level in Libya.

The use of mixed methodology has also facilitated the triangulation of the data, hence making the conclusions more credible. The use of mixed methods has also highlighted the differences that emerged from different sets of data which will further inform the conclusions of the current research. An obvious basic distinction between qualitative and quantitative research is the form of data collection, analysis and presentation. While quantitative research presents statistical results represented by numerical or statistical data, "qualitative research presents data as descriptive narration with words and attempts to understand phenomena in natural settings" (Hittleman and Simon, 1997, p. 31). This analysis of the data has also helped the researcher to reflect on the aims which were identified at the beginning of this research (refer to p. 25 of this thesis).

7.2.0.0 DATA COLLECTION AND ANALYSIS PROCEDURES IN MIXED METHODS RESEARCH

Quantitative research makes use of questionnaires, surveys and experiments to gather data that is revised and tabulated in numbers, which allows the data to be characterised by the use of statistical analysis (Hittleman and Simon, 1997, p. 31). Quantitative researchers measure variables on a sample of subjects and express the relationship between the variables using effective statistics such as correlations, relative frequencies, or differences between means; their focus is to a large extent on the testing of theory. In the same manner, the quantitative research method employs statistical tools in the collection and interpretation of data. Quantitative methodologists believed that research can only be conducted by statistics and statistical methods.

Quantitative research is, therefore, seen as more representative and reliable. Its emphasis on systematic statistical analysis helps to ensure that findings and interpretations are robust (Devine, 2002). It is a research method that is deeply rooted in positivism and their epistemological orientation. Similarly, quantitative research denotes collection of observations and measurement of repeated incidences of social phenomena, such as incidences of crime, household poverty, voting for a political party, and so on. The idea is that by observing variables over a large number of cases, it is possible to make inferences about a particular social phenomenon (John, 2002). The argument being advanced here is that, with large samples, social science researchers can confidently make generalisations about the empirical world.

Statistical theory, according to John (2002), demonstrates that the larger the number of cases or samples, or the greater the number of samples in relation to the whole population, the better and the surer the findings. John (2002, p. 217) further argues that quantitative researchers help their counterparts to adequately

attack them, because they report complex statistical analysis as though they had run their data through a “black box” making knowledge of the technique a necessary prerequisite to understanding the article. Often collecting, presenting and analysing data and findings in purely statistical forms does not help non-statistical specialists understand the logics of quantitative analysis. The implication of this will be summary dismissal of such research by qualitative researchers. In any case, like qualitative research, quantitative methods have also come to stay and to continue to shape social science discipline across all its spectrum of knowledge. In this context, the quantitative approach to curriculum measurement and analysis is defined as one that traditionally employs representative sample surveys and questionnaires to collect mainly quantifiable data and analyse it using statistical techniques (Kanbur, 2001a). The main features of quantitative research methods are that:

- A. It aims to classify features, count them, and construct a statistical model in an attempt to explain what is observed;
- B. A researcher knows exactly what he/she is looking for and where to get it;
- C. It is employed during the latter stages of research;
- D. All stages of the research are carefully designed before data is collected;
- E. It employs instruments such as questionnaires;
- F. Data are in the form of numbers and statistics;
- G. It seeks precise measurement and analysis of target concepts, such as use of surveys, questionnaires;
- H. Quantitative data is more efficient. It helps to test hypotheses accurately and it is value-free and objective.

In spite of its distinguishing strengths, quantitative research methods are attacked for their lack of rigour, ignoring the reality of the social world of the researched, lying with figures and numbers, neglecting socio-cultural contexts of phenomena, employing *ad hoc* procedures in defining, counting and analysing variables, as numbers themselves need qualitative explanations, and so on. For instance, numbers do not provide any detailed explanation of a research phenomenon. Even where numbers are used, they need qualitative explanation to adequately flesh them out. While qualitative research tends to take the socio-cultural settings and orientations of research objects on board, quantitative research hardly does it this way.

Silverman (2000) sharply stresses that quantitative research suggests a “quick-fix” for the following reasons: (a) involves virtually no contact with the participants; (b) statistical correlations might be only based on variables that are arbitrarily defined; (c) it relies on after-the-fact speculation of the meaning of correlations; (d) unperceived values may creep into the research due to over-dependence on measurement; and (e) over-reliance on the test of hypotheses can make the development of hypotheses a trivial matter and consequently fail to help in generating hypotheses from the data. However, in qualitative studies, the researcher is considered the primary instrument of data collection and analysis. The researcher engages in the situation, makes sense of the multiple interpretations, as multiple realities exist in any given context given that both the researcher and the participants construct their own realities. She/he strives to collect data in a non-interfering manner, thus attempting to study real-world situations as they unfold naturally without predetermined constraints or conditions that control the study or its outcomes.

According to Merriam (1998, p. 23), the researcher engages in the situation most often without an observation schedule, and plays a dynamic role in constructing an understanding of the research environment through self-

interpretation of what happens. Thus, qualitative research produces a result which is “an interpretation by the researcher of others’ views filtered through his or her own”. An inductive method is then used to support or challenge theoretical assumptions. Although the research process in qualitative research is inductive, Merriam (1998, p. 49) notes that most qualitative research inherently moulds or changes existing theory in that:

- Data are analysed and interpreted in light of the concepts of a particular theoretical orientation;
- Findings are usually discussed in relation to existing knowledge (some of which is theory) with the aim of demonstrating how the present study has contributed to expanding the knowledge base.

Maxwell (1998, p. 66) counts some research purposes for which qualitative data are particularly useful:

- Understanding the meaning that participants in a study give to the events, situations and actions that they are involved with; and of the accounts they give of their lives and experiences;
- Understanding the particular context within which the participants act, and the influence this context has on their actions;
- Identifying unanticipated phenomena and influences, and generating new, grounded theories about them;
- Understanding the process by which events and actions take place; and
- Developing causal explanations.

However, Lincoln and Guba (1985, p. 290) caution that qualitative research, which is an approach that acknowledges the researcher’s subjectivity, requires that the “biases, motivations, interests or perspectives of the inquirer” are identified and made explicit throughout the study. Given below are some other

disadvantages of qualitative research. These points were useful to the researcher such that he could minimise their effects during the processes of this study.

- Researcher bias can bias the design of a study;
- Researcher bias can enter into data collection;
- Sources or subjects may not all be equally credible;
- Some subjects may be previously influenced and affect the outcome of the study;
- Background information may be missing;
- The study group may not be representative of the larger population;
- Analysis of observations can be biased;
- Any group that is studied is altered to some degree by the very presence of the researcher. Therefore, any data collected is somewhat skewed;
- It takes time to build trust with participants to facilitate full and honest self-representation. Short term observational studies are at a particular disadvantage where trust building is concerned (Lincoln and Guba, 1985, p. 290).

Interpretive approaches give the research greater scope to address issues of influence and impact, and to ask questions such as ‘why’ and ‘how’ particular technological trajectories are created (Deetz, 1996). Walsham (1993) asserts that the purpose of the interpretive approach in informative science is to produce an understanding of the context and the process whereby informative science influences and is influenced by the context. This assertion justifies the researcher’s choice of hermeneutics as the philosophical rationale for this study. Thus, the researcher adopted an intersubjective or interactional stance towards the reality he was investigating.

7.2.1.0. MEASURING ATTITUDES IN THE EDUCATIONAL AND CURRICULUM CONTEXT

Cook and Selltiz (1964, p. 98), many years ago, presented the following approaches to attitude measurement: “(1) Measures utilising self-reports of beliefs, feelings, of behaviour; (2) Measures involving observations of behaviour towards the attitude object; (3) Measures of reactions to or interpretations of relevant partially structured stimuli; (4) Measures involve psychological reactions to the attitude objects”.

It is important to recognise that attitudes are directed towards a target, often described as an attitude object (curriculum). The target may be a person, a situation, or an educational experience. Indeed, in a curriculum, there are probably three general targets or objects of attitudes towards: Subjects being studied; Study itself in all its dimensions; Topics and themes being studied. The Questionnaire design was structured on the students’ attitudes and experiences towards aspects related to the formal school curriculum (see Figure 0.4. in Appendix B, p. 400 for more details). Looking again at the Cook and Selltiz analysis, the first two on their list are appropriate in an educational setting and are widely used (see Reid, 2003). Either the learners (or their teachers) are asked to indicate their views using a written questionnaire or they are asked their views by means of an interview.

However, there is no certainty that attitudes can be deduced precisely from responses to questionnaires or interview questions. For example, if the respondents suspect that there is some agenda, they might offer answers which they think will be seen as desirable. Equally, respondents may offer answers which reflect what they would like a situation to be rather than what it actually is. This has been described as the reality-aspiration problem and may be particularly important with younger respondents (see Danili, 2004). Some of these issues about validity and reliability have been already discussed previously in more detail within the methodology chapter (see Chapter Three).

7.2.2.0 VARIABLES AND MEASUREMENT

Reid (2003) notes that, in educational research, it is possible to see five types of data, while in measurements in the physical sciences, ratio and interval types dominate. In looking at questionnaire design, Oppenheim (1992, p. 21) distinguishes four different kinds of variables:

“(1) *Experimental variables*: These are the ‘causes’ or predictors, The effects of which are being studied they are sometimes referred to as 'independent' or explanatory variables. The analytic type of survey like the lab experiment is set up to vary these factors systematically so that their effects can be observed. Often several such variables working both in isolation and in various combinations are of interest.

(2) *Dependent variables*: These are the results, the effects-variables, the predicted outcomes, these variables have to be measured particularly carefully and group differences tested for statistical significance.

(3) *Controlled variables*: As a source of variation these should be eliminated in order to fulfil the condition of other things being equal when the effects or correlates of the experimental variables are stated.

(4) *Uncontrolled variables*: These are ‘free -floating’ variables and can theoretically be of two kinds: (a) *confounded variables* and (b) *error*. The confounded variables, sometimes called ‘correlated biases’ have hidden influences of unknown size on the result.” Inevitably, any research design also suffers from error. Such error variables are (or are assumed to be) randomly distributed or at any rate, distributed in such a way as not to effect the results, (see Oppenheim 1992, pp. 21-22).

In the context of attitude measurements, attitudes themselves influence behaviour which itself can sometimes be observed and measured. The problem

is to control other variables which might confuse the relationship between attitudes and behaviour. This, of course, assumes that the behaviour is planned and under some kind of control, according to the Theory of Planned Behaviour (Ajzen, 1991; Eagly and Chaiken, 1993). These authors indicated that rational planned behaviour is controlled by an intention to engage in that behaviour and this, in turn, is controlled by three factors which can be loosely seen as: attitudes related to that behaviour; what the person thinks others will think of them engaging in that behaviour (subjective norm); and whether the behaviour is seen as possible (perceived behavioural control) (Ajzen, 2002). For example, a student might be considering taking a course in English or physics. The strongest influence on the decision would be the person's attitude to learning English or physics, which might itself be influenced by past experiences, teachers or assessment. There would be other factors: what the student considered would be the reactions of important other people (e.g. parents, family, and friends), along with whether it was possible to take the course (e.g. cost, timetabling, time and previous successes).

However, theory also offers insights into the problem of attitude measurement. If behaviour intention is being considered in an attitude measurement (say, a questionnaire or interview), then this theory indicates that this is related to three factors, only one of which is attitudinal. One factor relates to how the person thinks others will view the behaviour, while the other factor relates to constraints on whether the behaviour is possible. If the population being measured are encouraged to be honest and assured that their responses will not affect anything else (like what their teacher thinks of them or their examination marks), then what others think will not be a very powerful factor. Equally, if the measurement does not involve issues of behaviour constraints, then that factor may also be weak. Thus, the theory does suggest that the measurements (based on behaviour intentions) are likely to be closely related to the attitudes under consideration.

7.2.3.0 SCALING METHODS

Attitude scales are described frequently in the literature (see Oppenheim, 1992, p. 21; Reid, 2003). The principle behind such an approach is that it is dangerous to rely on a single measurement. Scaling offers a way to bring together several measurements from attitude surveys to give an overall picture. Thus, it is sensible never to rely on one approach, but to use several. The essential problem is how to bring the responses from different approaches together to make a meaningful whole picture. Scaling is often used and is described here in very general terms: for example, to consider an attempt to measure attitudes towards the aspects of sciences among secondary school students, 19 statements were constructed and the students were asked to indicate the extent to which they agreed with them.

The response patterns from each of the 19 questions were correlated with each other and the 10 questions which showed the highest correlation were selected. These were then used in the final form of the questionnaire. Responses were coded using numbers and the total score for each pupil was found by adding up the numbers. This can be compared to an imaginary test in science. Suppose there are ten questions and the intention is to measure how well a group of students have performed in a range of science skills. The ten questions might test ten different skills. After marking, the marks are added to give some kind of estimation of each student's performance. The test setter would rarely set ten questions which test exactly the same skill. Thus, the performances in the ten questions might *not* correlate highly with each other. The aim is to give some measure of performance in a *range* of science skills. The marks can only be added if the 'value' of a mark in one question is regarded as similar to the 'value' of a mark in the other questions.

However, an experienced test setter can ensure that this is likely to be reasonable. When attitudes are to be measured by a questionnaire, the thought is that the responses to, say, ten questions, all seeking to offer some kind of measure of some latent construct, can be brought together to give a better measure than that obtained by simply using one question. The problem is how to be sure that the ten questions are, in fact, measuring the same construct. Correlation is often used for this purpose, but the weakness of this approach has been discussed in some detail by Reid (2006). Scaling underpins numerous approaches (e.g. especially Likert, 1932 and Osgood *et al.*, 1957) and these already been described. But, it is possible to use the structure of questionnaire items (e.g. from the Likert or Osgood approaches) without employing the uncertain approaches implied by scaling.

Thurstone (1929) is sometimes described as the father of attitude scaling but his method, although ingenious, is time consuming. It is rarely used in this form today. However, his approach led to the ideas developed by Likert (1932). Likert's primary concern was with unidimensionality - making sure that all the items would measure the same thing. He also wanted to eliminate the need for judgements by getting subjects in a trial sample to place themselves on an attitude continuum for each statement- running from 1 for strongly agree, 2 for agree, 3 for neutral, 4 for disagree and 5 for strongly disagree. These five positions were given simple weights of 1, 2, 3, 4, and 5 for scoring purposes. Likert (1932) stressed that it is very important to define the attitude object precisely and to ensure that scales are defined in narrow terms to avoid other dimensions appearing. The Likert approach is clearly much less laborious than Thurstone's approach. Oppenheim (1992) indicates that Likert scales correlate well with outcomes from Thurstone scales. Likert's approach is very popular today and is used widely.

However, Al-Shibli (2003) has noted that the five point scale is only defined at one end. This means that the 'disagree' end of the scale may be defined differently by different respondents. This problem is resolved by the approach developed by Osgood *et al.* (1957), where both ends of the scale are defined. Osgood and his team of researchers (1957) were exploring semantic meaning when a method they developed offered some useful insights related to attitudes. They called their approach the semantic differential. The semantic differential consists of a series of adjective scales, each of which is conventionally separated into six categories. The attitude object is placed at the top of the page and respondents are asked to rate the object by ticking one box on each of the popular scales (e.g. good-bad).

Skryabina (2000) illustrates the approach. She used this approach extensively to explore attitudes towards physics at various ages (10 to 20) in Scotland and found it a most insightful technique to gain pictures of the way attitudes were changing with age and stage of education. There are two major advantages of the approach. The first is that questions can be answered at a very fast rate, thus giving huge amounts of data very rapidly. The second is that both ends of the scale are defined precisely, leaving less room for confusion or ambiguity.

7.3.0.0 STATISTICAL TOOLS APPLIED IN THE DATA ANALYSIS

The data analysis emerging from the questionnaires was numerically analysed and interrogated through the production of categories, themes and patterns based upon theoretical concepts of students' continual reconstructions of their own attitudes in terms of knowledge, beliefs, feelings and experiences. In major quantitative data looking for patterns, how the students responded to the aspects of the questionnaire which I was looking at. The quantitative data involving closed questions was analysed using, the Statistical Package for Social Sciences (SPSS). The SPSS covers: How the data was analysed? This depends on how you gathered your data and what type of data (Are the data paired or not? Are they parametric or non-parametric data?) you are looking for. There are four areas that will influence the choice of analysis.

The first area is the type of data you have gathered, (i.e. *Nominal /Ordinal /Interval/ Ratio*). *Nominal data*: These data which classify or categories some attribute they may be coded as numbers but the numbers has no real meaning. *Ordinal data*: These are data that can be put in an order, but don't have a numerical meaning beyond the order. (e.g. the difference between 2 and 4 in the example of a Likert scale might not be the same as the difference between 2 and 5). *Interval data*: These are numerical data where the distances between numbers have meaning, but the zero has no real meaning. *Ratio data*: These are numerical data where the distances between data and the zero point have real meaning.

The second area is parametric data. These are assumed to have a normal distribution: it is a data distribution with more data values near the mean, and gradually less far away, symmetrically (e.g. a lot of biological data fit this pattern: measurements that come from a population that is normally distributed, e.g. t-tests).

The third area is non-parametric data. These do not depend on many assumptions about the underlying distribution of the data (e.g. Wilcoxon signed rank test, Mann-Whitney test, scores or categories). The t-test statistic was used to compare the means between two independent group samples to determine and test the significance of any possible differences that existed between male and female responses.

The fourth area is what you are looking for (significant differences, correlation etc.). Using Descriptive Statistics, from the output, look at the mean and standard deviation (Std, S.D.). Mean measures of averages are based on all the data values, and S.D. measures how widely values are spread or variation from the mean value (see Figures: 0.1, 0.2, and 0.3 in Appendix B, pp. 397-399, for more details on how the researcher selected tests statistically analysing data using SPSS and what was the order of the data been tackled in with an example extracted from current data analysis for further demonstration).

7.3.1.0 QUANTITATIVE AND QUALITATIVE DATA ANALYSIS

A strategy is a plan of action designed to achieve a specific goal. This strategy required an overview of the whole project that uses the bigger picture as the basis for deciding what offered the best prospects of success in the ‘research aims’. The *quantitative technique* was to measure phenomena, so that they can be transformed into numbers. Once the phenomena have been quantified (measured), they lend themselves to quantitative analysis software. The goal of the quantitative study then was to generate data that were numerical with transforming what was observed, reported or recorded into quantifiable units. The *qualitative study* enhanced the findings of the research, providing in-depth thoughts and a more complete picture of aspects being studied and gave the further indication of the understanding of the frames, and enriched in-depth these choices made in the quantitative data by the participants’ responses. This

could help to understand the social background processes of those involved, covering not only the scale of the issue (e.g. numbers involved, age, sex, ethnic groups) but also giving some insights into the motivational factors that gave rise to the attitudes and behaviour (e.g. peer groups).

The data collected from the close-ended questionnaires have been tabulated and analysed using descriptive statistics, and for this purpose, percentages have been calculated. Percentages are computed when the data is conceptualised in relative terms. The percentages have highlighted the distribution of responses along the scale. The Likert scale has been applied and coded. The percentages will also enable the researcher “to compare the distribution with another” (Pilcher, 1990, p. 142). The percentages provide a complete summary of the data and highlight the various trends emerging from the data, which will inform the research conclusions. Interview data involving open-ended responses to the questionnaire and the three main stages suggested for interview investigation by Ary *et al.*, (2006: 490) and Hill *et al.*, (1997) were applied.

The first stage was familiarization and organization, when all interview notes were read and reread by myself to be familiar with the data, and to be able to organise the open-ended questions. Domains were used to categorise the data into general topics. In the second stage, the domains were analysed for core ideas that were meant to summarise and capture the essence of the participants’ words by coding and recoding, given the particular phrases, themes and patterns that emerged from participant respondents. They were identified and arranged into categories of meaning based upon recurring themes in the data (Bryman, 2004). This coding system was utilised to create a composing style sheet for each subject from which patterns in subjects’ processes are revealed. Through these patterns, similarities and differences among subjects were determined. These categories were then amended to incorporate other areas of concern that

emerged. In this manner, all of the categories of meaning were subsequently refined to ensure that all of the different kinds of ‘units of analysis’ (Bryman, 2004, p. 187) were included in the findings of the research. The third and final stage of a cross-analysis was conducted to determine and summarise the common themes across the participants’ responses for the final data interpretation. The objective of analysis is to stay as true to the participants’ words as possible. Semi-structured interviews that allow the respondents some freedom were also conducted to enrich and enhance the validity of the questionnaire evidence (Gomm, 2008; Oppenheim, 2003). These interviews can give a prepared explanation of the purpose of the study and provide respondents with the possibility of elaborating on their answers to any questions (Silverman, 2005).

In order to ensure that I gained a clear understanding of the precise language used by respondents, at the end of each interview I provided a summary of what the interviewees said during the interviews. I invited respondents to make any corrections as I gave my summary, but all interviewees agreed and were happy with the summary contents. Since researcher biases and expectations are likely to influence data analysis, open discussions and reflection on biases and expectations are meant to condense their impact on the final analysis and conclusions. Constructivism is closely related to interpretivism. Interpretivism often addresses the essential features of shared meaning and understanding, whereas constructivism extends this concern with knowledge as produced and interpreted.

In the context of this study, individuals construct their own knowledge within the social-cultural context influenced by their prior knowledge and understanding, and, therefore, the researcher positions himself as an insider researcher within the parameters of a constructivist epistemological discourse. As the emphasis is on the socially constructed nature of reality, the learning

environment has to be created in such a manner that there is an intimate relationship between the researcher and what is being studied, and learners could describe/express their unique individual experiences in the learning process. Such a research environment allows the researcher to observe, investigate, and understand the learning process, and further, gather and document the subtleties of learners' experiences through strategies, such as participant observation, various written texts, and face-to-face individual interviews in a social and cultural context in which the learning occurs. The key words pertaining to this methodology are participation, collaboration and engagement (Henning *et al.*, 2004).

In the interpretive approach, the researcher does not stand above or outside, but is a participant observer and/or as insider researcher (Carr and Kemmis, 1986; Costley, 2010) who engages in the activities and discerns the meanings of actions as they are expressed within specific social contexts. Shankman (1984b) wrote, that he believed complete objectivity is impossible; but this does not mean abandoning the search for objective knowledge or conceding that all versions of reality are equally true. What is necessary, according to the interpretivist theorist Rosaldo (1982, pp. 198-277), is “ways of moving back and forth between an actor’s subjective interpretation and a set of objective determinants”. This perspective maintains that subjective interpretations of reality and objective phenomena may be simultaneously sought and that it is furthermore important to understand the connection between the two. The very fact that subjective understanding differs depending on the context reveals that objective contextual conditions may influence subjective meanings (Shankman, 1984b).

Thus, compatibility can be found between positivism and this understanding of interpretivism, which focuses on why and how individuals come to understand events as they do, yet recognizes that those understandings may be influenced

by an objective reality that, while difficult to discern, is potentially knowable. Under this framework, it is possible to simultaneously accept that there is both a single objective truth of factual events and multiple subjective views of the truth that reveal much about the worldviews and perspectives of those who hold them. The objective for a positivist analysis, as we have discussed, is therefore to come as close to this objective truth about the causes of events as possible by managing various forms of bias or distortion that may arise from the context or the respondent's interpretive understanding of events.

The objective for interpretive research, by contrast, is to understand how individuals understand that context and how the multiple subjective 'truths' they construct provide insight into their cultural understandings. We argue that each approach is important in its own right and that combining the two has even greater analytical value. Qualitative approaches are becoming more widely used as analysis methods improve and people search for better ways of gathering data about a problem (Price, 2002). The essential processes in this study included investigating in detail the unique educational gender experiences of individuals in the complexity of a real classroom.

The researcher as a participant in the study undertook all the processes that influenced these experiences and the analysis of the resulting descriptive data. This approach allowed for 'thick narrative descriptions' of the phenomena under study and gave the researcher the opportunity to take into account the views of the participants and the subtleties of complex group interactions and multiple interpretations in the group's natural environment. The researcher found a qualitative description of participants' experiences and an inductive analysis of data as most appropriate for the purpose of this research, because all these procedures enhanced the possibility for some kind of objectivity which would have been lost if quantitative or experimental strategies were applied

alone. Moreover, constructed knowledge is not a truth that remains stable and generalizable across all possible contexts; rather, it exists within specific contexts and perspectives - knowledge that may profess to be truth for one context may not be truth for other contexts. Learning is a complex process. For the learning environment to be effective, it requires the complex interaction of many variables. Assessment of learning is better done when the learning is taking place (rather than after it has taken place), by observing how the learners are participating and progressing in the learning process. As a result, description of the processes or events is more valuable than the research outcomes or products. Furthermore, it is difficult, if not impossible, to predict with accuracy the gendered attitudes of complex organisms.

The use of quantitative research could obscure some of those insights and experiences of participants of both genders that the researcher needed to understand in order to address the complexities of the learning processes and the contextual factors required for the learning environment. The preceding section explained these three theoretical objectives, first, looking initially at positivist and second, interpretivist analyses as each might be conducted independently of the other, and third, looking at the advantages of combining the two. In particular, the focus was on how “contested events” can illustrate how social divisions, normally buried in the patterns of everyday life, become revealed as people project these underlying biases onto their understandings of the gender ideology. The following sections summarise and discuss the findings from the mixed methods research: quantitative and qualitative analysis.

7.4.0.0 THE SUMMARY OF THE RESEARCH FINDINGS AND DISCUSSIONS

Much data was collected using questionnaires, with a large sample of students (1000 in all) at various ages and stages, which has been quite encouraging and shows the interest of both genders in improving the teaching practice through the medium of curriculum content at the secondary school level in Libya. The sample was drawn from different school locations (rural and urban regions) in such a way that it reflected the social mixture of Libyan society. 80% (n=800) of questionnaires were completed and returned. Only 20% (n=200) of questionnaires were invalid, mostly as a result of not being answered completely.

I managed to collect the completed documents through my colleagues in the four different institutions, as a basis for drawing up the structure and content of a series of semi-structured interviews for deeper insights into the themes identified by the questionnaires and to begin to explore the construction of meaning that lies behind the responses in the questionnaires. In my view, having that major quantitative study from different geographical locations increased the reliability and validity of the methodology.

The distribution of the overall sample was split between rural schools (Al-Nosour Khader School and Al-Zahf Alkhader School), which accounted for 55%, (n=440) of the sample, with urban schools (Al-Gartabya School and Al-Fatah School) accounting for the remaining 45%, (n=360) of the sample (see Table 1.3). Government schools are included in this study. Schools are considered as urban if they are in the main cities or major towns towards the Shabiya (large area). Schools are considered rural if they are in outlying districts or small towns (Mantaqa) or villages (Qarya). Selected schools cover coastal (sahal) areas, agricultural and pastoral farming areas, and desert (Sahara) areas.

TABLE 1.3: THE SAMPLE SIZES OF THE PARTICIPATANTS INVOLVED IN THE QUANTITATIVE DATA CLASSIFIED (see Figure 6.0 in Appendix C, p.412 for the map of school locations).

Age	Total	Percentage	Stage	[2] Rural Schools* = 55%			[2] Urban Schools ** =45%		
				Male	& Female	= Total	Male	& Female	= Total
15	97	12.1	Year one	32	34	66	10	21	31
16	103	12.9	Year one	22	25	47	12	44	56
17	200	25.0	Year two	60	46	106	56	38	94
18	200	25.0	Year three	50	55	105	51	44	95
19	123	15.4	Year four	32	38	70	29	24	53
20	77	9.6	Year four	21	25	46	14	17	31
Total	800	100.0	Total	217	223	440	172	188	360

Total Number 440 = 55% Rural Schools (Al-Nosour Khader and Al-Zahf Alkhader).*

*Total Number 360 = 45% Urban Schools ** (Al-Gartabya and Al-Fatah).*

TABLE 1.4: THE GENDER CHARACTRISTICS OF THE SAMPLE

Gender	Frequency	Per cent=%
Males	389	48.6%
Females	411	51.4%
Total	800	100%

The gender distribution of the overall sample scale favours females (see Table 1.4). The female participants account for 51.4% (n=411) of the sample. Although the male participants are substantial in number, they account for only the remaining 48.6% (n=389) of the total sample. It is difficult to fully account for the inequality. One of the reasons for this might be the field locations of this research context, where females make up a higher percentage in attendance in the most school institutions regardless of their subjects of study. Although the number of males and females in most classes was not the same, with more females than males, I was able to find school classes with approximately equal numbers of male and female students for the current research study. Overall, there is a reasonable balance of numbers between the two genders for the purposes of this research.

7.4.1.0 THE KEY “ATTITUDE OBJECTS” IDENTIFIED BY THE STUDENTS TOWARDS THE FORMAL ACADEMIC CURRICULUM (refer to aim 1, p. 25).

Table 2.0 and Figure 1.5 show the gender differences in students’ directions for the study subjects as categorised.

TABLE 2.0: SHOWS THE PARTICIPANTS’ DIRECTIONS OF THEIR STUDY CHOICES

Analysis	Gender		Arts	Sciences	Technology	Maths	Total
Percent	M48.6%	F51.4%	22.80%	35.80%	29.00%	12.50%	100.00%
Frequency	M-389	F-411	182	286	232	100	800
1st year	Males		15	31	23	7	76
	Females		35	43	33	13	124
2nd year	Males		20	40	38	18	116
	Females		20	31	19	14	84
3rd year	Males		21	35	30	15	101
	Females		30	28	27	14	99
4th year	Males		14	41	30	11	96
	Females		27	37	32	8	104

- There was clear indication that sciences and technology specialisations were the most common areas within the curriculum (see the following Figure 1.5). These areas (sciences and technology) accounted for 35% (n=286) and 29.0% (n=232) respectively. These subject areas appear to attract the majority of both genders at all ages and were evidently towards future career (see Table 2.1). Despite the differences of participants’ background in this particular research context, this supports what Catsambis (1995) found in the National Educational Longitudinal Study: that over twice as many middle school males as females are interested in a future career in science.

FIGURE 1.5: SHOWS THE PARTICIPANTS' DIRECTIONS OF THEIR STUDY CHOICES CATEGORISED.

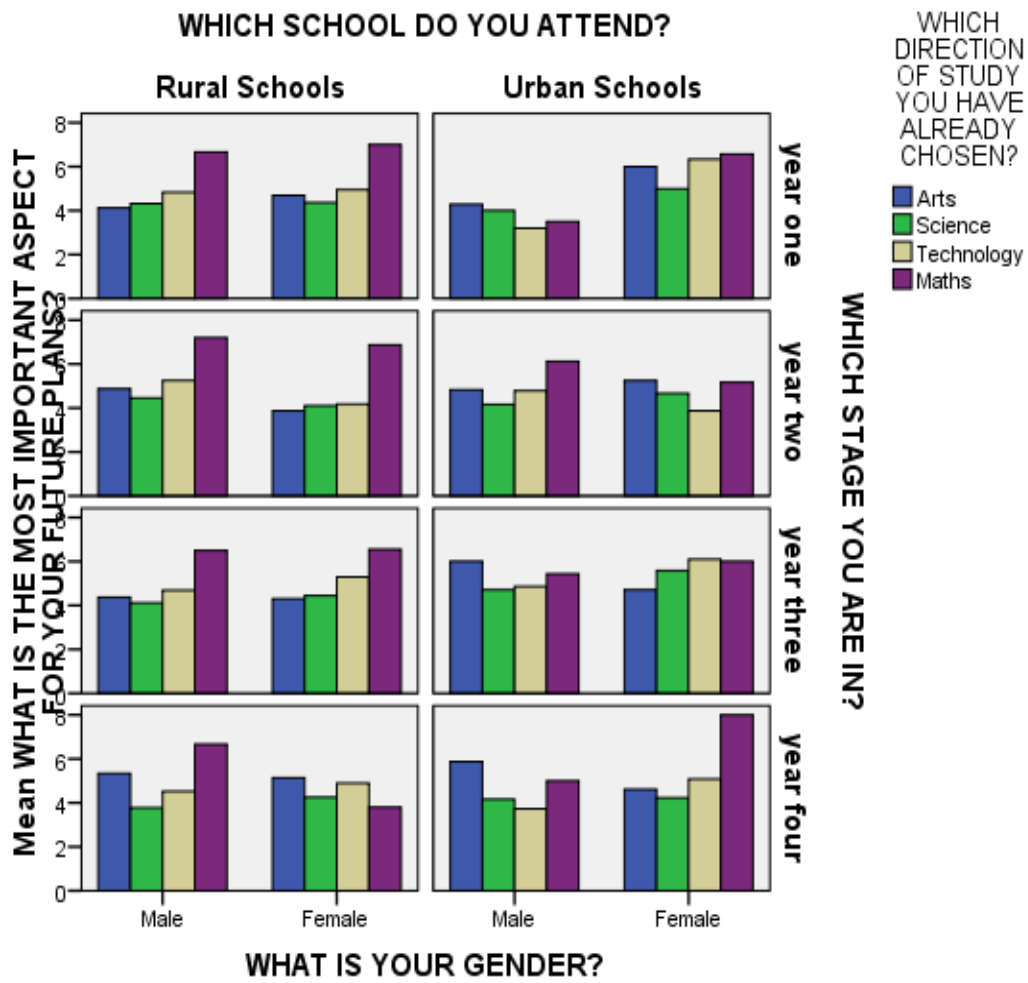


TABLE 2.1: SHOWS PARTICIPANTS’ REASONS FOR CHOOSING THE COURSES

THE SUBJECT CHOICES				Total & %	Gender frequency males & females	
(A). I am doing what parents encourage me to do.				11.3% (90)	34	56
(B). I am doing what my gendered Peers encouraged me to do.				12.0%(96)	58	38
(C). My subject relates to my culture understanding.				6.4%(51)	26	25
(D). My subject choice relates to our religion influence.				13.9%(111)	56	55
(E). My course will lead to a good jobs.				15.6%(125)	53	72
(F). My teachers encouraged me.				11.8%(94)	41	53
(G). My subject choice related to the societal attitudes and experiences.				12.5(100)	54	46
(H). The subject is important for further study at University				11.4%(91)	47	44
(I). The best part of school subjects.				5.3%(42)	42	0
Variable	Gender	Mean	SD	t	df	Sig
RESEASONS FOR CHOOSING THE COURSE	Females	5.10	2.506	7.67	798	P= .002
	Males	4.57	2.245			

- There was clear indication of gendered differences 12.0% (n=96) between male students 58 and 38 for female students in their perceptions of what their gendered peers encouraged them to do at school (see Table 2.1). There was equivalent indication of gendered differences 13.9% (n=111) between male students 56 and 55 for female students in their perceptions of subject choice related to their culture and religion influences that have a major impact on their decision towards formal academic subject directions (see Table 2.1).
- The majority of the participants considered the value of their subject choices for studying mainly in terms of job opportunities. When it comes to reasons for career preferences in terms of gender, we see significant frequency differences, which accounted for 15.6% (n=125) of the total 53 for males and 72 for females (see Table 2.1). This supports research evidence that an important purpose of school and education is to help students get a job or set them on the path for their chosen career (Kysel *et al.*, 1992). The majority of secondary schools have initiatives under way intended to broaden pupils’ thinking about subject choices and careers.

These sometimes make good use of the outside agencies and they build well on work experience programmes. Nevertheless, progress is very slow in developing countries, such as Libya, particularly in the rural regions.

- The Means in the above Table 2.1 indicate, that there was a statistically significant difference ($t = 7.67$, $df = 798$, two tailed $P = <.002$) between the mean responses for the females (5.10, $SD=2.506$) and males (4.57, $SD=2.245$) about the students' gendered experiences and perceptions of reasons for choosing their study courses. There were clear indications of gendered variation differences between males' and females' responses and also between the same genders of rural and urban responses. The following Figure 2.0 shows the overall picture of variation differences categorised in a diagram by comparison for better understanding.

FIGURE 2.0: SHOWS GENDER GAP DIFFERENCES IN PARTICIPANTS' REASONS FOR THEIR STUDY COURSE DIRECTIONS.

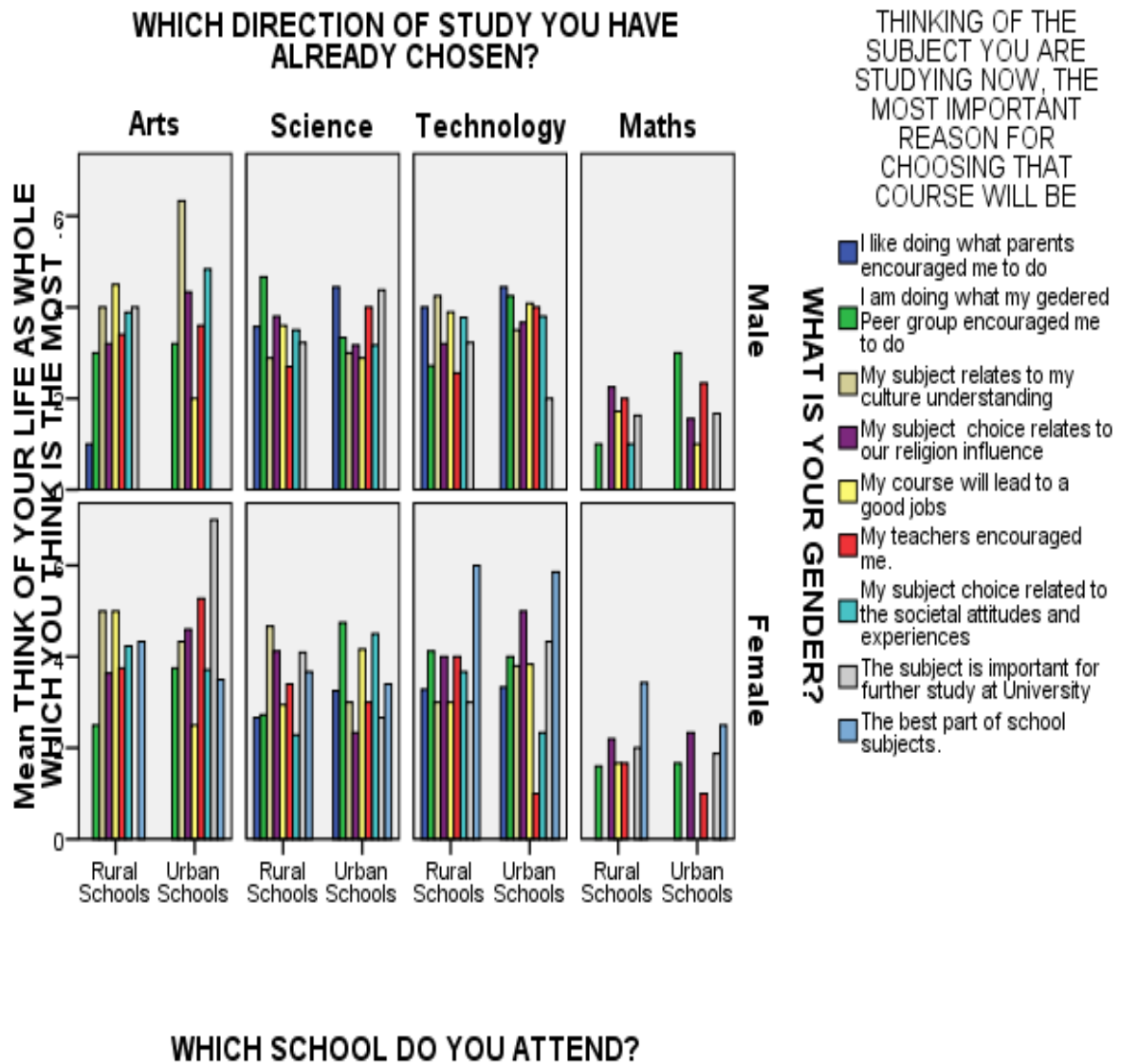
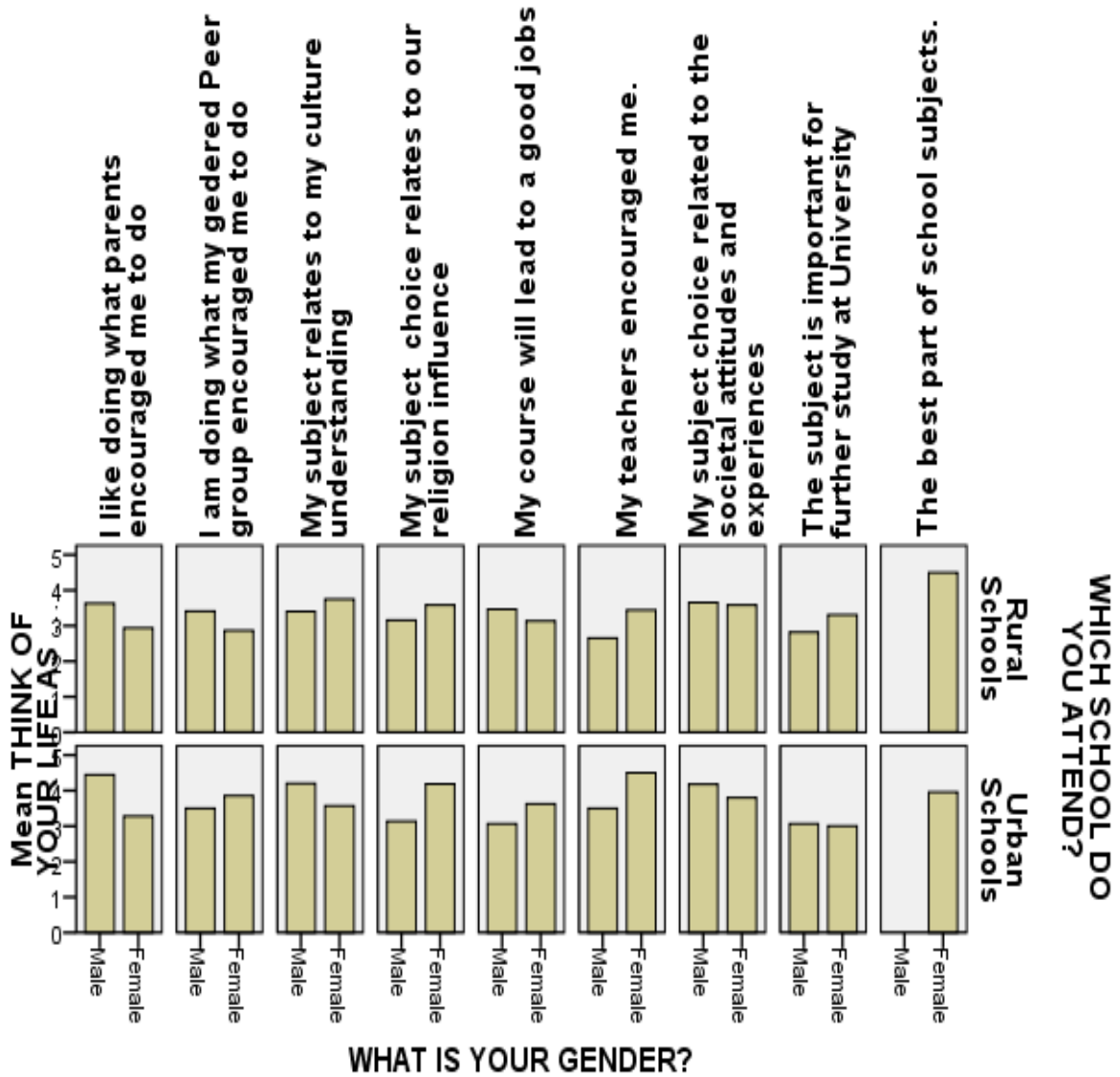
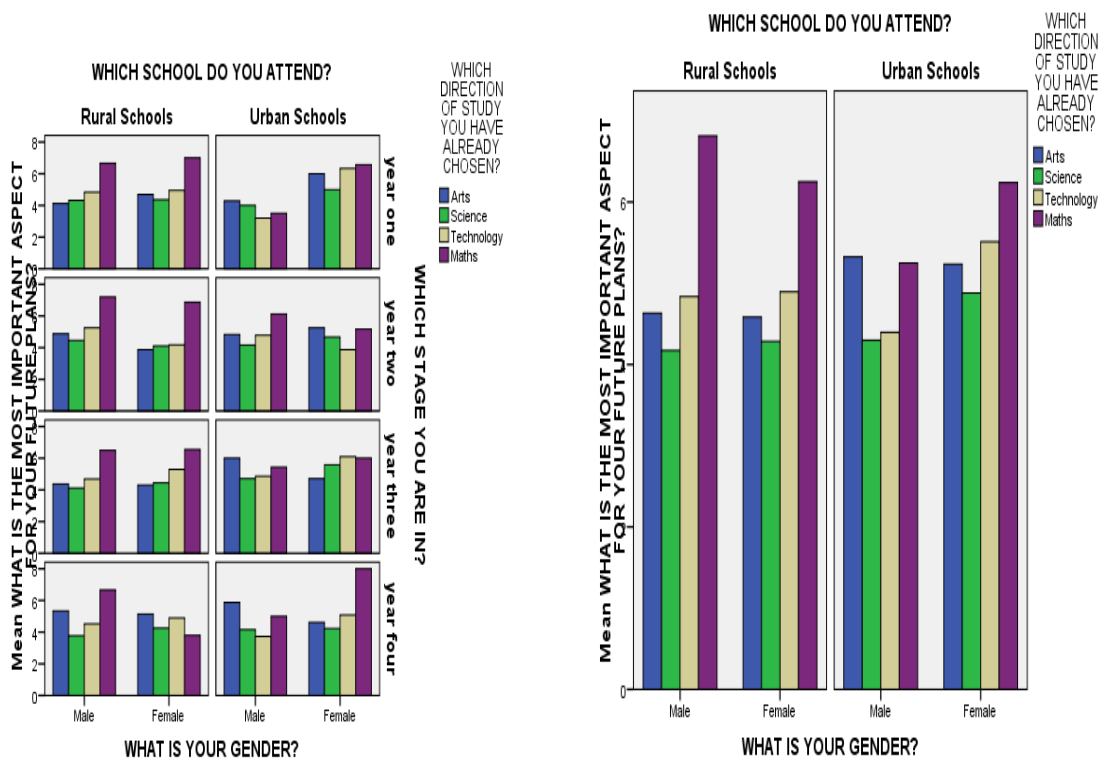


FIGURE: 2.1 REASONS FOR CHOOSING THE STUDY COURSE DIRECTIONS CATEGORISED



- Evidence from this current research data suggests that the effect of gender gap differences are continuing steadily and not changing over the period of study in the sciences, technology and mathematics specialisations between males and females, in particular with the rural male and female participants, while the effect of gender gap differences is narrowing and changing with urban male and female participants. Such a narrowing of gender gaps as did occur may, as Francis (2000) argues, reflect changes in the aspirations and norms in society (Francis, 2000; Wikeley and Stables, 1999). However, this pattern is not changed among rural participants (gender gap in favour of males maintained), (see Figure 3.0 below).

FIGURE 3.0: GENDER GAP DIFFERENCES IN PARTICIPANTS' INTERESTS FOR THE STUDY SUBJECT DIRECTIONS IN RURAL AND URBAN SCHOOLS.



In comparison with evidence from survey data from England, this also suggests that the effect of gender differences on subject choice appears to have been declining over time (Francis, 2000; Wikeley and Stables, 1999). This is reflected in examination entries for French, where the gender gap decreased from 20% to 8% between 1984 and 1997 (Bell, 2001). Evidence from this current research data also suggests that there was a strong statistically significant positive correlation ($r = .146$, $n = 800$, $p = <.001$) between the two variables of high levels of participants' attitudes towards the examinations system and how it affects the development of their skills associated with high levels of the participants' school results getting worse.

In addition, Brown (2001) uses a Gender Inequality Index to show that the trend of reduction in gender difference in examination entries in GCSE is strongly related to the introduction of a National Curriculum in England. Therefore, steps need to be taken by educational organisations at the secondary school level to develop co-ordinated communities of practice which reflect changes in aspirations and norms in society and aim to educate pupils about gender and subject choice. Each of these factors that might generate an association between social background and subject choice is mirrored in the case of gender. Moreover, it has been suggested that a further source of gender difference arises from the greater likelihood that females will adjust their view of their own capabilities in the light of external evidence. School subjects in which it is relatively more difficult to gain high marks may be less attractive to those females who adjust their self-effectiveness in response to test and examination grades secured (van de Werfhorst *et al.*, 2003; Wilder and Powell, 1989).

7.4.2.0 STUDENTS' EXPERIENCES AND PERCEPTIONS OF THEIR ABILITIES AND PREFERNCES (refer to aim 2, p. 25)

- The analysis of participants' performance has identified a number of curriculum concerns, for example, the continuing narrowed aspirations of females when selecting subject options and future occupational possibilities, despite their improved performance relative to males (refers to Table 2.0). The participants' perception of gender issues across a range of ages and social groups localities, were seen as more sensitive to changing cultural expectations and /or changes in the labour market preferences. For example, females and males appeared more confident and positive about their future jobs and opportunities. Nevertheless, occupational preferences for both sexes appear to remain conventional and stereotyped, influenced by their religion and social culture background (refers to Table 2.1).

TABLE 3.0: SHOWS SUMMARY FIGURES FOR THE T-TEST ANALYSES FOR EQUALITY OF MEANS IN STUDENTS' GENDER PERCEPTION DIFFERENCES TOWARDS THE ASPECTS OF SCIENCES.

Variables	Gender	Mean	SD	t	df	Sig
All one has to do in science is to memorise things	Male	1.94	1.27	-4.67	798	P= < .001
	Female	2.41	1.58			
Learning science successfully depends on having a good memory	Male	2.26	1.11	-4.66	798	P= < .001
	Female	2.68	1.4			

- There was clear and strong trend that the participants in particular females see the aspects of sciences largely as a memory picture. The Means in Table 3.0 indicate, there was a statistically significant difference (t= - 4.67, df=798, two tailed P = <. 001) between the mean responses for the females (2.41, SD= 1.58) and males (1.94, SD= 1.27), the security of

knowing what to learn and then simply committing it to memory, knowing that the rewards come from recalling the ‘right’ answers or procedures, was clearly a powerful influence.

- The Means in the Table 3.0 indicate, there was also a statistically significant gender difference ($t = - 4.66$, $df = 798$, two tailed $P = <.001$) between the mean responses for the females (2.68, $SD=1.4$) and males (2.26, $SD=1.111$) about the students’ gendered experiences and perceptions of their abilities related to learning science successfully. This likely presents the aspects of sciences within the school formal academic curriculum as abstract knowledge rather than meaningful methods of enquiry or ways of interpreting and understanding the world through the development process of learning at secondary school level.

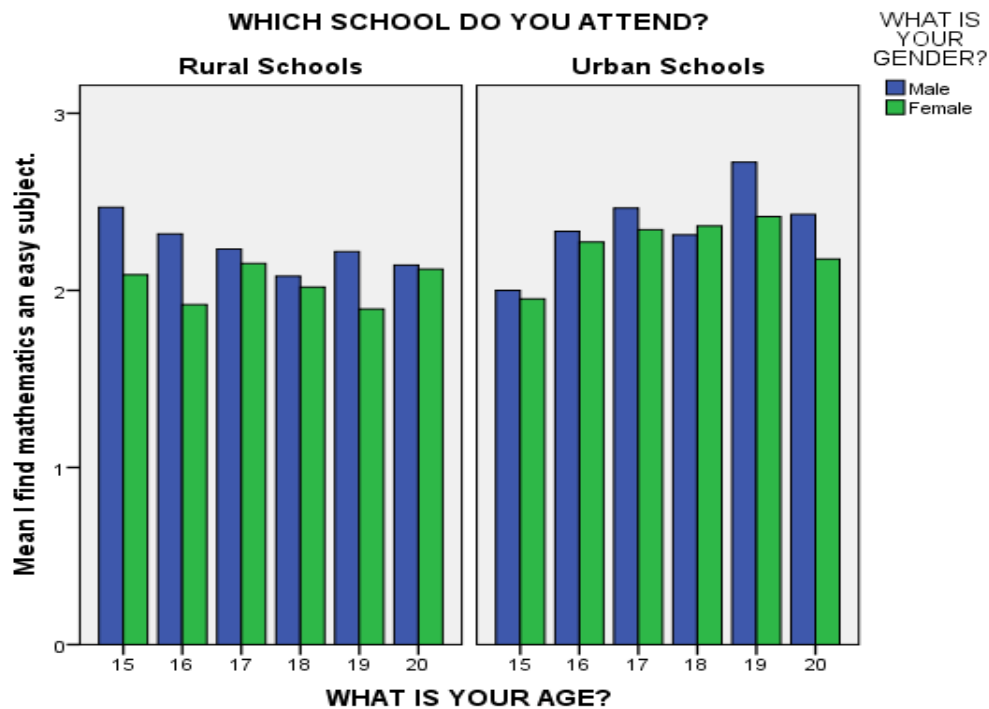
TABLE 3.1 SHOWS SUMMARY FIGURES FOR THE T-TEST ANALYSES FOR EQUALITY OF MEANS IN GENDER DIFFERENCES TOWARDS MATHEMATICS.

Variables	Gender	N	Mean	Std. Deviation	Mean Difference	t	df	Sig (2-tailed)
I find Mathematics an easy subject	Females	440	2.15	.852	.168	2.295	798	P= < .001
	Males	360	2.32	1.195				
I find mathematics to be very useful in daily life	Females	440	2.33	1.469	-.341	2.295	798	P= < .001
	Males	360	1.99	1.377				
Variables	Schools	N	Mean	Std. Deviation	Mean Difference	t	df	Sig (2-tailed)
Some students can do mathematics, others cannot do mathematics	Rural	440	3.26	1.38	0.99	11.08	798	P= < .001
	Urban	360	2.28	1.09				
I find mathematics to be very useful in daily life	Rural	440	2.11	1.44	-0.12	-1.17	798	P= .243
	Urban	360	2.23	1.43				
Mathematics is not preparing me well for further study	Rural	440	1.83	0.74	-1.92	-29.4	798	P= < .001
	Urban	360	3.75	1.1				

- The Means in Table 3.1 indicate, there was a statistically significant gender difference ($t = 2.295$, $df = 798$, two tailed $P = <.001$) between the mean responses for the females ($M=2.15$, $SD=.852$) and males ($M=2.32$, $SD=1.195$) about the students' gendered experiences and perceptions of their abilities related to learning mathematics. Mathematics emerged as a difficult subject particularly for female participants. One of the most common explanations for gender disparities in mathematics has focused on attitudes that students have towards mathematics. This study has reported that there were gender differences in attitude towards mathematics' difficulty, with females showing more negative attitudes than males comparing their entry performances.

- The Means in Table 3.1 above also indicate, there was a statistically significant difference ($t = 11.08$, $df = 798$, two tailed $P = <.001$) between the mean responses for the rural participants ($M=3.26$, $SD=1.38$) and urban participants ($M=2.28$, $SD=1.09$) about the students' gendered experiences and perceptions of their abilities related to learning mathematics. Clearly, mathematics posed the greatest difficulty in relation to rural participants' insights, in particular females, and this is likely to be the key to why the views about mathematics are so sustained over the period of the study (gender gap in favour of males maintained) in the overall scale (refer to Figure 3.1).

FIGURE 3.1: SHOWS GENDER GAP DIFFERENCES IN STUDENTS' PERCEPTIONS TOWARDS MATHEMATICS.



- The study has shown females are more likely to have a go, both in entry and performance, at the traditionally 'male' subject of mathematics (refer to Figure 3.1). The research found specifically that, although females showed their interests in entry and performance in mathematics, male students were more controlled and sustained in the overall scale. Compared with males, females students tend to take responsibility for bad academic results, attributing them to a lack of ability, and confidence, and perceiving mathematics as a male domain had debilitating casual attribution patterns both which are internal casual factors (Casey *et al.*, 2001; Ma and Kishor, 1997; Sayers, 1994; Vermeer *et al.*, 2000;). Despite such consistent findings of females' low confidence in mathematics, studies of classroom environment have shown that the girls' confidence in mathematics improved greatly in classes which actively involved girls in the learning of mathematics (Boaler, 2000; Rennie and Parker, 1997).

TABLE 4.0 SHOWS SUMMARY FIGURES FOR THE T-TEST ANALYSES FOR EQUALITY OF MEANS IN GENDER PERCEPTION DIFFERENCES TOWARDS TEACHERS.

Variables	Gender	Mean	SD	t	df	Sig
I do not believe in just accepting what the teachers say without questions, success involves thinking of myself	Male	1.67	0.83	-4.9	798	P= < .001
	Female	2.03	1.23			

➤ In Table 4.0 there was a statistically significant difference that illustrated the different perceptions in gender groups ($t=-4.901$, $df=798$, two-tailed $P< .001$) between the mean responses for females ($M=2.03$, $SD=1.231$) and males ($M=1.67$, $SD=.828$). Females do not believe in just accepting what the teachers say without question, success involves thinking. By comparison it is clear that urban females have a higher degree of belief perception than rural females (see Figure 4.0 for more details).

FIGURE 4.0: SHOWS GENDER GAP DIFFERENCES IN STUDENTS' BELIEF PECEPTIONS TOWARDS THEIR TEACHERS.

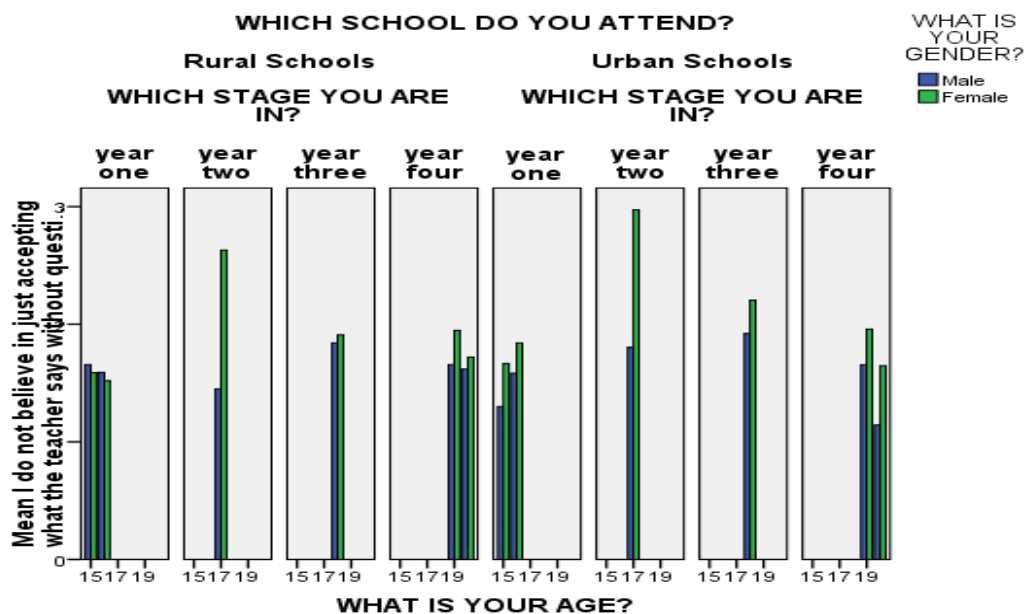


TABLE 4.1 SHOWS SUMMARY ANALYSES FOR EQUALITY DIFFERENCES OF STUDENTS' PARENTAL LEVEL OF EDUCATION.

Education Levels	No Education		Compulsory		High School		University	
	Father	Mother	Father	Mother	Father	Mother	Father	Mother
Parents								
Percent	11.8%	34.0%	28.5%	32.3%	18.0%	18.8%	41.8%	15.0%
Total Frequency	94	272	228	258	144	150	334	120
1st Year	12	30	58	80	32	46	98	44
2nd Year	26	56	42	62	34	48	98	34
3rd Year	16	70	58	66	38	38	88	26
4th Year	40	116	70	50	40	18	50	16

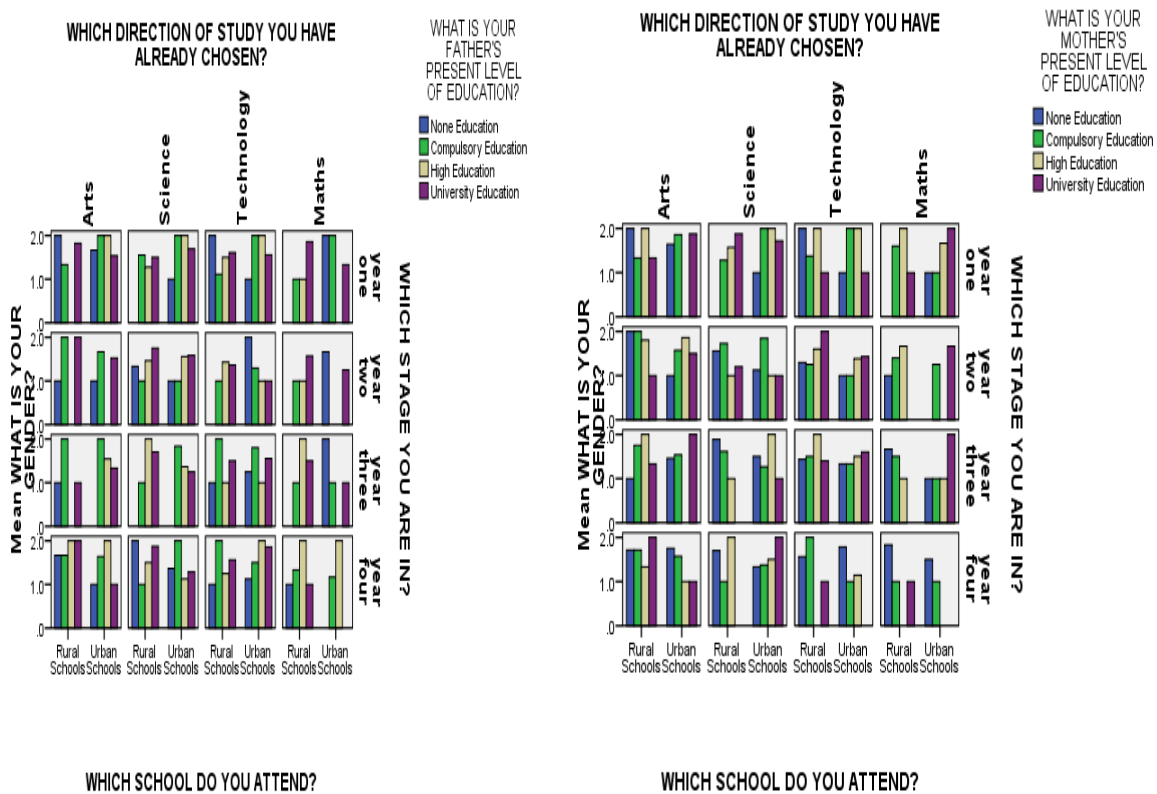
- There has been a remarkable change over four years in parental education (see Table 4.1), this is shown by comparing the statistical differences between the students' parental levels of no education [fathers 11.8% (n=94) and 34.0% (n=272) of mothers] and with the University education [fathers 41.8% (n=334) and 15.0% (n=120) of mothers].
- There was also a clear indication of a gendered Mean Difference of students' parental education for fathers ($t=2.186$, $df=798$, two-tailed $P=.029$, Mean Difference=.167) and ($t= -.533$, $df=798$, two-tailed $P=.594$, Mean Difference= -.040) for mothers (refers to Table 5.0 below).

TABLE 5.0 SHOWS SUMMARY FOR THE T-TEST ANALYSES FOR EQUALITY OF MEANS IN GENDER DIFFERENCES OF STUDENTS' PARENTAL LEVEL OF EDUCATION IN RURAL AND URBAN SCHOOLS.

LEVEL OF EDUCATION	SCHOOLS	N	Mean	Std. Deviation	Std.Error Mean	t	df	Sig 2-tailed	Mean Difference
FATHERS	Rural Schools	440	2.97	1.058	.050	2.186	798	.029	0.17
	Urban Schools	360	2.81	1.097	.058				
MOTHERS	Rural Schools	440	2.13	1.032	.049	-.533	798	.594	-.040
	Urban Schools	360	2.17	1.077	.057				

- By comparing the Mean between rural mothers (M=2.13, SD=1.032) and (M=2.17, SD=1.077) urban mothers in Table 5.0, statistically there was a slight indication of a gendered Mean Difference of students' parental education in urban and rural regions. This was also revealed by comparing the Mean Difference between rural fathers (M=2.97, SD=1.058) and (M=2.81, SD=1.097) urban fathers. The diagram below also illustrates more by the comparison of students' parental education where there was indication of gendered difference of students' parental education in urban and rural regions over the four years of participants' study (refers to Figure 4.1 below).

FIGURE 4.1: SHOWS GENDER GAP DIFFERENCES IN STUDENTS PARENTAL EDUCATION CATEGORISED IN RURAL AND URBAN SCHOOLS.

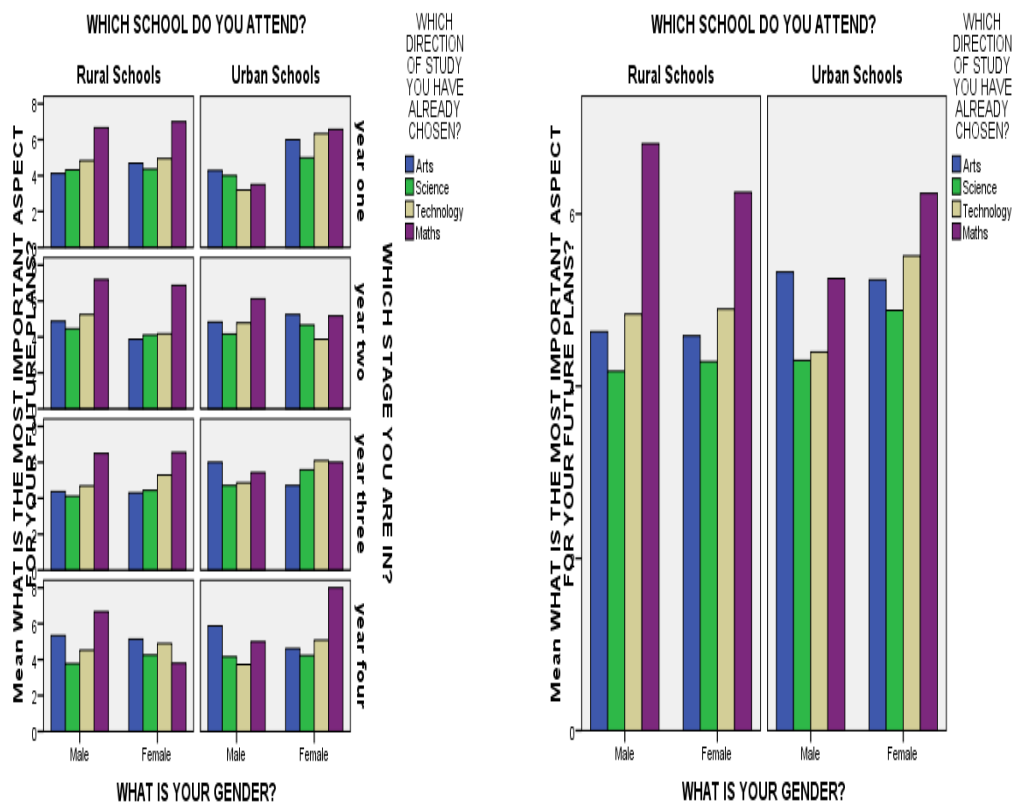


In this study, it was considered whether the educational background of mother and fathers had a bearing on the choices students expressed or on the career areas which their parents prefer for them. Overall, this did appear to be a significant factor and accounted for 11.3% (N=90 in total for males 34 and females 56) on their reasoning for their subject directions (see Table 2.1 Chapter Four) towards the formal academic curriculum. The above result Figure 4.1 suggests a higher educational level of parental support and interest in school and education compared to many years ago. In fact, gender is less important than other multiple factors and “...class and the associated levels of education of parents (for both boys and girls) continue to be the most reliable predictors of a child's success in school examinations” (Epstein *et al.*, 1998, p. 11). There are numerous theorists who, although acknowledging gender does influence levels of success in education, state any questionable differences cannot be properly understood without being related to social class and race (Bleach, 1998; MacDonald, 1999;).

7.4.3.0 WHETHER ANY SIGNIFICANT MEASURES OF ATTITUDES DIFFERENCE EMERGE IN THE PRIORITIES PROJECTED BY MALE AND FEMALE STUDENTS TOWARDS THEIR FORMAL ACADEMIC CURRICULUM (refer to aim 3, p. 25)

- There has been a considerable increase in entry mean differences at secondary school level with the entry gender gap subject choice, in favour of female students increasing their entry into full range of subjects, including the traditionally ‘male’ Science, Technology and Mathematics, whilst male students have nevertheless reduced the gender entry gap in Arts by increasing their performance movement into Technology and Mathematics subjects, particularly, in rural schools (see Figure 5.0).

FIGURE 5.0 SHOWS GENDER GAP DIFFERENCES IN STUDENTS' ENTRY MEANS OF SUBJECT DIRECTIONS AT SECONDARY SCHOOL LEVEL.



The difference in subject choice is an area which has not really dramatically changed throughout the years. Abercrombie and Warde (1994, p. 370) stress that “The sex segregation of the labour marketplace is perhaps the most important factor, since many girls will orientate themselves towards occupations known to offer reasonable access for women”. This is a common theory and it is sometimes suggested that the fact girls are more closely pulled to the domestic field constrains them and pulls them towards certain subjects (Griffin, 1995). In addition, differing socialisation, and often the need of being close to a ‘best friend’ (refers back to Table 2.1) can increase the proportion of girls in these certain subjects (Banks *et al.*, 1992).

TABLE 5.1 SHOWS SUMMARY FIGURES FOR THE T-TEST ANALYSES FOR EQUALITY OF MEANS IN GENDER DIFFERENCES TOWARDS TECHNOLOGY.

Variables	Gender	Mean	Std. Deviation	t	df	Sig (2-tailed)		
Using technology system in learning is essential	Male	2.22	1.55	7.67	798	P= < .001		
	Female	3.09	1.67					
I enjoy new technology like computers in my learning process	Male	1.42	0.89	-2.88	798	P=.004		
	Female	1.63	1.18					
Variables	Schools	N	Mean	Std. Deviation	Mean Difference	t	df	Sig (2-tailed)
Using technology system in learning process is essential	Rural	440	2.11	1.44	0.96	8.49	798	P= < .001
	Urban	360	3.07	1.71				
I find handling technology difficult	Rural	440	4.17	0.74	1.92	29.4	798	P= < .001
	Urban	360	2.25	1.1				

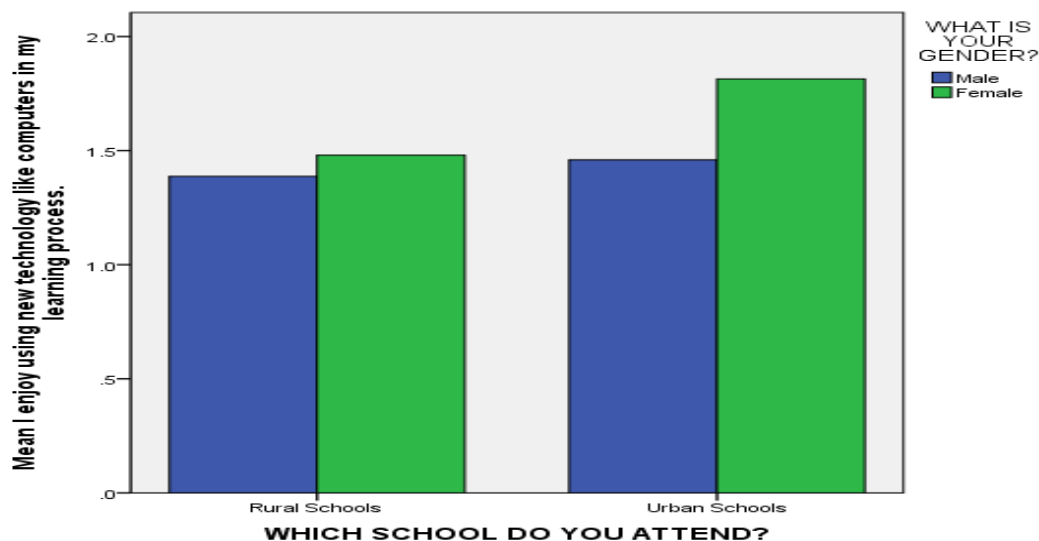
Variables	Schools	N	Mean	Std. Deviation	Mean Difference	t	df	Sig (2-tailed)
It would help me get a good job in the future	Rural	440	2.2	0.93	0.23	3.98	798	P= < .001
	Urban	360	1.97	0.64				
Technology is only needed by those studying subjects like sciences	Rural	440	3.71	1.05	0.34	4.26	798	P= < .001
	Urban	360	3.37	1.21				

- Referring to the Means in Table 5.1, it shows there was a statistically significant difference ($t=7.67$, $df=798$, two-tailed $P=<.001$) between the mean response for the females ($M=3.09$, $SD=1.67$) and males ($M=2.22$, $SD=1.55$). Female participants considered using a technology system in learning is essential, more so than male participants (see also Figure 5.1).
- Referring to the Means in Table 5.1, this shows there was a statistically significant difference ($t=-2.881$, $df=798$, two-tailed $P=.004$) between the mean response for the females ($M=1.63$, $SD=1.181$) and males ($M=1.42$, $SD=.886$). Female participants appear to enjoy the use of technologies, more so than male participants (see Figure 5.1). This does not mean that the female participants enjoy using the AV-aids or Computers for their study for longer periods of time. The mean suggests that the female

participants are indicating that they use AV-aids or Computers more frequently for their study purposes than the male participants.

- The Means in Table 5.1 show there was also a statistically significant difference on usage of technology ($t=29.4$, $df=798$, mean difference= 0.96 , two-tailed $P<.001$) between the mean response for the rural participants ($M=4.17$, $SD=0.74$) and urban participants ($M=2.25$, $SD=1.1$). Rural participants appear to find handling technology more difficult than urban participants (see Figure 5.1).

FIGURE 5.1 SHOWS GENDER DIFFERENCES IN STUDENTS' PERCEPTIONS OF USING THE TECHNOLOGY FOR THEIR STUDY.



There was also a clear picture of technological aids usage. It can be used in a number of ways not only to motivate and influence positively students' attitudes, but also to provide them with native contexts of English language use, for example, and to make learning more permanent and meaningful. However, a lack of such resources possibly may develop negative students' attitudes towards the subject choice or study itself.

7.4.4.0 TEACHERS' AND STUDENTS' PERCEPTIONS OF THE EFFECTIVE AMENDMENTS TOWARDS THE PRESENT FORMAL ACADEMIC CURRICULUM (refer to aim 4, p. 25).

The interviews provided a body of data that demands more detailed analysis than was possible in the present study. The cohort was small for statistical analysis, but quotations selected from some of the interviews are used to give some understanding of the students' and teachers' viewpoints, and their own sense of frustration at the educational problems created or increased by the teaching and assessment system in which they work. Each of the interviews highlighted a number of comments, but a few particularly interesting group comments are summarised. These interviews show a great desire for positive curriculum changes among participants (teachers and students) and effective amendments in major areas: *Curriculum and Assessment; Teachers' Attitudes and Classroom Environment; Teacher Training and Qualification; Teachers' and Students' Participation; and Gender Religion and Culture Influences*. (see the following Table: 7.0 for more details). These findings will be discussed in detail after the following Tables: 7.0 and 7.1 with some references to the Literature.

TABLE 7.0 SHOWS SUMMARY FINDINGS FOR TEACHERS' AND STUDENTS' PERCEPTIONS OF THE EFFECTIVE AMENDMENTS TOWARDS THE PRESENT SECONDARY SCHOOL FORMAL ACADEMIC CURRICULUM (see aim 4, p. 25)

<p>Materials</p> <p>Text Books</p>	<p>“Syllabus breakdown should have more space for reading”. (124)</p> <p>“Textbooks need to be revised”. (135)</p> <p>“Textbook must be loaded with activities so that the knowledge imparted is not only theoretical but practical as well”. (199)</p> <p>“The textbook may flexibly be exploited for the communicative competence of the learners”. (40)</p> <p>“Textbooks must contain activities which will improve not only writing skills but speaking as well”. (89)</p> <p>“The textbooks should focus on improving and developing of the language skills”.(97)</p>
<p>Methodology</p>	<p>“Presentation for confidence and speaking skills”. (62)</p> <p>“Communicative approaches should be used for better understanding”.(145)</p> <p>“Audio-visual aids must be used, they motivate students”. (187)</p> <p>“Teaching through Translation method (GTM)only is not correct”. (150)</p> <p>“GTM is mostly used in rural schools...modern technology and AV Aids are used only in advanced urban schools at provincial capitals”. (50)</p> <p>“Most of the time we are using the textbook only that is why we have to stick to the grammar translation method”.(97)</p> <p>“A teacher may want to do some experiments but we have to finish the course in the given time”. (80)</p> <p>“It is not only the textbook determining the directions of the teaching of English”.(76)</p> <p>“The conversational part is <i>very</i> minimum. This area is mostly neglected particularly in the rural schools in Libya”.(92)</p> <p>“The administration will not let teachers use any other teaching method”. (153)</p> <p>“Things are changing in private schools but it will take a lot of time in state schools”.(86)</p>
<p>Examination</p>	<p>“Evaluation system should be reconsidered as it is based on cramming and rote learning”.(43)</p> <p>“Computer based evaluation and learning so that students know their shortcoming and learn with their own pace”.(180)</p> <p>“Not only writing skill but the rest of three skills should also be evaluated”.(165)</p> <p>“Both objective and subjective types of questions should be included”. (30)</p> <p>“Students’ talking time should be maximised”. (67)</p>

<p>Students’ Participation</p>	<p>“Teachers should always encourage the students to converse in English”.(123)</p> <p>“A lighter, frank and encouraging environment can only provoke the motivated participation of the students”.(153)</p> <p>“We are not producing good listeners, good speakers” in the English language”.(92)</p> <p>“No great effort was made by teachers to develop and teach all the skills. All over the world speaking is followed by listening and writing by reading “but in Libya the whole situation is upside down”.(57)</p> <p>“To study biochemistry, and then into the private sector. Might have a husband and children”.(46)</p> <p>“ to study English. she was not sure what he might do after that, perhaps travel, writing, teaching, does want to get married and have children”.(59)</p> <p>“To study media studies, journalism, and then go to newspaper industry, journalism. She eventually wants to get married and have several children”.(78)</p>
<p>Classroom activities</p>	<p>“Students should be provided with all the audio-visual aids”.(142)</p> <p>“ the class sizes must be reduced to allow for more class activities”.(87)</p> <p>“Listening and speaking skills can only be evaluated if teachers are given facilities”.(42)</p> <p>“Students have the only model to listen to and that is teacher”. (28)</p>
<p>Teachers’ Training</p>	<p>“Teachers’ training would help teachers equip themselves with new skills”. (11)</p> <p>“Teachers should be trained to motivate the students”.(9)</p> <p>“Teachers should be provided opportunities on regular basis to participate in teaching training courses and workshops”. (6)</p> <p>“Each ELT teacher should be equipped with modern research carried out in the field of linguistics”. (5)</p> <p>“It is totally an utopian idea to demand from teachers the desired levels without giving them sufficient training and resources”.(63)</p> <p>“The future of the English will not improve unless drastic steps are taken (i.e concerned government employ some qualified teachers in primary schools on contract bases”.(82)</p>

(Numbers in brackets refer to the number of times the statements were repeated or support).

TABLE: 7.1 SHOWS SUMMARY FINDINGS FOR TEACHERS' AND STUDENTS' PERCEPTIONS OF GENDER, RELIGION AND CULTURE INFLUENCES (refer to aim 2, p. 25).

<p>The Impact of Religion On the Students' perceptions towards subject Choices and Directions</p>	<p>“Religion is need. It’s necessary for everything in this life, as humans need guidance”</p> <p>“The purpose of a person’s life is to worship God”.</p> <p>“The way I have always seen my religion is that it is guidance, it is just a route that makes it easier for you to live and follow”</p> <p>“It makes our live easy, it controls everything in details in our lives”</p> <p>“To me the crucial guidance is to the kinds of choices that you need to makes to be the best you can whether it’s with your life, your family or your job”</p> <p>“My religion is my first identity of my life. It plays an important role in all aspects of my life”</p> <p>“We are born Muslims and I live in a community society where all of them are Muslims, so it plays a critical role in all of our life aspects, at home, school or work”</p> <p>“It helps you to understand and learn things, how to be like for example, one of the best persons in this life”</p> <p>“You decision relates to your religion as a Muslim man, to raise your family with the right values”</p> <p>“It’s reality and guidance for our future because of the structure that is a part of religion”</p> <p>“The interesting thing attracted me to religion is the first word ‘Iqra’ (read) so the better you learn, the better you present your identity and yourself”</p> <p>“Even in education, we must think about religion to behave well and think for our future”</p> <p>I think that it is a duty and real guidance of every Muslim in this culture”</p>
<p>The Impact of Gender / Sex On Students' perceptions towards subject Choices and Directions</p>	<p>“Men and women are equal and should have equal access to education”</p> <p>“I belief that women are equal to men in regards to thinking and producing ideas and skills”</p> <p>“Women are as men in regard to their brain they are more intelligent than men”</p> <p>“Islam acknowledges gender differences, men and women are different but equal”</p> <p>“Women are so emotional and there are different biologically, women are physically weaker than men”</p> <p>“In our society women are different logically and biologically compared to men”</p> <p>“I belief that males and females have many obvious differences”</p>

	<p>“Allah said the male is not like the female. For this reason we must take this statement and put it in bold line and it in our mind”</p> <p>“Women should not be discriminated in our society based on their gender differences”</p> <p>“Differences between genders should not result in valuing one more than the other”</p> <p>“The men’s roles are more curial than women’s roles in our society today but women are important too for the family”</p> <p>Islam says that mothers are created to take care of children more than men do so”</p> <p>“Women can’t work in physical demanding jobs, there are some occupations that are unsuitable for women roles and gender division of labour is a global norm that occurs because of differences in abilities”</p> <p>“Islam does not limit the roles of women, prohibits oppression of women, and prioritises respect for women”</p> <p>“I think if you search in the source and the Qur’an, I don’t think that there specify that women can’t do certain jobs or things”</p> <p>“Muslim women are stereotyped and women face domination”</p> <p>“I think the most challenge for women is the economic imbalance in developing world where people have to struggle through to provide the most basic for their family”</p>
<p>The Impact of Culture On the Students’ perceptions towards subject Choices and Directions</p>	<p>“Culture and family as a source of gender role beliefs”</p> <p>“I think culture plays a crucial role in our directions”</p> <p>“Culture and your understanding of the roles and relationships with men and women are going to certainly more based on their culture and their experiences”</p> <p>“Culture is part of Islam and Islam is a part of culture, so they are complimentary”</p> <p>“The oppression of women should be attributed to culture, not to Islam”</p> <p>“I will say it is not because of Islam, it is because of society culture. The society culture has some components that are not relates to Islam”</p>

Domains	Categories	Core Ideas	Frequency
Religion / Culture	Intersection of culture and Islam; Historical relationship; Islam's role in life; guidance; Coping; Structure; Knowledge; Life Purpose;	<p>My culture and religion have a long history of impacting one another</p> <p>The influences my culture has had on me align with Islam.</p> <p>I use Islam for moral guidance.</p> <p>Religion is a need. It's necessary for everything in this life, as humans need guidance.</p> <p>The way I have always seen my religion is that it is guidance, it is just a route that makes it easier for you to live and follow.</p> <p>Islam plays a role in all aspects of my life.</p> <p>I use Islam as a source of guidance for being kind to others.</p> <p>To me the crucial guidance is to the kinds of choices that you need to make to be the best you can whether it's with your life, your family or your job.</p> <p>I think that it is a duty and real guidance of every Muslim in this culture.</p> <p>Faith helps you to overcome life's obstacles and tests.</p> <p>I enjoy the structure of Islam because it helps one to have.</p> <p>It's reality and guidance for our future because of the structure that is a part of religion</p> <p>Life-long learning is an important part of Islam.</p> <p>Islam give me a sense of purpose in life.</p>	Typical
Religion / Culture	culture and Islam; Oppression of women;	<p>The poor treatment of women in Muslim countries is due to culture not religion.</p> <p>The oppression of women should be attributed to culture, not to Islam.</p> <p>I will say it is not because of Islam, it is because of society culture. The society culture has some components that are not related to Islam.</p> <p>Islam does not limit the roles of women, prohibits oppression of women, and prioritises respect for women.</p>	Typical
Religion / Culture	Marital practices; Obedience; Respect; Protection;	<p>Marriage practices in Libya are materialistic, had on women.</p> <p>I follow dietary laws set by Islam.</p> <p>Islam increased my sense of obligation to family.</p> <p>The Quran teaches us to respect our mothers and wives.</p> <p>Islam promotes the protection of women</p>	<p>Variant</p> <p>Typical</p> <p>Variant</p>

Religion / Culture	Islam in Muslim countries; Social issues facing women;	<p>People in my country are more likely to practicing Muslims compared to Muslims in developed countries.</p> <p>The purpose of a person's life is to worship God.</p> <p>Stereotypes, oppression, sexism exists in all societies and is a major problem.</p> <p>Muslim women are stereotyped and women face domination.</p> <p>I think the most challenge for women is the economic imbalance in developing world where people have to struggle through to provide the most basic for their family.</p>	Variant
Gender/ Culture/ Religion	Source of gender roles beliefs; culture and family;	<p>My gender role beliefs depend on the culture I live in.</p> <p>Culture and family as a source of gender role beliefs.</p> <p>My father has influenced my beliefs about the role of men and treatment of women.</p> <p>You decision relates to your religion as a Muslim man, to raise your family with the right values.</p> <p>Women should not be discriminated in our society based on their gender differences.</p> <p>Differences between genders should not result in valuing one more than the other.</p> <p>Islam is the source of my beliefs and I can find support for my beliefs in Islam.</p> <p>My religion is my first identity of my life. It plays an important role in all aspects of my life</p> <p>My beliefs about gender role are guided completely by Islam.</p> <p>Having a belief system that fosters faith is important.</p>	<p>Typical</p> <p>Variant</p>
Culture/ Gender/ Religion	Cultural heritage;	<p>My culture is my country of origin.</p> <p>I think culture plays a crucial role in our directions.</p> <p>We are born Muslims and I live in a community society where all of them are Muslims, so it plays a critical role in all of our life aspects, at home, school or work.</p> <p>Culture and your understanding of the roles and relationships with men and women are going to certainly more based on their culture and their experiences.</p> <p>I belief that males and females have many obvious differences in our culture.</p> <p>The men's roles are more curial than women's roles in our society today but women are important too for the family.</p> <p>Islam says that mothers are created to take care of children more than men do so.</p>	Typical

	Influence of culture differentiating;	The practice of Islam can differ based on culture. My culture and Islam are intertwined and I cannot differentiate between the two.	Typical
Culture/ Gender/ Religion	Historical Muslim men and women; Physical differences; Appropriateness of women's jobs;	Historically Muslim men had active social, economic and political roles and women had passive ones. Islam does not limit women roles to the homes. Women can have jobs that do not violate Islamic orders. Women are physically weaker than men. Physically demanding jobs are unhealthy for women. Differences in gender roles does not mean men and women are unequal. The Quran teaches us not to oppress women.	Variant Variant
Gender/ Culture/ Religion	Division of labour; Islam's acknowledgment; Emotional; Occupational roles; Biological differences but equal; Women's income; Work and family;	Hiring people based on abilities and gender roles show discrimination of women more than men. Women are as men in regard to their brain they are more intelligent than men. Differences between men and women are fact. Allah said the male is not like the female. For this reason we must take this statement and put it in bold line and it in our mind. Allah states that men and women are different. Men cannot bear children. It can be difficult for women to balance work and family roles. Women are so emotional and there are different biologically, women are physically weaker than men. Women can't work in physical demanding jobs, there are some occupations that are unsuitable for women roles and gender division of labour is a global norm that occurs because of differences in abilities. In our society women are different logically and biologically compared to men. Islam does not prohibit social interactions between men and women. Gender segregation prevents people from getting to know one another as complete individuals. Women do not have to contribute their money to the family.	Typical Typical Variant

<p>Gender/ Culture/ Religion</p>	<p>Complementary roles; Personality mothers and fathers in Islam;</p>	<p>Men and women complement one another. Islam has allowed me to find peace in my heart. It helps you to understand and learn things, how to be like for example, one of the best persons in this life. It makes our live easy, it controls everything in details in our lives Development of personality traits depends on the environment, most Muslim families I know have dominant culture norms. Culture is part of Islam and Islam is a part of culture, so they are complimentary</p>	<p>Variant</p>
<p>Gender/ Culture/ Religion</p>	<p>The impact of environment; Social Justice; Equality, Education; Aspirations;</p>	<p>The environment I live in affects me and has a major impact on my future live too. Muslims are responsible for challenging injustice. Men and women are equal. Men and women should have equal opportunities for education. I think if you search in the source and the Qur'an, I don't think that there specify that women can't do certain jobs or things. Men and women are equal and should have equal access to education. Even in education, we must think about religion to behave well and think for our future. The interesting thing attracted me to religion is the first word 'Iqra' (read) so the better you learn, the better you present your identity and yourself. Men and women are equal brainy. I belief that women are equal to men in regards to thinking and producing ideas and skills. Men and women have similar hopes and dreams.</p>	<p>Typical</p>

The following sections are reflective discussions on the preceding findings from the interviews' data analysis (Tables: 7.0 and 7.1), which clearly show a great desire for positive curriculum changes among participants' (teachers and students) effective amendments within the contents of the formal academic secondary school curriculum in these major areas: *Curriculum and Assessment; Teachers' Attitudes and Classroom Environment; Teacher Training and Qualification; Teachers' and Students' Participation; and Gender, Religion and Culture Influences.*

7.4.4.1. FIRST, CHANGES IN CURRICULUM AND ASSESSMENT

When the researcher interviewed teachers involved in the curriculum teaching process at Libyan secondary school level, it was expressed clearly by them that regarding the inclusion of the language aspects, this curriculum was not practical in terms of implementation in the present teaching environment. This shows that the curriculum document gives an ideal picture of what should be done. What actually happens can be made explicit by recognising that the implementation of this curriculum has not yet been accomplished. This provides insights into the several challenges that must be overcome. Teachers want the syllabus to be revised and recognise that the system forces teachers mostly to use the Grammar Translation Method (GTM) (see Table: 6 for more details). Many theorists have pointed to the recent changes in curriculum and assessment in determining the academic success of males and females (Arnot *et al.*, 1998; Murphy and Elwood, 1996; Warrington and Younger, 1997).

Indeed, males and females do tend to react to different aspects of the curriculum in different ways, for instance, females are inclined to prefer more reflexive written work, whereas males react better to assignments that are more factual, especially when answers can be achieved at speed (Murphy and Elwood, 1996). Changes to the formal secondary school curriculum and examinations are seen

to have positive impact on promoting opportunities for both genders within the current research context. Thus the decrease in examinations and increase in coursework may result in an increase in female success rates (Arnot *et al.*, 1998; Warrington and Younger, 1997). Furthermore, many investigations have found that males' capacity significantly increases when they become certain of the value of the work set (OFSTED and EOC, 1996).

7.4.4.2. SECOND, TEACHERS' ATTITUDES AND CLASSROOM ENVIRONMENT

Previous research has identified that the teachers' classroom attitudes and classroom environment to be among factors associated with shape of students' attitudes. Therefore, it has been recognised that the teacher and the classroom environment play important roles in affecting students' attitudes (Germann, 1988; Reid, 2002, 2003, 2006; Skryabina, 2000). "An attitude is a mental or neural state of readiness, organised through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related" (Allport, 2006, p. 56). Therefore, attitudes are important to us, because they cannot be neatly separated from study. Attitudes may influence the attention in the class, motivation of learning, the use of categories for encoding information and the interpretation, judgement and recall of attitude-relevant information. Accordingly, attitude is a determinant and a consequence of learning (Reid and Skryabina, 2002a). The quality of learning is also affected by attitudes (Reid, 2006).

Meaningful and challenging learning environments have been linked to both engagement and perceived competence. When students are authentically engaged in meaningful, quality work, the likelihood increases that they will learn something new and remember what they learned (Hancock and Betts, 2002; Willms, 2002). Student engagement can be defined as the level of

participation and intrinsic interest that a student shows in school (Newmann, 1992). Extensive evidence exists that engagement and motivation are critical elements in student success and learning (Dowson and McInerney, 2001; Hancock and Betts, 2002; Kirsch *et al.*, 2002; Lumsden, 1994). Engagement in school work involves both behaviours (such as persistence, effort, attention) and attitudes (such as motivation, positive learning values, enthusiasm, interest, pride in success) (Connell and Wellborn, 1991; Johnson *et al.*, 2001; Newmann, 1992; Skinner and Belmont, 1993; Smerdon, 1999; Turner, 2004; Turner *et al.*, 1998).

Fisher and Richards (1998) also found that students' attitudes towards mathematics, for instance, tended to be more positive in classrooms where students perceived greater leadership and friendly behaviours in their teachers, and more negative in classrooms where students perceived their teachers as admonishing and enforcing strict behaviours. Thus, engaged students seek out activities, inside and outside the classroom, that lead to success in learning. They also display curiosity, a desire to know more and positive emotional responses to learning and school (Newmann, 1992). Results suggest that differences exist in the cognitive-motivational functioning of males and females in the academic environment. However, it has been indicated (Anderman and Midgley, 1997; Patrick *et al.*, 1999) that one aspect that may be influencing the relationship that exists between motivational orientation and students' gender is the type of academic discipline.

Moreover, the causes of the gender differences of students' attitudes towards mathematics, for example, were found to be multifaceted. It would be also interesting to determine other variables, such as females' and males' perceptions of their class experiences. Their teachers, as well as parental and societal attitudes, have been identified in this research context as being influential in making girls' motivational orientation internalise the feeling that they are

inferior to boys in mathematics. This result also supports the work of other researchers (Fisher and Richards, 1998; Forgasz and Leder, 1996; Papanastasiou, 2000; Wong, 1992).

7.4.4.3. THIRD, TEACHER TRAINING AND QUALIFICATION

There were repeated comments from participant students and teachers in this study that they were often weak in their subjects, were appointed without background or training in their subject area, or had very poor technology skills when it came to teaching and promoting learning in the classroom. Teachers are not to be blamed here, but it is critical to consider why those people are being appointed as teachers, and how they are being prepared. This study could make recommendations about improving the quality of teaching and learning at secondary school level. Moreover, this situation with poorly equipped classrooms and resources, facilities and workshops might also be connected to the fact that teachers have never had practical training and educational qualifications. Many teach the way they were taught.

However, teachers are at the core of secondary school education reform and it is important to provide them with opportunities for professional development in the use of educational technology (Danwa and Wenbin, 2010). Teaching staff play a significant role in the effective delivery of e-learning, as it is the teacher, not the technology, which facilitates the student learning experience (Mapuva, 2009). Danwa and Wenbin (2010) suggest that, in a diverse information technology environment, the development of students requires teachers not only to teach them how to use information technology, but also to guide them in the information technology environment. While Libyan statistics (see Table 1.1. in Chapter One) officially showed the teacher-students ratio to be 1:3 at secondary school level, which suggests there is no problem with the number of teachers, there is a serious concern with respect to the development of ‘specialised’

subject teachers. Many subject specialists had no profound pedagogical training. Therefore, one of the challenges facing the secondary education sector in Libya is providing teachers with an opportunity to gain the required expertise. These include teacher training, overcoming cultural perspectives. The lack of training results in teachers using traditional ‘chalk and talk’ methods which do not help students to learn how to think. Instead, there is a tendency for students to learn by memorisation (see Table: 3.1 in Chapter 4), rather than by reasoning and meaningful learning.

Mapuva (2009) points out that in developing countries the intensely established traditional pedagogical experiences based on the talk-and-chalk teaching methods and the shortage of resources has led to difficulties accepting and adopting e-learning. This is particularly problematic in teaching areas such as mathematics, which requires the use of many technologies. Despite the increase in spending by the Libyan National Education Department, there are limitations to what can be achieved. For instance, teachers have little experience of modern educational methods which implement strategies to build skills and engage students in thinking and analysis or even in using technology.

Jamil and Som (2007) argue that, to fill and correct such gaps, appropriate training needs to be identified through research, delivered in stages with the outcomes evaluated to ensure that training needs have been met. Teachers should be helped to understand how educational technology can inform and improve pedagogy and, as a result, contribute to improved student performance (UNESCO, 2005a). In developed economies, e-learning has become a significant medium for providing distance learning and support for student learning with students attracted to the use of diverse media, such as audio, graphics and video (Ali, 2003; Khine, 2003).

However, academic staff and students at secondary school level in Libya are generally not conscious of the potential of the resources and the support that can they obtain via an e-learning environment. Rhema and Miliszewska (2010) have expressed the view that the lack of adequate awareness of instructive technology is common between educators and students in Libyan higher education institutions. Techniques that can be used to raise awareness and change attitudes include “formally organised awareness programs, visits to similar institution where success has occurred, and short training” (Sife *et al.*, 2007, p. 63).

Regardless of the integration of technology into teaching, there are several issues in Libya which should be taken into account; the first is that the level of educational technology knowledge and basic computer skills among teachers in the secondary education sector is low and this leads to confrontation in adopting ICT for teaching (Rhema and Miliszewska, 2010); the second issue is the lack of training in both technology and instructional methods leads to concerns about teaching in unfamiliar teaching environments (Wright *et al.*, 2009). These technological developments add pressure to educators to integrate ICT, such as e-learning, into the education system (Ali, 2003). Where ICT has been used, it has been seen as a set of efficiency tools, rather than as an integration of these technologies into teaching (UNESCO, 2005a).

This may be lead to concerns about the adoption of new technology, such as e-learning in teaching and learning. Andersson and Gronlund (2009) and Wright, et al., (2009) consider that the home environment is the most important factor upon student use of e-learning. Families that are opposed to the acquisition of technological skills obstruct the use of e-learning (Mapuva, 2009). Mapuva (2009) argues that the introduction of ICT into secondary school or high school education will require institutions to support students in adapting to unfamiliar learning contexts (Andersson and Gronlund, 2009). Libyan

academic staff teachers in particular need to be trained in both the use of new technology, so that they become familiar with it, and in the effective use of it in teaching. To adopt and implement e-pedagogy, it is necessary to continuously provide trainers with confidence and skills via training and update courses (Mapuva, 2009). Teachers should be encouraged to continuously build up their experience and innovate in the process of the development of technological capabilities (Danwa and Wenbin, 2010).

International cooperation can positively impact on the adoption of e-learning and education reform. Through the support of UNESCO and the curricula provided by developed countries, Libya is currently moving to integrate ICT educational systems. The eventual aim of this project is to expand the course management system to all subjects and all levels of the education system. However, the adaptation of technology on its own cannot improve the learning experience of students. Even in developed countries, teachers are faced with a continuing challenge to review their teaching practices and to develop and adopt learning design for teaching with technology (Agostinho, 2006). One of the difficulties for secondary education organisations is to develop an understanding of how to balance the demands of technology against the need for strong pedagogy (Harper *et al.*, 2001). This includes teacher training, overcoming cultural perspectives.

Libya has begun to address the issue of national development and has developed an information technology infrastructure plan which seeks to support the rapidly developing information technology market and enhance education. There is a need to design new curricula specifically for an e-learning setting (Andersson and Gronlund, 2009) which combines interesting learning interactions with attractive designs to improve learning and motivation. Libyan educational curriculum developers lack the experience to develop curricula and pedagogies

for e-learning. These developments require the contribution of academic expertise and support from educational developers experienced in e-learning (Rhema and Miliszewska, 2010).

7.4.4.4. FOURTH, TEACHERS' AND STUDENTS' PARTICIPATION

The current research suggests that training in systematic self-analysis and critical reflection on teaching and the gender balance in classroom interaction should form an integral part of teacher education programmes for both trained and non-trained teachers. In fact, so many teachers are unaware of these tendencies in their teaching and the positive strategies for improvement were confirmed in a variety of studies in different countries (Howe, 1997, Kahle *et al.*, 1993). Quoting research relating to non-language subject classrooms notes that “educators are generally unaware of biases in their behaviour, which may mean that differential treatment of the genders is often unintentional” (Yepez, 1994, p. 123).

Similarly, Kelly (1988) in her analysis concludes as follows: the differences are just as large in teacher-initiated interactions as in pupil-initiated interactions, which suggest that teachers are either unaware of the way in which males dominate in class, or are unsuccessful in controlling this domination. Consequently, in order to manage the distribution of attention, including equal criticism between the sexes in the classroom learning environment, teachers can be given suggestions which reflect upon the strategies that have been used to address gender issues in classroom interactions, and to explore the validity of other perspectives.

At the secondary school level, sensitivity to gender issues can be facilitated through discussions and collaborative action between teachers. The influence of the teacher on educational inequality has been widely studied in sociology, not only in relation to gender, but also in relation to the discriminating factors of

teacher judgement and expectation of young learners. This has been suggested in studies such as Rosenhal and Jacobson's *Pygmalion in the Classroom*, where they found teachers reacted on first impressions alone rather than a willingness to work with pupils on an equal scale. In contrast to the aforementioned 'Pre-girl' success theories of sociologists, such as Spender and Stanworth (1989), there is now an argument for a reversal of paradoxes. Boys feel they receive less support, encouragement and guidance and are treated in a more hostile nature by teachers and have lower teacher expectations. This can, therefore, lead to detrimental effects on the achievement of boys (Warrington and Younger, 1997).

7.4.4.5. FIFTH, GENDER, RELIGION AND CULTURE INFLUENCES

If gender is a complex and interlocking set of power relations constituted in the historical process (Bourdieu, 2001), then it is possible to speak of the 'gender order' of a society, despite the impossibility of ever disentangling the full complexities of this order. The current curriculum continues to miss important aspects of gender perception and cultural perspectives which are affecting adolescent students, females in particular. For example, the school environment contains aspects of gendered violence and discrimination that are slowly being recognized as contributing to polarised conceptions of gender. Religion, peer groups and cultural influences play significant roles, as well as not easily visible gate-keeping roles in reproducing gender ideologies. Jackson (1992) views Tyler's book as an authority in curriculum design. It can be argued that Tyler's rationale provides a fundamental structure to any curriculum. Tyler's structural approach can be a very helpful place to start (refer to Chapter One for more details). Hlebowitsh (1992) praises Tyler's rationale as it can be used at any level of study and can be applied to any subject.

However, the hidden messages conveyed through the curriculum are very significant in shaping the personalities of the students. Using this systematic approach, the role of the hidden aspects of the curriculum should be minimised and tight alignment is necessary among all the steps so that no room is given for the hidden curriculum. As already discussed in the Methodology chapter (see Chapter Three), interviews were carried out with volunteer participants (teachers and students) who gave additional evidence of their gendered attitudes arising from the impact of gender, religion and culture on their experiences in the context of Libya (see Table 7.1 in Appendix A, p.390 for more details). This qualitative investigation has explored the roles of religion, gender and culture in the lives of young people at secondary school level (ages 15-19) in Libya and sought the ways in which religion and culture influence their beliefs about gender roles towards their subject directions within the formal academic curriculum.

As I have argued in relation to Islam, religion is not only the social expression of engagement with a source of power which is unique to religion, but religion also involves interaction with ‘materialistic’ sources of power, both social (cultural, political, economic) and socio-personal (emotional, physical). Religion not only takes its place within this order, it is a constitutive part of it, though it may play a range of different roles and occupy a number of different positions. Religion’s constitutive contribution to power relations within society is best understood by viewing religion itself as a system of power. Once power is highlighted, it is easy to see how religion and gender can and do interact. By way of symbolic and material practices, religion can reinforce existing gendered distributions of power or try to change them. At any one time, a religion will exist in a particular structural relation to the gender order of the society of which it is part.

However, the existing relationship is only a snapshot in an on-going dynamic that is shaped by many factors, including the religion's own gender strategy. Given that gendered distributions of power are integral to the wider inequalities of social power, which define all known societies, this gives us two main variables to consider: one, the way in which religion is situated in relation to existing distributions of material power: religion's *situation* in relation to gender; two, the way in which religion is organised in relation to existing distributions of material power: religion's *strategy* in relation to gender. Therefore, religion can be integral to the existing gender order, and can serve to reproduce and legitimate gender inequality for those who practise the religion.

Religion can also be integral to the existing gender order, but can be used to give access to power from 'inside' and use it in ways which may be destabilising of the existing gender order. In addition, religion may be marginal to the existing gendered distribution of power, but used as a means of access to that power from the outside, without necessarily intending to disrupt the distribution of that power. Furthermore, religion may be situated in a marginal relation to the gendered distribution of power, and may be used to try to contest, disrupt and redistribute that distribution ('counter-cultural'). Religion which is counter-cultural with regard to gender is not only marginal to the existing gender order, but actively opposes it and strives to change it in an attempt to establish more equal distributions of power between the sexes.

The current research data analysis showed how gender roles and stereotypes are being maintained in the division of labour directions, while their theoretical underpinning states that women's and men's status in the household realm conditions their participation in the job market. Inasmuch as the responsibility for domestic tasks and caretaking falls mainly on women, their possibilities for joining the workforce are limited; therefore, sex stereotyping in the selection of

subject choice remains a continuing feature of training and vocational education with young Muslim males and females choosing to study for different occupational qualifications that relate to their gendered culture and religion influences. This may be due to participants' difficulty in admitting to ways in which they are negatively impacted by discrimination. This could also be an indication of adherence to a traditional masculinity that makes it difficult for male and female interactions (Mahalik, 1998).

In a society as tradition-bound as Libya, its cultural influences present another challenge to the education sector. Chen et al., (1999, p. 219) argue that: "An appreciation of the role of culture in education is essential as it leads researchers and teachers to a deeper and more valid understanding of the nature of student learning". Rhema and Miliszewska (2010) argue that, due to Libyan customs and traditions, most Libyan families have concerns about the rapid growth of technology and its impact on their children. The effect of family background on a students' choice of subject at secondary school level possibly operates through association between factors and social background. Different school subjects are likely to be associated with different occupational trajectories.

However, the advantages of social background can be more influential on students' achievement in one subject than another. This might operate through the kind of reading matter that is available at home and the knowledge possessed by parents. It could be argued that boys and girls are socialised from birth towards certain roles by their parents, who initiate this with their own understandings of how parental prospects should be, which are in turn imposed upon the children, and direct them towards contracting development patterns which are reinforced in early schooling (Murphy and Elwood, 1996). The differing socialisation of boys and girls in the family structure perhaps results in an increasing gender gap. Girls are taught to 'sit still' and 'be quiet' to a greater extent, and because of this early encouragement to do so, they tend to conform

more readily in both primary and secondary education (Bray *et al.*, 1997). Nevertheless, this is inversely parallel to the boys, who are less encouraged to be quiet and even when they are so encouraged, they often find themselves unable to do so. They tend to have much shorter attention spans, which develops throughout the initial school years and, by secondary school, they are keen to complete tasks as quickly as possible. Because of this tendency, they identify any studious behaviour as not being ‘macho’ (Bleach, 1998), supporting Williams’ (2000) findings. Because of the factors involved in the contrasting socialisation of boys and girls, the boys tend to enter the education system with less developed skills. Therefore, they have an immediate disadvantage (resulting in lower performance levels) that has little to do with ability and more to do with different preferences of learning due to their upbringing (Murphy and Elwood, 1998).

The study also explored the role that men’s cultural background plays in their religious identities and gender role beliefs. Some of the quotes have been selected from these opinions, which denote some strong gendered attitudes of the students, as shown in the previous (Table 7.1). Those interviews were semi-structured round the aspects of teaching and learning issues in the questionnaire. The participants were given a chance to expand and comment. The interview data analysis has identified a number of participants’ perceptions of gender, religion and culture influences towards the formal academic curriculum. These are categorised in more detail in the following paragraphs.

Participants were asked to share their beliefs about the roles of men and women and explain in what ways, if any, Islam has shaped their beliefs. Categories that emerged in this domain include similarities, differences, family roles, occupational roles, complementary roles, personality, opposite sex interactions, Islam’s treatment of women, social issues facing women, and sources of gender

role beliefs. Subcategories emerged within the majority of the categories. Within the similarities category, participants addressed (a) equality; (b) education; (c) and aspirations. Within the differences category, participants addressed (a) physical; (b) Islam's acknowledgement; (c) emotional; (d) biological; and (e) different but equal.

Within family roles, participants discussed (a) women's role; (b) men's obligations; (c) men as financial providers; (d) household labour; (e) parenting; and (f) marriage. Occupational roles included (a) women's income; (b) physical jobs; (c) historical Muslim women; (d) appropriateness of women's occupations; (e) women's occupations and family; and (f) division of labour. Within opposite sex interactions, participants addressed (a) permissible interaction; and (b) gender segregation. Subcategories within Islam's treatment of women included (a) women's roles; (b) prohibition of oppression; (c) respect; and (d) protection. Social issues facing women included (a) stereotypes and (b) oppression. Source of gender role beliefs included (a) culture; (b) family; (c) Islamic support beliefs; and (d) Islamic doctrine as a source of beliefs.

In addressing similarities, participants typically reported that men and women are equal and should have equal access to education. Variant responses included men and women's similarity in intelligence and aspirations regarding education. In regard to aspirations, a variant number of participants reported that men and women share the same hopes, dreams and lifetime goals. Participants typically reported that women are physically weaker and cannot tolerate certain work that men can, because of this difference. Participants had variant responses regarding: the belief that men and women are objectively different, Islam acknowledges gender differences, men and women are different but equal, women are more emotional and there are biological differences. With regard to physical differences, participants typically reported that women are physically weaker than men.

Finally, another variant response was participants' beliefs that men and women are different but equal. Specifically, one of the participants reported that men and women should not be discriminated against based on their differences and another explained that differences between men and women should not result in valuing one more than the other. One of the specific roles addressed by participants was the role of men and women in the family. Men and women, are seen as equal, but as having sorts of differences, but complementing each other. Participants addressed their beliefs about gender and personality. Variant responses included the belief that one's environment impacts one's personality development and that there are Muslim mothers who have more dominant personalities than the fathers.

Regarding women's role as primary caretaker, participants typically reported that women are the primary caretakers of children and that household labour should be shared. Variant responses included that a man's first obligation is to his family, men are financial providers, there are historical examples of the Prophet Mohammad helping with household labour, parenting is a shared role, and a marriage should be a partnership. Beliefs about occupational roles included the variant responses that women do not have to contribute financially to the family, women cannot work in physically demanding jobs, Islam has historical examples of women in the workforce, there are some occupations that are more appropriate for women than others, women's work can interfere with family responsibilities, and gender division of labour is a worldwide norm that occurs because of differences in abilities (see previous Table 7.1 for more details).

Some of the issues arising from these attitudinal findings will be discussed in the following Chapter Five. However, it is important to give some summary about these participants' attitudinal findings. The following briefly presents the

summary outcomes from the current interview data analysis (see in previous Table 7.1):

- The participants do not strictly observe the formal practices of Islam within the formal academic curriculum; however they reported that religion plays significant role in their lives and influences them in many ways.
- The most typical responses were that religion provides guidance (similar to previous findings in Carolan *et al.*, 2000) and motivates participants to prioritise their obligations to their families.
- The typical beliefs about gender were that women are logically and biologically different from men.
- Women should have equal access to education.
- Opposite sex interaction is permissible.
- Islam prohibits the oppression of women and women should be respected.
- Women's role should not be limited to the household.
- Family and culture are direct sources of participants' beliefs and religion reinforces those beliefs.
- Participants addressed that there is relationship between religion and culture. They explained that the historical role of religion in their cultures makes it difficult to distinguish between the influences of religion and culture.
- Participants made statements about the equality of men and women. They specifically addressed that men and women have equal rights to an education. This supports other studies (Carolan *et al.*, 2000; Ramji, 2007).

SUMMARY

The current research findings suggest a substantial amount of effort and much more proactive engagement by educational decision-makers are needed if gender practices in secondary schools, and education in general, are to be substantially modified in order to improve not only the present formal academic curriculum at secondary school, but also towards the educational system as a whole in the context of Libya. The secondary school curriculum in Libya needs to be assessed strongly in order to scale its relevance to the world of work. The quality of teaching and learning in all aspects, and at all levels, must be radically improved, especially in the secondary education for the young generation. This study cannot deal with this huge subject, but it clearly reinforces the urgent need to address these issues. The widespread cultural turn in gender studies in recent decades has seen some change of concentration from material factors, such as gender differences in the workplace, to cultural factors, such as the influence of the media and other popular cultural representations of masculinity and femininity (Evans, 2003).

Yet there is still widespread agreement about the interconnection of a wide range of processes in the production and reproduction of gender differences, and wherever they choose to concentrate their attention, feminist theorists tend to agree that such processes reflect and reproduce not just ‘difference’, but the unequal distribution of power on the basis of gender (Walby, 1990, 1997). It seems that legal regulation has reached its ceiling, that of cultural resistance. This has happened because the orientation of these rules and care services have focused on making it easier to perform household-family work without taking into account the unequal distribution between men and women. There are two consequences to this inequality: first, it affects women’s chance to participate in the job market, and secondly, it has negative repercussions on men’s commitment to domestic work and care for dependent persons. Consequently,

we might anticipate an effect of social background on subject choice, operating through aspirations, regardless of the evidence of students' potential for achievement at school. There may also be systematic social differences in the knowledge of the implications of subject choice for future employment (Wikeley and Stables, 1999). Students may choose a subject on the basis of what they believe is appropriate for 'people like them'. Kabasakal and Bodur (2002) argue that in Arabic culture, family members are expected to obey the directions and decisions of their father without question. Such norms and values created in a family are extended to society and institutions and encourage the inequality of power distribution. However, creating a social environment in the formal curriculum training and/or at the secondary school level can help to improve the level of gender participation (Arora, 1992).

The following chapter provides further discussion on the gender impact on the young students'/individuals' gendered identities and continues to debate that women's knowledge is secondary due to the environment in which women's knowledge functions. The focus will be on the explanation of gender, religion and culture concerns and considerations in the context of Libya (Islam) which are likely to make a major contribution to the development of young individuals' gendered identities, experiences and their attitudes towards the formal academic curriculum directions at secondary school level in Libya.

CHAPTER FIVE

8.0.0.0 INTERPRETATION OF THE GENDER IMPACT ON INDIVIDUALS' GENDERED IDENTITIES IN THE CONTEXT OF LIBYA (ISLAM)

8.1.0.0 INTRODUCTION

The focus of this chapter will be on the explanation of gender, religion and culture considerations in this particular research context of Libya (Islam) which are likely to have the major influences on the young students'/individuals' gendered identities and their gendered dissection of knowledge towards the curriculum directions at the secondary school level in Libya. It has to be admitted that there is a gender bias in choosing of science subjects towards the secondary formal academic curriculum directions in Libya. Since ideas and constructs about gender constitute an important feature of Libyan culture, gendered cultures are reproduced in the aspects of the science curriculum.

School research on gender today clearly needs to address issues such as the construction of masculinities and femininities, forms of violence such as bullying and homophobia, and the active role of peers in the formation of school cultures. Understanding of various forms of masculinity has deepened our knowledge of know the construction of masculinities involving the creation and use of power relations (authority, control over resources), a division of labour (concentration on gender in courses and tasks which boys and girls perform) and symbolization (gendering of knowledge in which certain fields are seen as masculine and others as feminine).

Attention to gender demands attention to power, because gender is inseparably bound up with the unequal distribution of power in society. Recent developments in gender theory have, if anything, reinforced awareness of the significance of the unequal distribution of power between the sexes by seeing it as constitutive of sex/gender itself. By rejecting that the construction of

sex/gender has a material basis in biologically-given bodies (at least over and above basic reproductive differences), gender theory has shifted the focus onto systematic structural inequalities between men and women as the basis of sex/gender differences. It is the social inequality context which creates the idea that there are two opposed sexes, male and female, characterised by the different characteristics we label 'masculine' and 'feminine', and not the other way round.

To imagine that inherent differences between men and women result in the gender division of labour and other inequalities is the exact inverse of what is really the case. As MacInnes (1998) argues, inequality creates masculinity and femininity as ideologies which serve to mask and legitimate social inequality. Gender patterns in peasant communities in developing countries are not the same as those in middle class communities in rich industrial countries. Findings about communities whose cultural background is European Christianity cannot be assumed to apply in communities with an Islamic background. There is need to examine local patterns in all parts of the world. However, we also need to go beyond local contexts.

As it has been argued in *Men and Boys* (Connel, 2002), we need to consider the situation of local masculinities in a world context. Global history and contemporary globalisation must be part of our understanding of masculinities. Individual lives are powerfully influenced by geopolitical struggles, imperialism and colonialism, global markets, multinational corporations, labour migration and transnational media. Not only ethnography, but also post-colonial studies (Ouzgane and Coleman, 1998) are important for understanding the cultural dynamics of contemporary masculinities.

8.2.0.0 UNDERSTANDING OF GENDER CONCERNS IN THE CONTEXT OF LIBYA (ISLAM)

8.2.1.0 GENDER EQUALITY

There are two types of intellectuals, namely conservatives and reformers, who have approved that men are superior to women and they have constructed their analyses on the indications in both the Qur'an and Hadith (Barlas, 2002; Engineer, 2004; Rahman, 2009; Wadud, 1999). Intellectuals differ, however, in their understanding of the relevance and meaning of male superiority in the policies. Conservative intellectuals argue that men have been given a status above women because men have innate qualities, such as mental and bodily strength, to maintain and protect women, who are gentle and weaker. This belief is also based on the norms of traditional masculinity that place expectations on men to be physically stronger than women (Glick *et al.*, 1995; Messing *et al.*, 2000). Therefore, admitting that women can perform physically tough work could be experienced as a threat to their masculinity.

This viewpoint could also be a signal that participants are responding to the changes that are occurring in the dissections of labour between men and women (McTague *et al.*, 2006). These men could be feeling threatened as occupational separation based on sex continues to weaken and the lines between masculine and feminine become blurred. Thus, their stress on physical differences is a socially acceptable way to validate the need for dissection of labour between men and women, possibly as a reaction to a threatened masculinity. This view authorises a traditional masculine ideology based on patriarchal norms. In contrast, reform intellectuals argue that the Qur'an verses and traditions in the Hadith that suggest male superiority were meant for a specific socio-political context in which macho was part of the social fabric (Barlas, 2002; Engineer, 2004; Rahman, 2009).

Reformists also argue that the subordination of women has been a historical reality in most societies and one that has influenced interpretations of religious rule to fit patriarchal traditions (Engineer, 2004; Rahman, 2009). It could also be argued that there are many verses in the Qur'an and examples in the Hadith that also suggest equality between men and women and these verses and examples take priority over those that need to be interpreted contextually (Barlas, 2002). According to Barlas (2002), verses which suggest the differential treatment on certain issues are not tied to claiming the innate inferiority of women. It is important to note that reformists are concerned with gender inequity, but argue against Western feminist theories that associate difference with inequity and that identify religion as incompatible with gender equality (Barlas, 2002). This perception validates a gender ideology that is less rigid than conservative intellectuals but is still based on Islamic values.

This is not to disagree that gender is experienced and constructed differently in different social and geographical settings, with ethnic, racial and class identifications serving to modify its influence. Although acknowledgement of such differences undermines the idea of patriarchy as a single system of oppression of all women by all men, it is compatible with a recognition that the workplace, the home, the political arena, the legal system, and mass culture are organised in mutually-reinforcing ways which, though various and ever-changing, nevertheless result in women being disadvantaged and disempowered relative to men across the globe (Connell, 2002, pp. 97-114). Clearly different theorists have different ways of explaining how gender-based patterns of inequality are generated and sustained, and different authors may assign priority to different factors.

A new phase in the politics of gender in Islam has begun. One crucial element of this phase has been that it places women themselves-rather than the abstract notion of 'woman in Islam'-at the heart of the battle between forces of

traditionalism and modernism. By the early 1990s, there were clear signs of the emergence of a new consciousness, a new way of thinking, a gender discourse that is 'feminist' in its aspiration and demands, yet 'Islamic' in its language and sources of legitimacy. Some versions of this new discourse came to be labelled 'Islamic feminism'-a conjunction that is unsettling to many Islamists and some secular feminists. This discourse is protected by a new trend of reformist religious thought that is consolidating a conception of Islam and modernity as compatible, not opposed. Reformist intellectuals do not reject an idea simply because it is Western, nor do they see Islam as providing a scheme, as having an in-built programme of action for the social, economic, and political problems of the Muslim world.

Following and building on the work of reformers such as Husein *et al.*, (2006), they contend that the human understanding of Islam is flexible, that Islam's tenets can be interpreted to encourage both pluralism and democracy, and that Islam allows change in the face of time, space and experience. Not only do they offer a serious challenge to legalistic and absolutist conceptions of Islam, they are carving a space within which Muslim women can accomplish gender equality in law. Before considering further the implications of twentieth-century developments for Muslim women's quest for equality, let me probe this question: Why and how did Muslim family law come to be as patriarchal as it is today? Can there be an equal construction of gender rights within the framework of Islamic legal thought?

The essence of my argument is that the origin of gender inequality in Islamic legal tradition lies in the inner contradictions between the ideals of the *Shari'ah* and the patriarchal structures in which these ideals unfolded and were translated into legal norms. While *Shari'ah* ideals call for freedom, justice and equality, their realisation was impeded in the formative years of Islamic law by Muslim

social norms and structures. Instead, these social norms were assimilated into *Fiqh* rulings through a set of theological, legal and social theories and assumptions that reflected the state of knowledge of the time, or were part of the cultural fabric of society (Husein *et al.*, 2006; Rahman, 2002). In this way, Islamic legal thought became the prisoner of its own theories and assumptions, which in time came to overshadow the ethical and democratic voice of Islam and its call for justice and reform, thus opposing the spirit of the *Shari'ah*.

I elevate the second question-the possibility of achieving gender equality within an Islamic framework-through a discussion of the twentieth-century developments that transformed the interaction between Islamic legal theory and practice. The essence of my argument here is that these developments-the partial reforms and codification of *Fiqh* notions of gender during the first half of the century and their abandonment in the second half after the rise of political Islam-have made it richly clear that there can be no justice for women as long as patriarchy is not separated from Islam's sacred texts and the *Shari'ah*.

In the course of the century, the idea of gender equality became inherent to global conceptions of justice and acquired a clear legal mandate through international human rights instruments, notably the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW). Since it came into force in 1981, CEDAW has been ratified by all Muslim states except Iran, Qatar, Somalia and Sudan, although, in most cases, ratification has been subject to 'Islamic reservations'-a notion that speaks of unresolved tensions between CEDAW and Islamic legal theory.

Let me conclude with two observations that suggest that a reconciliation between the two is in the making, and that the substance for this has been the rise of political Islam and its slogan of 'Return to the *Shari'ah*'. Among the paradoxical and unintended consequences of the rise of political Islam was the

demystification of the sanctity that covers the patriarchal interpretations of the *Shari'ah*, so that women gained both the cause to demand equality and the language to argue for it from within the tradition. First, as the twentieth century came to a close, for many Muslims the patriarchal dogmas and constructs that informed the premodern notions of marriage in Islamic legal theory lost their theological validity and their power to convince. In their place, the discourses of feminism and human rights have combined to bring a new consciousness and a new point of reference for Muslim women and reformist intellectuals.

The growing body of texts under the rubric of 'women in Islam' (much of it now on the Internet and social media) is a clear sign of recognition of this new consciousness. As I have argued elsewhere, this literature must be seen as constituting its own subject matter, as opening a space in the Islamic legal tradition within which women are treated as 'social beings', 'rights holders' and 'citizens'-concepts that were alien to classical *Fiqh*, which treated women as 'sexual beings' and discussed their rights only in the contexts of marriage and divorce (Husein *et al.*, 2006).

Ranging from sound scholarship to outright arguments, this literature displays different positions and different gender perspectives, from endorsements of the classical *Fiqh* rules to advocacy of gender equality on all fronts. Regardless of their position and gender perspective, all contributors to the literature agree that 'Islam honours women's rights', and that justice and fairness are integral to the *Shari'ah*; they disagree on what these rights are, on what constitutes justice for women, and how to realise it within an Islamic framework. The intensity of the debate, and the diametrically opposed positions taken by some authors, are indications of a paradigm shift in thinking about gender rights, Islamic legal theory and politics. Significantly, even those who see classical *Fiqh* judgements on marriage and gender roles as immutable, as part of the *Shari'ah*, use titles

such as ‘Women’s Rights in Islam’ and ‘Gender Equity in Islam’, and are silent on the juristic theories and theological assumptions that underlie them (Husein *et al.*, 2006).

The second point and observation is that legal systems and jurisprudential theories must be understood in the cultural, political and social contexts in which they operate. The old *Fiqh* paradigm, with its strong patriarchal ethos, as well as the new feminist readings of the *Shari‘ah*, should be understood in this complex double image, as both expressing and moulding social norms and practice. We must not forget that legal theory is often reactive, in that it reacts to social practices, to political, economic and ideological forces and people’s experiences and expectations.

In other words, law most often follows or reflects practice; that is to say, when social reality changes, then social practice will effect a change in the law. Islamic legal theory is no exception-as proved by the way both legal systems and women’s lives and social experiences have been transformed in the course of the twentieth century. The new feminist voices in Islam represent the coming of a democratic legal paradigm that is still in the making. On the basis of these observations, I suggest that arguments and strategies for Muslim family law reform need to be placed alongside within Islamic and human rights frameworks.

8.2.2.0 EDUCATION AND INDIVIDUALS' GENDERED CURRICULUM DIRECTIONS

The participants in the qualitative data analysis have made statements about the equality of men and women. They specifically addressed men and women having equal rights to an education. This also supports other studies (Carolan *et al.*, 2000; Ramji, 2007). There is also agreement between conservative and reformist intellectuals that Islam emphasises the pursuit of knowledge for both men and women and they both have a right to an education. Intellectuals differ, however, with concern to the plans and implications of educational directions of women (Engineer, 2004; Rahman, 2009).

Conservative intellectuals argue that women should pursue an education in subjects that are gender appropriate, such as teaching, nursing or being a medical doctor for women. Moreover, the content analysis and the literature reveals that gender issues have not been addressed in the true spirit at any level. The issue of presence in the formal academic curriculum organisation in secondary education reveals that a certain kind of hidden curriculum is active, which has different implications for different groups interacting with these activities.

For example, most of the reality of vocational careers is gender specific; the role allocation and the ratio of gender representation is not equivalent to the population. Sexism is a major problem, since: "Sexism is an unconscious cultural bias, expressed in and reinforced by the religious language people learn from childhood on" (Florent and Walter 1988, p. 180). Different authors have approached sexism differently. Holmes (1996, p. 336) sees sexism as "the way in which language conveys a negative attitude to women".

Spender (1985) argues that sexism depicted in language is one of the major reflections of a patriarchal society. She believes that in a male dominated

society, language represents male superiority and undermines females. In this research context at the secondary level, particularly, the textbooks do not promote gender equity but are promoting the hidden curriculum that is the domination by males. Textbooks are not the only sources of information for people, but they are a “vital means of mass media in the society” (Kobia, 2009, p. 57). It can be argued that women are considered weak and the terms associated with women are detrimental, because they describe females as weak and males as strong. This supports the point made by Spender that, in societies dominated by males, the patterns of behaviour are explicit in the language and most of the time these are the acceptable norms.

Furthermore, in practice, the reality of the classroom experiences of different areas of the curriculum may still differ for girls and boys, because of their attitudes and the influences of their society. For example, single-sex schools at secondary level are not found to exhibit major biases in the overall curriculum, but access to vocational education for women in the context of Libya tends to be restricted to stereotyped activities, in the society where Libyan women are stereotyped as not engaging in leadership behaviours, like displays of power, authority and fortitude. Therefore, females’ dual adherence, both productive and reproductive, will lead them to live a permanent system of twofold presence that they could scarcely imagine. Amongst the young generations, boys and girls share the collective consciousness of equal opportunities and equal access to school curriculum directions, thus making them believe this.

However, once they enter adulthood, many women discover the hidden facet of this notion: the dual adherence, both productive and reproductive, which will condition their entire life time and do so in both their workplace and their personal lives. Firstly, they will come upon not formal, yet real, difficulties when choosing certain professional options. Sexist discrimination in school

does not result in lower educational attainment, rather in a devaluation of professional options. Secondly, when they acquire effective stability, they will most likely take on greater responsibilities for domestic work and care work than their partners.

Sexism is evident, and the representation and the characters allocated to the females are not proportionate to the male characters. The roles assigned to the females are very traditional and reflect stereotypes; more than half of Libyan's population is comprised of women, but their contribution to the national stream of progress has been ignored completely and the female role models within the teaching materials are, in one way or another, related to stereotypes which are influenced by the Islamic religion. The contents of religion are represented in the majority of the school teaching materials. This may create a sense of segregation among the students' insights on neglect of other worldwide religious bodies because they may not feel their part in communities of practices of the whole nations.

The consequences of this hidden curriculum results in the different ways boys and girls organise experiences, structure spaces, articulate time, establish relations and perform tasks, differences which condition their life plans. Our society does not recognise the importance of women's knowledge. Instead of spreading women's knowledge and improving their rights, they remain a bit behind and this can really affect the protection of women's knowledge. Given the characteristics of this hidden curriculum, it should be understood that the primary socialising agents are not aware of them, consequently, they do not have the resources and training needed to combat gender stereotypes and roles. Or if they are already aware of them, they can generate tension with the norms and values transmitted by other agents: contradictions between what is learned at school and what is experienced at real life.

However, it can be argued that the teachers themselves are not aware of these issues and pass on the messages implicitly in the hidden curriculum to students in their day-to-day routine, creating a situation where the resultant behaviours are thought to be acceptable. These by-products of planned materials should always be taken into consideration because students learn all sorts of behaviours, which may ultimately damage either their own attitudes' development or the social network in which they interact.

It could also be argued that the subordination of women often results in the subordination of their knowledge and the subordination of their knowledge results in the subordination of women; it is cyclical. This is spread in both the public and private domains. Women are far behind, they are not consulted or they are not involved, such as in the case of this particular context of Libya. This is very strange. If you look at the household, women have a very powerful role, but if you look at their role in the society, for example, a women's political role is very negligible. This could be one reason why gender discrimination is widely seen and largely accepted by most people.

Therefore, in order for women to play a full role in society, gender discrimination needs to be eliminated in line with the commitment to Goal Five of the Dakar Framework for Action 2000 (UNESCO, 2000), which was a commitment to eliminate gender disparities in primary and secondary education by 2005 and achieve gender equality in education by 2015. The focus is to ensure that girls have full and equal access to, and achievement in, a basic education of good quality. Gender equality demands the true representation of both sexes. According to the Council of Europe (2008), gender equality signifies the empowerment, reflectiveness and involvement of all members of society, irrespective of their gender, in all domains of public and private life.

As I discussed previously (in Chapter One), despite policy assurances, the reality is that the implementation of the policies has not been carried out effectively in terms of fulfilling the commitments and objectives of education within the Libyan context. The implementation strategy has not defined how the issues of access, equity and provision of a quality curriculum will be resolved. The inclusion of the terms appears to be just an effort to gain political credibility. The history of the implementation of educational plans also supports this point; for example, the curriculum implementation which developed in 2005 has not been accomplished to date and the students at the secondary school level are still studying and using materials and methodologies based on the previous curriculum.

Since the report on the education policy (2005), we have not seen any significant steps forward taken by the government to implement the policy change. Education in general has been used to create and retain identity, which has proved a difficulty in the provision of an equal and quality educational curriculum for all citizens of Libya, regardless of the gender, social class and race they belong to. Curriculum improvements are not reflected by the steps taken by the government. In addition, women within the gender context are still working around areas of biological diversity and women realise that their knowledge protection in the formal structures that exist within a society need to be improved and become more fair in order for their knowledge to be recognised and protected.

Moreover, in the community there is a dualism that men and women are one, but, in the society, it is men who have more decision-making power and women are relegated into our communities. One of the concepts that may best explain this difference in female and male identity is the hidden curriculum. This term refers to the entire set of norms, attitudes, expectations, beliefs and practices that are unconsciously taught in institutions and in the hegemonic culture (Santos Guerra, 1996).

8.2.2.1 MUSLIM WOMEN AND EQUALITY/DIFFERENCES

How can we apply these insights to the issue of Muslim women and the equality/difference challenge? Here, in the short space left, I would like to address them by calling upon my experiences of teaching for the past seventeen years in Libya. The students that I teach have changed considerably in relation to the extent that Islam has become a salient dimension of their identities- but in much more complex and surprising ways than one might assume. Superficially, the changes could be summed up by the growing numbers of female students wearing some form of Islamic dress. Whereas fifteen years ago only one student out of the twenty wore a headscarf in the course, now approximately half of our students are religiously identified in terms of their dress. These are outward signs of social phenomena.

In the classroom, on a few occasions, I have seen that a normally vibrant and critically thinking range of individuals, suddenly become a distinctive and defensive unified group, because a secular student (either male or female) has made a remark implying the inferiority of women wearing headscarves. Outside the classroom, some workplaces seem to prefer ‘secular’ women, where religiously identifiable students have faced discrimination. But more often, this happens when students are working with international agencies and foreign nationals, where their Islamic identity becomes emphasized as they have faced negative stereotypes and insulting treatment.

A number of times, students have actually turned these negative experiences into research projects and looked at how other religiously identified women actively challenge these stereotypes, while attempting to negotiate respect on the basis of difference. But in all these cases, Muslim identity has become for them the salient issue, exactly because it has been used as a basis to identify them negatively. Similarly, a number of studies have noted that one outcome of

the rise of Islam phobia in Europe and the USA has been a growth in the numbers of Muslim women choosing to wear “Islamic” dress as markers of their faith and identification with their community, rather than the opposite (Dustin 2006; Phillips 2000). However, by calling some of our students “religiously identified”, I am imbuing a range of highly variegated individuals with a single collective identity that presumes their religiosity is the same. As individuals, how they define, practise and give content to the religious dimension of their identity is extremely diverse and I imagine is also changing over time. A small handful of students (often among the best academically) are active in Islamic political movements. Others support secular national movements, but the majority are like the majority of people in the world: critical of all organized political parties, religious or secular.

Beyond some foundational practices and beliefs, they also differ on the definition and demands of piety; not only in terms of “Islamic dress”, but also in the degree to which Islamic faith is the dominant or guiding ethic in their everyday life and what that might entail. For the majority, being a Muslim is simply part and parcel of who they are: a natural and mundane part of their everyday. It is sometimes a cause for celebration and positive belonging; at other times a source of burden and responsibility; and at others still, a source of solace, support or guidance in a difficult and complex world. But what about gender equality- do my students want it?

Obviously-but precisely as the provisional and changing historical practice that I have already discussed. Many of them, both religious and secular-identified, arrive at the programme fully wedded to the notion that their struggle is about equality with men. Rarely do I find students willing to support radical feminist positions about men’s and women’s innate difference— because it is the conservative version of this position that has been the force for gender

discrimination in their lives. So when I review the equality versus difference debates and bring out the limitations and dilemmas that I have discussed here, students still attempt to claim the model– but seek ways to make it work for their needs and context.

8.2.2.2. FAMILY/PARENT INVOLVEMENT

There seems to be a common perception among secondary school students in Libya that the family is the prime decider on the study and career path of the participants. The current research findings have evidently showed that the secondary school students actually found a high degree of independent choice, and family connections also appeared to be important for the majority of students who recognised that, without family influence, they would not have equal chances with some others. This means that other factors, like the family situation and the socio-economic conditions of the student, which have an impact to some extent on the students' entry behaviour and affective characteristics, can be influenced and moulded by designing a curriculum which assists and helps the students to master learning skills.

Thereby, changing the students' entry behaviour and affective character can prepare them for further learning. Although family involvement has reached a “new level of acceptance” today as one of many factors that can help improve the quality of schools, “acceptance does not always translate into implementation, commitment, or creativity” (Drake, 2000, p. 34). Much remains to be done. “Our society has simply become too complex for support entities to continue to function individually” (Buttery and Anderson, 1999). Schools, communities, and parents/families should cooperate and work collaboratively to improve the learning experience of all children. Simon (1999) found that, although study habits, attitudes, and behaviour patterns may be set by a student's senior year, an adolescent's success is influenced by his or her family even through the last

year of high school. The ways in which parents/families can be involved in their children's education have broadened considerably over the past three decades beyond the traditional 'big three' volunteer, homework helper, and fund-raiser (Christenson and Sheridan, 2001). What parents/families do in the home environment, however, remains significantly more important to student outcomes than what parents/families do in the school setting (Christenson and Sheridan, 2001; Hickman *et al.*, 1995; Izzo *et al.*, 1999; Trusty, 1999).

In their interviews with students, teachers, and parents in four high schools, Sanders and Epstein (2000) also found that, although adolescents need more independence than younger children, the need for guidance and support from caring adults in the home, school, and community during this time in their lives is very important. Other studies reinforce the value of parents/families expressing confidence in adolescents and supporting autonomy as significant contributors to achievement among high school students (Christenson and Christenson, 1998; Deslandes *et al.*, 1997; Kellaghan *et al.*, 1993).

The value of family is also an Islamic principle that is shared by both conservative and reformist intellectuals. However, in regard to the role of husbands and wives there are differences in their beliefs (Abdul- Rauf, 1993; Rahman, 2009). Conservative intellectuals stress the role of women in the domestic scope, with men in the community context, and describe that this division is due to natural differences in abilities between men and women given by God (Badawi, 1980). According to this view, God has given men the abilities needed to work, and to be the financial providers, protectors, and leaders of the family.

Reformists argue that men were referred to as the financial providers in the Qur'an, not because men are naturally superior to women, but because of a socio-political context that prevented women from having economic equality. Therefore, the verse describing men's obligation to provide was meant to

provide financial security for women, given the patriarchal system that existed. In contrast, women have been granted the qualities necessary to take care of the domestic sphere and children by creating a gentle, soothing home (Badawi, 1980). Conservative intellectuals, however, are concerned that if women participate in the workforce equal to men, the health of the family will suffer (Abdul-Rauf, 1993).

Conversely, there is no indication in the context of Islam that women cannot or should not work and be financial providers (Engineer, 2004; Rahman, 2009). Islam priorities respect for women (Hopkins, 2006) and does not limit a woman's role to the home or restrict roles based on gender, which aligns with understandings of reformist intellectuals (Barlas, 2002). The Qur'an does not demand labour divisions between men and women. Reformists illustrate some examples from the Prophet Mohammad's life, pointing out that he assisted his wives with domestic chores and that his wives worked in positions that conservative intellectuals consider to be the patriarchal, such as advisors, business women, and leaders in their communities (Engineer, 2004; Rahman, 2009).

Reformists are not necessarily in contradiction to the traditional roles, since they interpret these as being functional and complementary to one another, as long as both are valued equally and the Islamic principle of partnership between husband and wife is upheld (Rahman, 2009; Wadud, 1999). This view is similar to the beliefs of cultural feminists (Enns, 1997). In Islamic values, sex outside of marriage is forbidden. Based on this forbiddance, the most conservative approach is to prevent social interaction between non-married men and women, opting for gender segregation at all social events in which non family members are present. However, this approach can also have implications for opposite sex interaction in other settings, such as education, workplace and employment.

In discussions over Islamic family law, when it is pointed out that the gender logic underlying Islamic jurisprudence is the principle of the complementarity of the sexes (their fundamental difference from each other) rather than equality—once again, the responses are to look for context-specific solutions of how to expand women’s rights within, and simultaneously against, a source of inequality. In short, equality for our female students (both religious and secular identified) is seen as an absolute principle through which they seek to fight discrimination on the basis of their gender in their Muslim majority contexts. At the same time, they see it for what it is - a process of expanding rights, one that can lead in unforeseen directions, or create new dilemmas and contradictions. There is no universal model and no universal outcome, only a universal struggle against existing inequalities.

8.2.3.0 MUSLIMS CULTURES

Kluckhohn (1951, cited in Hofstede, 2001, p. 9) argues that: “ Culture consists in patterned ways of thinking, feeling and reacting, acquired and transmitted mainly by symbols, constituting the distinctive achievements of human groups, including their embodiments in artefacts; the essential core of culture consists of traditional(i.e historically derived and selected) ideas and especially their attached values”. Cultural issues can play a part in subject choices and achievements which are influenced by gender. The current research interview data findings have evidently showed and supported this. However, Muslim populations are considerably diverse and the impact of culture on Muslim identities has been recognised.

Participants discussed the role of Islam in shaping their gender role beliefs, particularly where Islam has been the predominant religion. Typical responses were religion and culture influence beliefs about gender and Islamic principles support them. Religion has played a significant and historical role in

participants' cultures. Because of the role that religion has had in the participants' cultures, it was difficult to distinguish between cultural versus religion influences on their lives. Culture differences among Muslim men and women can influence their gender ideologies, religious identities and the practice of Islam (Haddad and Esposito, 1998). According to Stone (2002, p. 124): "Islam has adapted itself to local cultures and conditions, and its salience in politics derives to a considerable extent from this adaptability rather than its ability to transform local cultures into any unified world image. Even while owing allegiance to the Islamic pillars and sharing a commonality of attitudes and outlook, which such allegiance is susceptible of enforcing, the adherents are willing to continue this allegiance only to the extent that it does not threaten their cultural autonomy".

Hofstede (2001) explains how national culture affects the values of the organizations in society. On the basis of his analysis of national culture, he defined the following four dimensions which negatively affected communication among employees in the corporate decision making process.

HIGH VERSUS LOW DISTANCE: this dimension illustrates the extent to which the less powerful members of organization and institution accept that power is distributed unequally. Organizations from high power distance cultures rely deeply on hierarchy.

INDIVIDUALISM VERSUS COLLECTIVISM: individualism refers to societies in which everybody is expected to look after themselves and his/her immediate family. However, collectivism illustrates societies in which people from birth onwards are integrated into strong, cohesive in-groups, often extended families who offer protection and a degree of social insurance in exchange for unquestioning loyalty.

MASCULINITY VERSUS FEMININITY: this dimension describes the distribution of the roles between genders. The masculine culture refers to the assertive pole and the feminine culture is referring to the modest caring pole. In feminine cultures women and man share caring values, therefore they have the same modest approach. However, in the masculine cultures there is a gap between men and women's values. For instance, women are somewhat competitive and assertive, but not as much as men.

UNCERTAINTY AVOIDANCE: uncertainty avoidance cultures represent the extent to which members of a society respond to unstructured situations. In high uncertainty avoidance cultures, people have lower tolerance for innovations, while in low uncertainty cultures, which have been called uncertainty accepting, people are more likely to accept different opinions from those they are used to.

Accordingly, the Libyan culture is characterised as one with high power distance, low individualism, high uncertainty avoidance and masculine in nature (Abubaker, 2008; Twati, 2007). Cultural and family background, including 'class' can enforce early patterns. Every culture develops its own set of values and assumptions. In any country or culture, some of this will be held in common, but each individual will have a unique set of held knowledge and beliefs that mark him/her out as separate individuals and personalities. Not only do we sense selectively, but we also add, from experience, to our sensory information and amplify an otherwise incomplete sensory experience. A wider culture and experience will influence this.

The pressure to conform to subculture gender stereotypes is immense as, in general, there is an influential anti-school subculture forcing boys away from any feminine traits, such as being intellectual, arty, or indeed learners (Bray *et al.*, 1997; Cohen, 1998; Gallagher, 1997; Pickering, 1997). Gender stereotypes are pervasive and have an impact on all aspects of women's and

men's behaviour. Social psychology and organizational development literature on gender stereotypes provide insight into pervasive expectations that influence how women are perceived or view themselves in situations where leadership is required (Astin and Leland, 1993). Differences in leadership styles associated with gender affect the perceived effectiveness of leaders. In a recent, thorough review of literature on gender, Eagly and Sczesny (2009) posit that women leaders are usually disadvantaged when people's stereotypes of women, men, and leaders are dissimilar. Such stereotypes are influenced by historical and cultural trends. Cultural stereotypes about women, men, and leaders have shifted somewhat in a feminine direction, but such shifts are not consistently seen in all studies.

Historical patterns clearly have affected gender expectations in higher education leadership. The impact of historical context is illustrated by Astin and Leland's (1993) analysis of three recent generations of women leaders in academia and other social organisations. While the research on gender stereotypes does not go back farther than the 1970s, it is assumed that stereotypes are not static and change with cultural transformation, as evidenced by shifts that have occurred in recent decades. These historical patterns, then, most likely reflect changes in the gendered expectations of leaders; gendered scripts play out differently in different historical contexts (Reynolds, 2003).

However, culture for Williams (1999) is not, or should not be, what separates people, but what joins them in a community. Attia *et al.*, (1999, cited in Marta, *et al* 2004) make the point that, "the Arabic cultural environment encompassing religion, language, customs, social etiquette and laws constitutes a strong barrier toward conducting research" (i.e. in the way it is conducted in the western societies). According to Islamic culture (Libyan culture), faith, ethics and social practices are strongly connected (Twati and Gammack, 2007). Islam is

considered a comprehensive religion covering social and political aspects, as well as the piety of the soul and the moral principles of people's behaviour (Twati and Gammack, 2007). Vandewalle (2006, cited in Abubaker, 2008) claims that the impact of Islam upon Libyan cultural values is as significant as in any other Arabic country. Twati (2007) pointed out that Libyan society has strong social, tribal and familial bonds. It is by its nature an intensely family oriented society; social reputation becomes important for societal relationships in Libyan society, where people from the same sex can communicate, stand and walk side by side. However, the communication between different genders in organisations or workplaces seems to be a strict culture (Samovar and Porter, 2004; Twati, 2007).

Religion is one of the most important aspects in Libyan culture, and it plays a significant role in most societies (refer to Table 2.1., Figures: 2.0, 2.1). Max Weber was the first to identify the significant role that religion plays in social change (Guiso *et al.*, 2003). Muslims increasingly see religion as an important aspect of identity; it is positioned in many different and diverse ways. For example, in some cases, it is shaped by, and has developed in response to, experiences of racism and discrimination; in others, it can be a resource to negotiate parental and community pressures.

Dabbous-Sensenig (2006) reported that different aspects of Islamic religion indicate how women in particular should behave in the workplace. We can then assume that religious ideas and ethical principles, such as "respect others to gain their respect", have a serious influence on the communication behaviour of individuals in Libyan society and organisations. We can also argue that these stereotypical social structure and cultural dimensions are based on religion, leading to the stereotypical gender differences within the social structure which affects the communication and behaviour of individuals in terms of performance and treatment towards one another (Hofstede, 2003; Merkin, 2005).

This leads to the argument that the Islamic religion has played a serious role in creating and in shaping the cultural values of individuals (Vandewalle, 2006). These values are considered as a type of belief concerned with what is good or desirable. They also motivate behaviour and guide evaluations and decisions (Hyde and Williamson, 2000). Thus, individuals are expected to act according to these values. This may be due to the social tradition which encourages respect and obedience to parents and elderly people and is strongly recommended in the Qur'an (the holy Book of Islam), being considered as part of worshipping God, whereby believers will be rewarded (Abouhidba, 2005).

There are many references in the Qur'an to good and proper behaviour such as: in the following. **SELF-CONTROL**: this comes through a Muslim recognizing himself or herself as a human, whose being is always in front of God at any time; **PUBLIC CONTROL**: this encourages people to behave well, and helps them avoid any bad deeds; **GOVERNMENT CONTROL**: this demonstrates that managed social behaviour is an important duty of an Islamic government, so people do not become involved in incorrect actions and desist from incorrect behaviour. According to these beliefs, when Muslims understand this control system they try to act according to God's requirements at all times and in all aspects of this life. They do this due to self-control and also due to the pressures of public and government control.

The application of religion to social relations has a crucial role in increasing power distance cultures, formal and respectful behaviours, collectivism and masculinity in the Libyan culture (Twati, 2007). The common language and religious cohesiveness has generated separate schooling for various subject areas for boys and girls, strongly didactic traditions, as well as powerful family influences strongly directed by the fathers and the need for behaviour patterns consistent with the teaching of Islam. However, schools at secondary level are

not found to exhibit major biases in the overall curriculum, but supply and demand are both factors that have a major impact on limiting girls' participation in the field of vocational context in Libya. Therefore, access to the vocational education context for women tends to be restricted to stereotyped activities, in which women are stereotyped as not engaging in leadership behaviours, like displays of power, authority and fortitude. Research tells us that one of the ways in which stereotypes negatively impact real behaviour is that they become internalized oppression (Thomas *et al.*, 2004).

In other words, people assimilate stereotypes and believe them in reference to their own behaviour (Bennett and Gaines, 2010; Thomas *et al.*, 2004). It is clear that gender stereotypes can be primed by situational features; that is, they are more likely to be invoked when indications in a situation suggest them, even in subtle ways (Bennett and Gaines, 2010). Therefore, it is not surprising that women may devalue their own leadership potential, if they believe the stereotypes about their gender. It is a mechanism that explains the lack of awareness as to the transmission of the patriarchal culture's implicit norms and values. Beyond content, it highlights the importance of social relations as a factor exploring the process through which gender is socially constructed. Social institutions within societies operate from an epistemology which discounts women's knowledge at every level within society. When social institutions dismiss half of the available knowledge, then they are incomplete structures that are not functioning at full capacity (UNDR, 1997).

The gender and division critique seeks to turn development on its head by restructuring social relations and social institutions by shaking up these institutions and ridding them of inequalities. Harding (1991, p. 139) states that it is interesting to note "the feminist theory of knowledge is inextricable from the feminist critique of power because the male point of view forces itself upon the

world as its way of apprehending it”. It can be argued at the outset that, this is further linked to the idea of objectivity and masculinity being inter-connected in some gendered cultures, especially in terms of public discourse domain.

8.3.0.0. ISLAM AND THE FEMINIST ETHICS

Longstanding assumptions about Islam and women (or how women’s inequality is foundational to Islamic culture and religion) became wedded in alarming ways to intense ideological conflicts and debates that had immediate political implications in the real world. This can be raised on discussions about the Muslim women’s rights and equality through re-visiting a fundamental debate in Western feminism; the challenge of equality versus difference. At the end of the 20th century, Muslim women’s inequality and lack of rights came to play an active role in the rhetoric and politics of the “Clash of Civilizations”. In both Muslim majority and minority contexts, dominant public discourse increasingly posed gender equality and Muslim identity as mutually exclusive and conflicting choices for women and society at large.

This problematic view reflects a politics of gender where Muslim women’s rights have become a stand-in for various imperial, national agendas that in the process ignore and silence the desires and needs of the very women they claim to represent. Some feminists believe that the Qur’anic language, which is Arabic, is a masculine language. However, the Qur’an does not consider the factor of ‘gender ’ as a factor affecting the essence of humanity: The Qur’an addresses the essence of humanity, in which maleness or femaleness is not important. The following verses from the Qur’an show the honesty of the negation of gender superiority:

- ❖ ‘I waste not the labour of any that labours among you, be you male or female. ’[The House Imran, 195].

- ❖ ‘Whosoever does a righteous deed, be it male or female, believing, we shall assuredly give him or her to live a goodly life’ [The Bee, 97].

Although the four words of ‘Ammal’ (labour or deed), ‘saleh’ (righteous), ‘Hovva’ (he), and ‘Mo’men’ (believer) in the above are considered to be male, the Qur’an makes it clear that gender is not important. We should remind ourselves that, in Arabic, and in every language, as far as I know, many words refer to males, but they mean humankind: for example, man, mankind, he, etc. in English.

Therefore, many theories provide various approaches to facilitating communication between different discourse systems. One approach is to increase shared knowledge, which aims to find out more about the cultural background of the people we communicate with. In spite of the fact that the main element of communication is language, and all languages are similar in linguistic structure, they may express different cultural aspects. Thus, Wray and Grace (2007) think that cultural diversity plays an important role in misunderstandings in exoteric communication:

- Islam says that ‘rights’, ‘justice’, etc. are absolute terms, which should be discovered; but Feminism says that these terms are relative.
- According to the Islamic approach, the legal difference is something obvious; according to Feminism, the legal difference is conventional, and that identity is created by humans.
- In Islam, the standard for distinguishing the rights is the Divine Revelation; in Feminism, the criterion is the consensus of human wisdom.
- According to Islam, the existential value of men and women is the same, and that the criterion for superiority stems from god-fearing or ‘taghva’; while, according to Feminism, ‘equality’, ‘similarity’, and ‘sameness’ are one thing: Islam says they are different.

Therefore, both Islam and Feminism try to administer justice to the rights of women, but their origins and methods are quite different. The first school of thought believes in God's words, and the second school of thought believes that women's rights can be materialized through human words. Islamic feminists are reinterpreting Islamic sources in order to achieve equal rights for women within an Islamic framework. They have challenged traditional interpretations of scripture and received notions of interpretive authority, both in Muslim majority societies as well as in the diasporic Islamic world. With their new interpretations, they have contributed to the transformation of the legal, political and social rights of Muslim women. There are, however, also limitations to the feminist interpretations of scripture and their potential to deliver gender equality.

Feminists look to the time of Islam's origin and assert that women, who had played a significant role as the creators of oral texts, became invisible after the inception of Islam, both as originators and interpreters of such texts. Scriptural literature was then produced by men, who incorporated their own restrictive assumptions and understanding of gender relations. Legal texts were also created in this way and a masculine bent was inscribed into the legal literature of that time, resulting in the atrophying of the democratic ethos of Islam. Thus, the feminist project is based squarely upon an Islamic framework within which an ethically correct gender paradigm and the resulting legal rights for women may be configured. The reform of Islamic law is seen as one of the principal means by which the discrimination women have suffered under certain interpretations of Islam can be addressed.

Bringing to light the gender democratic instinct of the Qur'an, these new interpretations then form the basis for an emancipatory agenda for the establishment of equality. Therefore, this development captures the vision of a post-patriarchal Islam which assures women legal and social rights, equal with

men. This will only be possible, feminists argue, by liberating Islamic orthodox scripture from the stranglehold of male-centred interpretations that have become embedded in the Islamic canon. Thus, by challenging traditional notions of authority, and deconstructing gendered Islamic discourses, Islamic feminists are producing interpretations of scripture that can be utilized for the radical re-configuration of gendered legal rights. However, despite this uniformity of aim, Islamic feminism is also characterized by a great diversity of opinion. Therefore, it may be more appropriate to talk of Islamic feminisms which can be differentiated by the viability of locating gender equality within Islam. Someone who is highly critical of the Islamic feminist project is Haideh Moghissi, who asserts that Islam and feminism are fundamentally incompatible, because Islamic scripture contains a highly developed gender hierarchy. Consequently, Moghissi doubts the possibility of developing a programme of social and legal rights for women within Islamic parameters- as these, for her, are inherently antithetical to the notion of gender equality.

Nevertheless, what is abundantly clear is that most feminists are striving for a renewal of gender equality within the parameters of a discursive framework which is deemed to be faithful to an ethically correct Islamic impulse. This approach is predicated upon the view that such gender equality was an integral part of Islam at its very inception, and that feminists are reviving what has been lost or marginalized throughout the centuries of Islamic history. As a result, the feminist movement embodies both a trenchant critique of conservative Islamic thought, as well as opening a new phase in the politics of gender, and of reformist theorization in Islamic thought. Consequently, there is much to approve of in the advances being made by Islamic feminism and it is a force that is clearly gathering momentum.

8.4.0.0 MASCULINITY AND MUSLIM MEN

In line with emerging feminist voices in Islam, I contend that patriarchal interpretations of the *Shari'ah* can and must be challenged at the level of *Fiqh*, which is nothing more than the human understanding of the divine will- what we are able to understand of the *Shari'ah* in this world at the legal level. In short, it is the distinction between *Shari'ah* and *Fiqh* that enables me- as a believing Muslim— to argue for gender justice within the framework of my faith. Throughout this thesis, then, the *Shari'ah* is understood as a transcendental ideal that embodies the spirit and the trajectory of Islam's revealed texts, a path that guides us in the direction of justice; while *Fiqh* includes not only the legal rulings (ahkam) and positive laws (enacted or legislated) that Muslim jurists claim to be rooted in the sacred texts, but also the vast quantity of jurisprudential and exegetic texts produced by the scholars.

The concept of justice is deeply rooted in Islam's teaching, and is integral to the basic outlook and philosophy of the *Shari'ah*. This is where the juristic consensus ends. What justice requires and permits, its scope and its manifestation in laws, and its roots in Islam's sacred texts, have been the subject of contentious debates. For this particular research context, the gender role conflict occurs when there is a strict adherence to traditionally masculine norms and devaluing roles and behaviours that are stereotypically feminine. Patterns of gender role conflict include men's preoccupation with status and power and difficulty with achieving a work-life balance. Gender role conflict has been associated with aggression (Kaplan *et al.*, 1993), and anxiety (Blazina and Watkins, 1996). Masculine gender role stress suggests that men experience stress as a result of not being able to live up to traditional male norms and having fears of being perceived as feminine. Masculine gender role stress has been associated with increased anger, anxiety (Eisler *et al.*, 1988), and

aggression (Cohn and Zeichner 2006; Jakupcak *et al.*, 2002). Archer (2001), Alexander (2000) and Hopkins (2006) explore male Muslim identity as part of a performance of masculinity. They warn against seeing Muslims as having neatly 'bounded' Muslim identities. Hopkins (2006) identifies two dominant discourses about the masculinities of young Muslim males. The first emphasises patriarchy and aggression whilst the second focuses on effeminacy and academicism.

Archer's (2001) study is based on interviews with 24 young Muslim males aged 14-15. She finds that Muslim boys perform, enact, challenge and resist a range of identities and that Muslim men identities are intimately tied up with issues of masculinity. Masculinity, here as elsewhere, is constructed through various positioning of self and others, particularly through the 'ownership' and 'control' of women. In her study, the young men emphasise their religious identity over their ethnic and national identity. They view their religious identity as trans-national. In particular, the young men construct a 'strong' Muslim identity as a way in which to resist stereotypes.

One aspect of Muslim masculinity, as with other forms of masculinity, is its role in the male control and policing of women. Macey (1989) finds that young Muslim men place importance on appropriate gender roles, family authority, dress and marriage as a method whereby they can control the freedom and choice of young women. Archer (2001) notes how male discussion of female behaviours as being un-Islamic allows men to define themselves against women and place themselves as the authentic speakers. At the same time it allows them to create the boundaries of Muslim and western society in terms of the treatment of women. Thus, the young men use 'women' as a particular discursive arena for drawing divisions and negotiating power between themselves and other white men.

Dwyer (1991) also found that, for young men, the policing of women was an important means for maintaining and asserting their own adolescent masculine ethnic and religious identity. Young Muslim men mobilised religious discourses in order to legitimise their authority. Macey (1989) argues that the use of religion to challenge the demand to education and forced marriages is primarily found with those educated in the UK and with middle class Muslims. She points out that this is not true for first generation Muslim women who are not educated in the UK. Such women are less able to counter cultural discourses that limit their freedom and participation in society. Hopkins (2006, p. 89), however, found that young men, in discussions of gender inequality, identified the assignment of the home as the space for women, as a cultural association, arising from their heritage, “They simultaneously argue that men and women are equal in Islam whilst advocating sexist stereotypes about their expectations of Muslim women”.

The discourses of women in this particular developing context of Libya are socially constructed. Women generally have a low status within the society and are often not directly represented at the local, regional and national political decision-making structures, where important issues are discussed. Societal structures affect what access women have to legal representation, levels of legal status with their communities, as well as to what extent women can participate in the marketplace, community and household. Although most world religions do have scriptures that establish the superiority of men over women, male superiority is attributed to Islam more than other major world religions (Harrison, 2007; Hasan, 2012).

Generalizations are also made about masculinity in Islam based on Western perceptions of Muslims in the Middle East. Muslim men are faced with having their masculinity defined based on stereotypical and discriminatory perceptions guided predominantly by the media (Gerami, 2005). According to Adibi (2006),

there is patriarchal system in the Middle East that grant men legal control over their wives, sisters and daughters. However, this is misattributed to the Islamic religion and generalised to all Muslim men without taking into account the cultural factors.

8.5.0.0 INCREASING WOMENS' PARTICIPATION IN MIXED-SEX GROUPS

To develop the 'power to' is to face many challenges and new problems, from coping with new skills to conflicts with husbands (Townsend *et al.*, 1999, p. 127). In this particular context of Libya, the home can be a very repressive place, full of gendered power relations. It is extremely important to educate and bring men into this process. It can be argued that this is essential to the success of their communities. Often men in their communities view development and gender programmes as a western feminist project. Men in their communities will reject or resist empowerment strategies, if they see them as a threat to their own existing power. Therefore, this necessitates involving men and women participating with mixed-sex groups, especially at the national and international levels. We realise our different gender knowledge is vital to our cultural survival, so we need each other- that is why our organisations need to believe in meetings that include the needs of men and women.

Culture difference needs to be taken into account, but as the participant Miera states, "As a strict Muslim, the idea of me working and my husband caring for our child is a problem for my parents and my parent in laws, but we cannot let culture bind us to accepting inequality" (Miera's quote). Sunderland and Litosseliti (2002) also highlight the vital importance of paying attention to context when conducting an analysis of gender and discourse. They see the relationship between context and discourse as a dialectic one, in that context can shape discourse and vice versa. By examining context, they argue that

“emphasis falls on both ‘specificity’ and ‘complexity’” (Sunderland and Litosseliti, 2002, p. 15). They identify the former as a concentration on a specific group of women and men in a specific setting, whereas the latter refers to the manner in which gender ‘interacts’ with all other aspects of identity and power relations.

Furthermore, Sunderland and Litosseliti (2002) go on to make the point that examining context has also resulted in an analysis of ‘situated’ or ‘local meanings’ through a communities of practice approach. I wish to suggest combining the socially constructed notion with the communities of practice framework as one of the approaches or means for making some improvements towards the secondary school curriculum in Libya. A number of researchers have made a connection between gender, as social construct, and the communities of practice approach. For example, Holmes and Meyerhoff (1999, p. 180) point out that the communities of practice approach is clearly more ‘compatible’ with the social constructionist view of gender than other, “less dynamic or activity focused concepts”. Bergvall (1999, p. 273) believes that the communities of practice framework “focuses much-needed attention on the social construct of gender as local and cross-culturally variable”.

8.5.1.0 COMMUNITIES OF PRACTICE

Drawing on work by Lave and Wenger (1991) Eckert and Sally (1992, p. 464) define a communities of practice as: an aggregate of people who come together around mutual engagement in an endeavour. Ways of doing things, ways of talking, beliefs, values, and power relations-in short-practices emerge in the course of this mutual endeavour. In a later work, Eckert (2000) argues that a communities of practice exists simultaneously by its membership and by the shared practices that its members partake in. The immense value of the communities of practice as a theoretical construct rests on “the focus it affords

on the mutually constitutive nature of the individual, group, activity and meaning” (Eckert, 2000, p. 35). Bucholtz (1999) argues that the advent of the communities of practice approach had a revolutionary effect on language and gender research by providing it with a workable feminist social theory. Sunderland and Litosseliti (2002) document that the discourse as social practice approach is an ever-growing field in language and gender studies, and Meyerhoff (2002, p. 539) points out that the communities of practice approach has been heavily influential in language and gender.

The ‘communities of practice’ approach was first introduced into language and gender studies by Eckert and Sally (1992). They argue that the explanatory force of previous research has been weakened by the lack of “a coherent theoretical framework” (p. 87). This issue stems from the fact that both language and gender have been abstracted from the social practices in which they are produced, thus blurring the complex way in which they relate to one another. They assert that researchers need to connect each abstraction “to a wide spectrum of social and linguistic practice” (p. 88) and they believe that the communities of practice approach will achieve this. Communities of practice can survive changes in membership, they can be small or large, and they can come into existence and go out of existence.

In a further development of the communities of practice approach, Eckert and Sally (1992) point out that the notion of communities of practice can also extend to more global communities, such as the academic field, religions or professions. The work of Cameron (1997, pp. 28-29) echoes the methodological perspective of Eckert and Sally (1992), arguing that any study of linguistic behaviour needs to be accompanied by broadly ethnographic descriptions of “the local context and belief system within which language use is embedded”.

Cameron (1997) also observes that there has been a move in this direction amongst feminist linguists, and cites Hall and Bucholtz's (1995) collection as one example of this. A move towards qualitative, ethnographic methods, generally developed alongside the notion of the communities of practice, has continued steadily since Cameron's observation in 1997 (see Baron and Kotthoff, 2001; Bucholtz *et al.*, 1999; Litosseliti and Sunderland, 2002). The research suggests the view of communities of practice approach on learning where social participation and community membership provide the vehicle for learning science as at its practice in the real world. It asks policy makers to rethink the current trend in education and re-examine the ways in which learning can occur in schools (no differently than the ways in which we learn in everyday life) by participation and social engagement with others.

When teachers are given the opportunity to collaborate, and have ownership in curricula and assessment, teaching and learning becomes a participatory event for all the actors involved. Learning is viewed as participation, and science as practice: Situated Learning takes as its focus the relationship between learning and the social situations in which it occurs. Rather than defining it as the acquisition of propositional knowledge, Lave and Wenger (1992) situate learning in certain forms of social co-participation. Rather than asking what kinds of cognitive processes and conceptual structures are involved, they ask what kinds of social engagements provide the proper context for learning to take place (Lave and Wenger, 1992, p. 14).

The following is a basic outline of the strategies presented in the research for engaging and encouraging students through the use of communities of practice and situated learning. There are countless groups that can be labelled as a community of practice: for example, the professionals in school education or hospital (Lave and Wegner, 1991). While not the usual practice of a high school

educator, a secondary classroom can become a community of practice. In order to do so, teachers need to design a context where students are mutually engaged in common goals. This is generally implemented through the commonality of the skill set learned in a particular subject or content area. One way of cementing this mutual engagement is through the development of a joint enterprise (e.g. in science: a school-wide recycling initiative project). Through these schemes, the classroom community of practice uses the language, discourse, and artifacts of the professional community of practice.

The communities of practice, therefore, provides a mechanism for examining the social learning environment and its effects on the curriculum experienced by learners within the research context; how the learning and practice of the curriculum occurs in secondary school classrooms. It takes on the challenge of rethinking learning in schools by viewing learning *as* participation (Lave and Wenger, 1992). It centres on teachers' abilities and willingness to create social learning environments in their classrooms, where science is taught as it is practised in the real world. In this scenario, teachers are facilitators and students are the practitioners in the local production of science (MacBeth and Lynch, 1998).

Specifically, it can be utilized to understand how both users (and newcomers as described by Lave and Wenger, 1992) and makers (who can be viewed as old-timers described by Lave and Wenger, 1992) translate their communities of practice experiences into their classroom environments. The technology (curriculum) involved in this study is built on the premise that classroom science is taught as it is practised in the real world. At its core are understandings from the sociology of science. Lave and Wenger's (1992) constructs provide a meaningful way for examining the social learning environment created by teachers in their local production of science. It also allows for examining how students become practitioners in their own local

production of science. It focuses on the social engagements that are made available for learning to occur. In order to build social learning environments in classrooms, teachers need to be provided with opportunities for social interaction, collaboration, and experiences that enable them to identify themselves as members of a group or community (Sullivan *et al.*, 1998). In viewing learning as a social process, as participation, “it makes enormous sense to provide occasions for interaction, joint collaboration, and the collective pursuit of shared goals-that is, to nurture communities of practice” (Sullivan *et al.*, 1998, p. 79). We know teachers bring experiences, beliefs, and philosophies about teaching science to their classroom environments (Cunningham, 1995; Helms, 1998).

However, what we do not know is how these constructs and teachers’ social experiences in these types of communities affect their classroom practice. Teachers’ work goes beyond the classroom and often includes their participation in settings (such as professional development, curriculum development, conferences, and in-service workshops) that foster teacher-teacher interaction. These types of experiences provide teachers with opportunities to exchange ideas as well as develop the materials and activities they in turn bring to their classrooms. It also provides an environment where teachers can network and draw on each other for support and creativity.

Consequently, it brings together secondary school teachers, educators, staff and scientists in multiple levels of collaboration with a variety of actors in different settings working with individual and small groups in order to create an environmental science curriculum that is sociologically authentic. Although transmission models of teaching now labelled traditional, such as lecture and presentation, dominated 20th century education, learning through experience was not completely discounted by theorists and practitioners. John Dewey

published *Experience and Education* in 1938, which argued that instruction lacking in hands on experience and without a focus on inquiry is not effective. His work sparked an education reform movement in the United States. Dewey also argued for multi-disciplinary approaches, so that students would better be able to make connections between what they learned and their own lives. This coincides with the learning of multiple disciplines within the authentic context of an apprenticeship (e.g., metalworking apprentices learning the math, science and language arts of metalworking) rather than the compartmentalized approach of the emerging high school.

The Cooperative Education Movement also began in the early 20th century. Through a partnership between a school and a professional environment, such as a dental practice, students left the classroom to be learners and participants in authentic contexts. Often students found the learning and networking involved in cooperative education helped to solidify a career in a given field. Although it applied mainly to post-secondary programs, its emphasis on school-to-work opportunities represented a continuation of apprentice-style education for young adults. Cooperative Education gained momentum in the 1960s with a more recent increase in presence in both alternative and mainstream secondary schools.

8.5.2.0 THE CONSTRUCTION OF IDENTITY IN COMMUNITIES OF PRACTICE

My proposed framework involves a social perspective, and I rely on Lave and Wenger's (1992) construct of identity: I will use the concept of identity to focus on the person without assuming the individual self as a point of departure. Building an identity consists of negotiating the meanings of our experience of membership in social communities. The concept of identity serves as a pivot between the social and the individual, so that each can be talked about in terms of the other. It avoids a simplistic individual-social dichotomy without doing

away with the distinction. The resulting perspective is neither individualistic nor abstractly institutional or societal. It does justice to the lived experience of identity, while recognizing its social character-it is the social, the cultural, and the historical with a human face (p. 145). Identity is the vehicle that carries our experiences from context to context (p. 268). Identity in practice is defined socially not merely because it is reified in a social discourse of the self and of social categories, but also because it is produced as lived experience of participation in specific communities (Lave and Wenger, 1992, p. 151).

I illustrate the utility of a community of practice view in describing classroom practices and in shaping sociologically authentic school science programs. This view of learning-as shared participation (Lave and Wenger, 1992), in a Community of Practice (Wenger, 1998) is a beneficial way of characterising what takes place in scientific communities. This perspective is transferable to the science classroom, where learning by participation can also occur, and enhances learning science as it is practised in scientific communities. Lave and Wenger (1992, p. 95) describe participation-legitimate peripheral participation (LPP), as the beginning of the community membership process: it crucially involves participation as a way of learning, of both absorbing and being absorbed in, the 'culture of practice'. An extended period of legitimate peripherality provides learners with opportunities to make the culture of practice theirs.

Wenger describes (1998) a community of practice as being a composite of a *shared repertoire, a joint enterprise, and mutual engagement*. The *shared repertoire* of a community of practice includes routines, works, tools, ways of doing things, stories, gestures, symbols, genres, actions, or concepts that the community has produced or adopted in the course of its existence, and which have become part of its practice. The repertoire combines both reificative and participative aspects. It includes the discourse by which members create

meaningful statements about the world, as well as the styles by which they express their forms of membership and their identities as members (p. 83). These practices are the property of a kind of community created over time by the sustained pursuit of a *joint enterprise* (p. 45).

The first characteristic of practice as the source of coherence of a community is the *mutual engagement* of participants. Practice does not exist in the abstract. It exists because people are engaged in actions whose meanings they negotiate with one another. Practice resides in a community of people and the relations of mutual engagement by which they can do whatever they do. Membership and community of practice is therefore a matter of mutual engagement. That is what defines a community (p. 73). In the unpredictable invention of the dilemma of adolescent identity formation with the problem of waning student engagement, a solution may be found in the application of the pedagogical aspects of the learning taking place in communities of practice.

In the discussion of the history of this particular context and a critical review of the body of research, effective strategies are required for creating communities of practice in public school classrooms in order to encourage students to incorporate content area identities. For instance, at secondary school, core curricular classes (Arts, Science, Maths, and Technology) are organized by grade level. The secondary school student has a unique opportunity to learn with other students who are at different grade levels and who often hold a wider variety of experience in the content area. For example, a fresh learner may enter a general theatre (Hall/Room) class with seniors who took the class for the previous three years.

In many of these classes, students serve as mentors or even teachers to each other. A stronger sense of community develops in the classroom as students work toward producing authentic projects together. It is in these types of classes

where I, as a student, experienced the greatest motivation, engagement, and significant learning. Moreover, as secondary students must change hats generally every hour at the ring of a bell, the goal for the teacher is not to convince every student to choose her content area as a permanent vocation, but for the course of study to be an authentic experience- one which will engage the adolescent and ultimately help him to make an informed decision as to what occupation or future education would best suit him. Constructivist pedagogies call for active students to have a dynamic interaction with the learning goals and environment.

In constructivist approaches, the social and cultural backgrounds of the students have great importance in designing curricula. Students participate in collaborative processes and often learn by teaching. Teachers serve more as facilitators than instructors and assess through authentic measures, such as completion of projects, rather than information recall in an exam. All of these qualities are seen in the above learning situations of the mixed level secondary school theatre (Hall) class room. As showed in the secondary school theatre classroom and the standard apprenticeship, a community of practice consists of a group of people striving towards common goals. Consequently, the members experience the process of social learning, shared sociocultural practices, and artifacts that emerge and evolve from collaboration.

While a more complex concept, situated learning can also be observed in both the secondary school theatre classroom and in a standard apprenticeship. Situated learning is learning that occurs in the same context in which it is applied (Lave and Wenger, 1991). Obviously, the apprentice carpenter is working in the field with a master carpenter. Less obviously, a theatre student participates in a real community of practice, collaborating to create a joint product to produce in a real theatre. A bad example in the secondary school

looks like the following scenarios: calculus students without authentic tasks, science students who repeat the same experiments with known outcomes, English language students learning only through completing grammar workbooks.

Therefore, the communities of practice can create huge positive effects towards students' gender interactions within the secondary school community in Libya, particularly, on the curriculum as experienced by students at secondary school level. It can help to increase student engagement and motivation and to provide authentic opportunities for students- opportunities that encourage them to be practitioners, or people in practice in whatever content area they are studying. Practice, too, must be expanded as a concept beyond merely repeating activities, drills, or tests. Certainly, repetition may be integral to skill acquisition, but it is in moving beyond learning the basics that a student truly experiences practice. In his foreword to *Situated Learning*, Williams asserts, "Learning is a process that takes place in a participation framework, not in an individual mind. This means, among other things, that it is mediated by the differences of perspective among the coparticipants" (Williams (1991), in Lave and Wenger, 1991, p. 15).

In other words, a (student) practitioner who works in a classroom community alongside fellow amateurs, more advanced practitioners, and who is given the opportunity to perform regularly, develops the ability to anticipate problems, to improvise, and ultimately, create something new. Regardless of the trajectory of the student after he leaves the classroom, these are the skills that will be transferable to other areas in the student's life, making him a valuable participant in any future education or career. Eckert and Sally (1992, p. 93) point out that individuals "participate in multiple communities of practice and their individual identity is based on the multiplicity of this participation".

Gender is produced and reproduced in different memberships of communities of practice, and an individual's exposure or access to communities of practice is related to other categories of social identity as gender, including age, class, ethnicity, etc. Gender is also produced and reproduced in differential forms of participation in communities of practice and this is crucially linked to the place of such groups in wider society. Interestingly, Eckert and Sally (1992, p. 94) quote the workplace as a prime example of this, stating that females are more likely to be subordinate to males in the workplace as a consequence of their subordinate place in wider society.

Furthermore, Eckert and Sally (1992, p. 466) acknowledge that relations between different communities of practice, when they come together in overarching communities of practice, can also work to produce and reproduce gender arrangements, an example of gender differentiation being reproduced at a wider, institutional level. However, they make a crucial point, which accords with the view of gender as a performative social construct, that speakers should not be viewed as passively reproducing the gendered norms associated with their sex. Instead, the communities of practice approach enables researchers to focus on "people's active engagement in the reproduction of or resistance to gender arrangements in their communities" (p. 466). Eckert and Sally (1992, p. 95) believe that individual and communities of practice change constantly, and that our gendered sociolinguistic identities are transformed as we change and expand "forms of femininity, masculinity, and gender relations". In conclusion to their theory, they advocate that in order to make reasonable and justifiable claims about language and gender, integration with researchers from a variety of disciplines is required.

SUMMARY

I end by focusing our attention on what I see as the next horizon for feminist change agents: a focus on the processes that might spur change at the interactional or cultural dimension of the gender structure. We have begun to socialize our children differently, and while identities are hardly post-gender, the sexism inherent in gender socialization is now widely recognized. Similarly, the organisational rules and institutional laws have by now often been redrafted to be gender neutral, at least in some nations. While gender-neutral laws in a gender-stratified society may have short-term negative consequences (e.g., displaced homemakers who never imagined having to support themselves after marriage), they can hardly retreat from equity in the law or organisations.

It is the interactional and cultural dimensions of gender that have yet to be tackled with a social change agenda. Cognitive bias is one of the mechanisms through which inequality is re-created in everyday life. There are, however, documented mechanisms for decreasing the salience of such bias (Bielby 2000; Reskin 2000; Ridgeway and Correll, 2000). When we consciously manipulate the status expectations attached to those in subordinate groups, by highlighting their legitimate expertise beyond the others in the immediate social setting, we can begin to challenge the non-conscious hierarchy that often goes unnoticed. Similarly, although many subordinates adapt to their situation by trading power for support, when they refuse to do so, interaction no longer flows smoothly, and change may result. Surely, when wives refuse to trade power for investment, they can rock the boat as well as the cradle. These are only a few examples of interactive processes that can help to explain the reproduction of inequality and to envision strategies for disrupting inequity.

We need to understand when and how inequality is constructed and reproduced to deconstruct it. I have argued earlier that, because the gender structure so

defines the category woman as subordinate, the deconstruction of the category itself is the best, indeed the sure way, to end gender subordination (Ridgeway and Correll, 2000). There is no reason, except the provisional faintness that will accompany the process to disassemble it, that an ultimate vision of a just world involves any gender structure at all. Why should we need to elaborate on the biological distinction between the sexes? We must accommodate reproductive differences for the process of biological replacement, but there is no *a priori* reason we should accept any other role differentiation simply based on the biological sex category. Before accepting any gender elaboration around the biological sex category, we ought to search suspiciously for the possibly subtle ways such differentiation supports men's privilege. Once two salient groups exist, the process of in-group and out-group distinctions and in-group opportunity hoarding become possible. While it may be that for some competitive sports, single-sex teams are necessary, beyond that, it seems unlikely that any differentiation or cultural elaboration around the sex category has a purpose beyond differentiation in support of stratification.

Feminist scholarship always struggles with the questions of how one can use the knowledge they create in the interest of social transformation. This kind of theoretical work becomes meaningful, if we can eventually take it public. We must eventually take what we have learned from our theories, practices and research beyond professional papers to our students and to those activists who seek to disrupt and so transform gender relations. We must consider how the knowledge we create can help those who desire a more democratic social world to refuse to do gender at all, or to do it with insubordinate reflexiveness to help transform the world around them. For those without a sociological perspective, social change through socialization and through regulation are the easiest to visualise. We need to shine a spotlight on the dimension of cultural interactional expectations, as it is here that the work needs to begin.

CHAPTER SIX

9.0.0.0 THE RESEARCH CONCLUSIONS AND RECOMMENDATIONS

9.1.0.0 THE SUMMARY OF THE RESEARCH OUTCOMES

This chapter reviews what has been achieved and learned from the data analysis gathered in the final research findings in this study, and considers how far the research questions (see p. 25 of this thesis) have been answered. In the following sections, each research question is stated and answered as it has been outlined in the research introduction. The study limitations and research recommendations for conducting an evaluation of mixed method inquiry research in such studies are also presented.

The researcher carried out the content analysis under different themes to see the extended alignment of the curriculum with not only the functional aspects, but also the inclusive elements. This analysis is subjective in nature and shows the clear standpoint of the researcher. In the later stage of the analysis, the findings of the content analysis were incorporated into the findings of the questionnaires and interviews to make the whole picture rich. The content analysis helped the researcher to conduct a comparison of the frequency occurrences in the data collected in the questionnaires and interviews. This helped the researcher to validate and triangulate the collected data.

In the interpretive approach, the researcher does not stand above or outside, but is a participant observer and/or an insider researcher (Carr and Kemmis, 1986; Costley, 2010) who engages in the activities and discerns the meanings of actions as they are expressed within specific social contexts. Shankman (1984b) wrote that he believed that complete objectivity was impossible; but this did not mean abandoning the search for objective knowledge or conceding that all versions of reality are equally true. What is necessary, according to the interpretivist theorist Rosaldo (1982, pp. 198-277), is “ways of moving back

and forth between an actor's subjective interpretation and a set of objective determinants". This perspective maintains that subjective interpretations of reality and objective phenomena may be simultaneously sought and that it is furthermore important to understand the connection between the two. The very fact that subjective understanding differs depending on the context reveals that objective contextual conditions may influence subjective meanings (Shankman, 1984b).

Thus, compatibility can be found between positivism and this understanding of interpretivism, which focuses on why and how individuals come to understand events as they do, yet recognizes that those understandings may be influenced by an objective reality that, while difficult to discern, is potentially knowable. Under this framework, it is possible to simultaneously accept that there is both a single objective truth of factual events and multiple subjective views of the truth that reveal much about the worldviews and perspectives of those who hold them. The goal for positivist analysis, as we discussed, is, therefore, to come as close to this objective truth about the causes of events as possible by managing various forms of bias or distortion that may arise from the context or the respondent's interpretive understanding of events. The goal for interpretive research, by contrast, is to understand how individuals understand that context and how the multiple subjective 'truths' they construct provide insight into their cultural understandings.

We argue that each approach is important in its own right and that combining the two has even greater analytical value. Qualitative approaches are becoming more widely used as analysis methods improve and people search for better ways of gathering data about a problem (Price, 2002). The essential processes in this study included investigating in detail the unique educational gender experiences of individuals in the complexity of a real classroom. The researcher as a participant in the study undertook all the processes that influenced these

experiences and the analysis of the resulting descriptive data. This approach allowed for ‘thick narrative descriptions’ of the phenomena under study and gave the researcher the opportunity to take into account the views of the participants and the subtleties of complex group interactions and multiple interpretations in the group's natural environment. The researcher found that using a qualitative description of their experiences and an inductive analysis of data was most appropriate for the purpose of this research, because all these procedures enhanced the possibility for some kind of objectivity which would have been lost if quantitative or experimental strategies were applied alone.

The next sections present the summary conclusions, limitations of the study and the research recommendations for future studies. Among other important barriers facing the development of the secondary academic curriculum in the educational system, particularly in developing countries such as Libya, are not only the political, religious or cultural aspects, but also the barriers that appear mainly from the advancement of knowledge, progress and development of education techniques and the weak capacity of scientific, technical and human resources to apprehend and integrate them into the overall educational process through the communities of practices. To overcome these barriers, preparation, time and rehabilitation are needed. In the following section, each research question is specified and answered as it has been defined in the research introduction (see p. 25 of this thesis for more detail).

9.1.1.0 Q1. HOW DO STUDENTS IN URBAN AND RURAL SCHOOL IN LIBYA GENERALLY IDENTIFY OBJECTS AND SUBJECTS THAT STRONGLY MEDIATE GENDERED ATTITUDES TOWARDS THE FORMAL ACADEMIC CURRICULUM AT SECONDARY SCHOOL LEVEL?

- There was a clear indication that sciences and technology specialisations were the most common areas within the formal secondary academic curriculum. These areas (sciences and technology) accounted for 35% (n=286) and 29.0% (n=232) respectively. These subject areas appear to attract the majority of participants at all ages; males in particular were evidently directed towards future career.
- The majority of the participants considered the value of their subject choices for studying mainly in terms of job opportunities; this frequency accounted for 15.6% (n=125) of the total 53 for males and 72 for females.
- Subject choices in the formal academic curriculum at secondary school level, reflecting students' individual preferences and perceived needs for future careers, are sometimes heavily influenced by gender.
- Students' perception of gender issues across a range of ages and social groups and localities were seen as more sensitive to changing cultural expectations and /or changes in the employment market. For example, females and males appeared more confident and positive about their future job and opportunities. Nevertheless, occupational choices for both genders appear to remain conventional and stereotyped influenced by social background.
- The typical beliefs among Libyan secondary school students about gender were that women are logically and biologically different from men which influenced by their religious beliefs may be have epistemological control,

therefore is being likely to disadvantage one gender group than other group towards the formal curriculum subject choices and performances.

- When subject options are introduced beyond the National Curriculum at Secondary School level, students (participants of both genders) sometimes make their choices on the traditional lines, reflecting stereotyped views of what is appropriate for their gender. Broadly speaking scientific and technical subjects attract more males than females.

9.1.2.0 Q2. WHAT ARE THE STUDENTS' BELIEFS ABOUT GENDER ROLES IN RELATION TO THE FORMAL SCHOLL ACADEMIC CURRICULUM? HOW DOES RELIGION IMPACT ON THE STUDENTS' BELIEFS ABOUT THEIR GENDER ROLES IN RELATION TO THEIR SUBJECT DIRECTIONS?

- The participants do not strictly observe the formal practices of Islam within the formal academic curriculum; however, they described that religion has a significant role in their lives and influences them in many ways.
- The most typical responses were that religion provides guidance (similar to previous findings in Carolan *et al.*, 2000) and motivates participants to prioritise their obligations to their families.
- Family and culture are direct sources of participants' beliefs and religion reinforces those beliefs. Participants made statements about the equality of men and women. They specifically addressed men and women having equal rights to an education. This supports other studies (Carolan *et al.*, 2000; Ramji, 2007).
- Participants addressed that there is a relationship between religion and culture. They explained that the historical role of religion in their cultures makes it difficult to distinguish between the influences of religion and culture.

9.1.3.0 Q3. HOW DO STUDENTS' EXPERIENCES OF THE FORMAL ACADEMIC CURRICULUM IMPACT UPON THEIR GENDERED ATTITUDES? WHETHER ANY SIGNIFICANT MEASURES OF ATTITUDE DIFFERENCE EMERGE IN THE PRIORITIES PROJECTED BY MALE AND FEMALE STUDENTS TOWARDS THE FORMAL ACADEMIC CURRICULUM?

- Evidence from this research survey data suggests that the effect of gender gap differences on the subject choice appears to have been declining among students' of both genders in urban school in particular.
- More females are now taking the males' traditional subjects (mathematics and technology), although males are still reluctant to take the traditional females' subjects (arts).
- Males and females in mixed schools generally have, in formal terms, equal access to the same curricular activities, although the pattern of females' involvement is often gender-related, especially towards school subjects which are solely mathematical, scientific or technological, thereby denying themselves some career opportunities in science, engineering and technology.
- There was clear indication of gendered differences between male and female students in their perceptions towards what their parents wanted them to do in relation to the formal academic curriculum at secondary school level.
- The research has identified a number of curriculum concerns; for example, the continuing narrowed aspirations of females and young women when selecting subject options and future occupational possibilities, despite their improved performance relative to boys.

9.1.4.0 Q4. WHAT ARE THE BARRIERS AND CHALLENGES IF ANY FACING THE SECONDARY FORMAL ACADEMIC CURRICULUM DEVELOPMENT(S)?

The most important factors in these barriers are summarised in the following:

- The tendency of teachers and educators to rely on traditional methods of teaching and education, and the poor professional ability to recruit the modern educational progress in curriculum and teaching methods.
- Predominance of the traditional character of curricula and educational programmers and the focus on conservation and memorization, without much attention to building skills, and the modern teaching methods used in the developed world.
- The weakness of education and teaching methods is reflected within the curriculum, due to the weakness of teachers and their scientific and educational qualifications. It follows from this that the students do not acquire the mental and behavioural skills that would enable them to continue their studies and be prepared to contribute in building a knowledge society and an information society and a knowledge economy, because there is a large gap between the school's methods of education and the reality and the ambitions of Libyan society in the present and future.
- The weakness of the efficiency of school principals to manage secondary schools, and their poor ability to deal with the educational and social problems and attitudes of students, which leads to the student's unhappiness and the poor adaptation to school, which leads in turn to failure in studies or to leaving and dropping school. This widens the gender gap, especially since the school is a group of young people and teenagers who often school principals and teachers are unable to deal

with them in a suitable scientific and educational style. In addition to that, many teachers, school administrators and supervisors do not have clear and organized ideas for a student-friendly school or a centre for reflection and thinking.

- The weak benefit from the results and recommendations of scientific conferences and symposiums on the local, regional and international levels. This undermines the relationship between the school principal and curriculum improvement, and is counter-productive both to effective school management, and to schools grasping complex initiatives such as worldwide curriculum development.
- The growth and development of science, knowledge and technological formats in all spheres of life and the weakness of the family's ability to apprehend this scientific progress and transfer it to the form of attitudes and behaviour to their children. Libyan families are still mostly traditional families, while the general educational and social system is modern, and it looks forward to the era of modernity and inclusive change.
- Cultural, demographic and labour market changes have influenced the way students and teachers think about the schooling of girls and boys.

9.2.0.0 THE RESEARCH RECOMMENDATIONS: Q5. WHETHER ANY CURRICULUM CHANGES ARE SUGGESTED BY TEACHERS' AND STUDENTS' PERCEPTIONS OF EFFECTIVE AMENDMENTS FOR THE CURRICULA IN SECONDARY SCHOOL EDUCATION IN LIBYA?

The research finally discussed specific changes or improvements, which participants would recommend to help them within the current formal academic curriculum and teaching at secondary school level in Libya. Overall, recommendations were realistic and did not aim particularly high. The interview findings from the data analysis have produced themes and patterns, which gave a clear picture of the present assessment and teaching environment at secondary school level in Libya. This involved both indigenous-typologies, “those created and expressed by participants” and analyst-typologies, “those created by the researcher as insider researcher that are grounded in the data but not necessarily used explicitly by participants” (Marshall and Rossman, 1999, p. 154).

The key issues emerged again: facilities and equipment, the quality of teaching and curriculum contents. Repeatedly, students commented on the absence of appropriate resourced science facilities and practical learning, and the reliance on theoretical and book learning (memorization and theory). This was particularly the concern reported in regards to Social Science and other theoretical specializations as distinct from so-called practical science specializations, which in fact appear frequently to be taught without functioning laboratories and without students doing the experimental work themselves. Teacher demonstration is not active student learning. This report is not the first to make such observations and to recommend the practical (as distinct from theoretical) upgrading of teachers to fit a modern education system: without this, little will improve. Students require generic Information Technology skills training and foreign languages for communication which can be used in the workplace.

It is important to reinforce other recommendations, which continue to be repeated in the comments. These interview findings evidently show a great desire for positive curriculum changes among the participants' (teachers and students) effective amendments within the contents of the formal secondary school academic curriculum in these major areas: *Curriculum and Assessment; Teachers' Attitudes and Classroom Environment; Teacher Training and Qualification; Teachers' and Students' Participation* (see Table: 7.0 in Appendix A, p. 388 for more details); *and Gender, Religion and Culture Influences* (see Table: 7.1 in Appendix A, p. 390 for more details). Undoubtedly, school education policies of the educational development in Libya, in particular at the secondary school level, need to review the current curriculum as planned, taking into account national constants and global changes, including:

- ❖ (a) The information and communications revolution and rapid global changes and their implications on all dimensions of life including the student's life as an individual and the society as a whole;
- ❖ (b) Changing the concept of investment to be based on the investment in human beings and building the mental capital to ensure the best return and increasing the value of science and innovation as inputs to generate added value;
- ❖ (c) Looking at the curriculum as a single unit within an integrated interactive system, not as a separate unit, based on the integration and unity of knowledge and the science curriculum and disciplines overlap;
- ❖ (d) Linking the curriculum with modern changes and the needs of modern society and the production sectors, empowerment and human development;
- ❖ (e) Linking the curriculum content with the school environment and the global information technology and communications revolution

surrounding the learners; and supporting the curriculum with professional and technical activities and gender studies;

- ❖ (f) Benefiting from the experiences of other developing countries, especially those that have reached tangible success in human development while preserving the culture and national identity;
- ❖ (g) Considering the age characteristics of learners and disparities in individual differences and gender patterns of learning and providing an opportunity for positive creativity and innovation and engaging the educational curriculum context in practical life.

Moreover, this study delivered descriptive and in-depth information regarding the role of religion in the lives of young Muslims and the relationship between their religion, cultures and gender role beliefs. The majority of participants did not strictly observe the formal practices of Islam, although they reported that Islam influences their lives in many ways. Participants appear to have an intrinsic motivation for religion and Islam appears to promote and reinforce a non-rigid masculine identity that allows men to seek guidance and support, encourages altruistic social behaviours and prioritises men's relationship with the family.

The majority of participants did not interpret the Qur'an in a literal manner, based on their views about gender, but reported that their views are supported by Islamic principles. The typical beliefs about gender were that women are physically weaker than men, women are better equipped to be nurturers and primary caretakers of children, men and women should have equal access to education, opposite sex interaction is permissible, a woman's role should not be limited to the home and household labour should be shared. Islam prohibits oppression of women, and women should be respected. These beliefs are inclusive of both traditional and non-traditional gender ideologies and are compatible with gender norms in this context. Whereas some of these beliefs

may increase the likelihood that Muslim men will experience gender role strain, others are indicative of a non-rigid gender ideology that may reduce gender role strain among Muslim men. Some of the beliefs are also indicative of pro-feminist ideologies that are sensitive to the issues of social justice forced by women. Participants also addressed the role of Islam in their culture, the difficulty in distinguishing between the influences of Islam and culture, the distinction between Islam and culture with regard to the oppression of women, and Islam's ability to adapt to diverse cultures.

This study provided descriptive and in-depth information regarding the role of religion in the lives of Muslim men and the relationship between their religion, culture and gender role beliefs (see Table 7.1. in Appendix A, p. 390 for more details). Contradictory to stereotypes, their gender ideologies are more different than similar to the gender norms in the UK or the USA, are multidimensional and complex and influenced by a dynamic interaction between Islam and culture. Overall, the study highlights the importance of challenging the predominantly one-dimensional portrayals of Islam and Muslim masculinity. The inclusive intention is to transform the formal school curriculum and its surrounding community into an environment which is physically, academically and socially gender responsive.

- ❖ The key strategies underlying the gender intervention include:
 - Involvement of all stakeholders; students, parents, communities, teachers, school management, and the Ministry of Education in the processes in transforming the formal school curriculum and its surrounding community into a gender responsive environment physically, academically and socially;
 - Capacity building of all stakeholders, individually or in groups, with gender sensitization and skills training; and

- Provision of the basic requirements in terms of gender responsive infrastructure, teaching and learning materials.
- ❖ The key strategies underlying the gender intervention also consists of units dealing with aspects of a gender responsive pedagogy including how to create gender responsive:
 - Lesson planning;
 - Teaching and learning materials;
 - Language use in the classroom;
 - Classroom set up; and
 - School management system.
- ❖ The key strategies underlying the gender intervention also consists of the practical application suggested from the current research findings has produced very encouraging results in terms of the following:
 - Raising the awareness of the teachers on the gender constraints to learning;
 - Equipping the teachers with concrete skills on how to eliminate the gender based constraints to the teaching and learning processes;
 - Equipping the teachers with skills for new teaching methods, which apply not only to gender, but also to the overall improvement of the quality of their teaching;
 - Equipping the teachers with the skills to identify gender stereotyping in teaching and learning materials, such as textbooks and visual aids, and the skills to produce gender responsive materials instead;
 - Promoting innovation and creativity in the teachers in the attempt to come up with gender responsive teaching methodologies, teaching and learning materials;

- Introducing a gender friendly atmosphere in the formal school curriculum among teachers and students, both inside and outside the classrooms;
 - Improving the quality of teaching and learning overall leading to better school performance by both boys and girls.
- ❖ Some other key strategies underlying the gender intervention consist the following strategic activities in the holistic package:
- Gender sensitization of parents, community leaders, community members, teachers, boys and girls;
 - In-service training for teachers into gender responsive pedagogy;
 - Empowerment of girls into skills for self-confidence, assertiveness, speaking out, decision-making and negotiation;
 - Establishment of counselling desks and training of teachers and students into the relevant skills;
 - Provision of scholarship and support to needy girls;
 - Provision of gender responsive infrastructures including boarding facilities;
 - Activities to promote the participation of girls in science, mathematics and technology subjects, such as science camps as well as support for science and computer laboratories and equipment;
 - Establishment of a gender responsive school management system and training of school management teams;
 - Activities to involve the community and other stakeholders in the school operations, monitoring and taking action to ensure the attendance and performance of the girls, including persuading parents against practices that can negatively affect girls' education, such as early marriage or reluctance to take girls to school.

Moreover, some recommendations related to the research methodology used for this study are also highlighted. The findings suggest using the methodological pragmatism approach: mixed methods is recommended when the convergence of findings is desired for triangulation, when diverse perspectives are desired to expand one's understanding of a phenomenon, if a study seeks to initiate fresh insights through an examination of divergent findings, and/or if multiple stakeholders have differing information needs. The mixed method design for the purpose of convergence and triangulation may also be optimized by considering the timing of single study implementation. If mixed method designs are conducted to examine convergence, a sequential design is most effective, where the interpretive methods may develop the content areas that would be explored in a post-positivist survey. Therefore, the amount of unique information in broad topic areas that is contributed by interpretive methods would be somewhat diminished.

Conversely, conducting the post-positivist method first, and the interpretive method second, would likely result in many unique findings in the interpretive method. This approach can be the ideal approach, if stakeholders are interested in how different methods produce different findings. When conducting mixed method research, single methods must be thoughtfully selected. I recommend using a more intensely interpretive approach, as compared to a weaker one, in order to more fully exploit the benefits of interpretive inquiry. A common point to mix methods is at interpretation. It is critical that mixed methods researchers take care to fully integrate findings at the point of interpretation and move beyond presenting method findings in a side-by-side manner. I recommend using a Hegelian framework to mix at the point of interpretation for the pragmatic approach. Further research on pragmatic criteria would be helpful to refine the framework based on the criteria first proposed by Datta (1997). Additional research is also necessary to develop a framework and criteria for judging the validity of inferences based on mixed method studies.

Finally, practitioners of mixed methods optimize the conduct of their studies when they have a sincere interest in, and capacity for, diverse methods, as well as the time and budget necessary to carefully attend to each. The value of mixed method studies is diminished by methodological laziness, due to lack of budget or a lack of interest or capacity on the part of the researcher. To successfully conduct mixed methods, much more research is necessary in order to draw conclusions about the pragmatism approach in other contexts. The difference in the kinds of information produced in the two types of method studies seems likely to result in similar findings across diverse research and evaluation contexts. The diverse information needs of multiple stakeholders has been an important rationale for mixed methods (Benofske, 1995; Chelimsky, 1997; Patton, 1997). However, the extent to which mixed methods meets these needs has received less attention. This study lends support to the usefulness of mixed methods for multiple stakeholders. In fact, the method mix with the phenomenological interviews was used to both better reflect participant perspectives and the underlying truth.

SUMMARY

In conclusion, I have made the argument throughout this research that we need to conceptualize gender as a social structure, and by doing so, we can analyse the ways in which gender is embedded at the individual, interactional and institutional dimensions of our society. This situates gender at the same level of significance as the economy and the polity. In addition, this framework helps us to disentangle the relative strength of a variety of mechanisms for explaining given outcomes without dismissing the possible relevance of other processes that are situated at different dimensions of analysis. Once we have a conceptual tool to organize the comprehensive research on gender, we can systematically build on our knowledge and progress to understand the strength and direction of causal processes within a complicated multidimensional recursive theory.

I have also argued that our concern with intersectionality is likely to continue to be paramount, but that different structures of inequality have different infrastructure and perhaps different influential causal mechanisms at any given historical moment. Therefore, we need to follow a strategy, to understand the gender structure and other structures of inequality as they currently operate, while also systematically paying attention to how these structured elements of gender domination intersect. Moreover, I have suggested that we pay more attention to doing the communities of practices work to help transform, as well as inform, society. If we can identify the mechanisms that create gender, perhaps we can offer alternatives to them and make a great contribution to society.

9.3.0.0. LIMITATIONS OF THE STUDY

Several limitations in this study circumscribe the conclusions that may be drawn:

First, the issue of gender is limited to specific aspects of the formal curriculum education at secondary school level in Libya. It is important to note that this study represents one sample (African-Arab Libya's developing context), an investigation using one real-world evaluation. Limitations exist due to political changes in terms of the post-Gadhafi regime and contingency. It is also due to practical terms and constraints. The study can be further explored and developed to include learners in early school stages and/or learners in other fields. Further, the context of this study is a relatively young field with little empirical literature to inform it. As such, this study is most valuable in that it raises important insights that require much additional scholarship for illumination and confirmation.

Second, this study focused on mixing methods at the point of implementation, although mixing did occur at both the points of sampling and analysis. Therefore, conclusions are best drawn about mixing at the point of interpretation. Advances are being made in mixing at the point of analysis (Day, Simmons, and Gu, 2008). Results may have been different had I mixed more at that level.

Third, the validity of mixed method studies was one component of this study. Unfortunately, a coherent conception of validity in mixed methods requires further scholarship. The strength of my validity claims would have been stronger, if a mixed methods validity framework were in place. Further, the assessment of the validity of inferences is largely based on my opinions of what the standards mean, what is required to meet the criteria and the extent to which the criteria are met. No information was available for the consistency for any

method and the confirmability of phenomenological interviews. These factors limit my ability to make claims about the validity of inferences.

Fourth, the practical considerations require attention; mixed method approaches are more expensive than single methods. More study is necessary to understand the research questions and contexts in which the additional costs of mixed methods are outweighed by the gains in knowledge and guidance for decision-making.

Finally, it is important to note that the self-completion survey fully explored the issues related to gender and the curriculum at secondary school level in Libya. However, due to time constraints and the in-depth nature of the method, the phenomenological interviews did not discuss the issues in sufficient depth. This limited the comparison of convergence, divergence and the uniqueness on this subject.

9.4.0.0 THE FUTURE PLANS FOR RESEARCH STUDIES

The question, which we continue to ask is: what schools can do better to prepare young students/individuals for equity of employment. The belief that attention to gender can, and should, inform and enrich all study of religion is not yet firmly established. Challenges in the academy may continue to effect improvement, not only as gender becomes entrenched in bordering fields, but as the gender balance begins to shift within the academic study of religion. Equally important may be the challenges in religion and society's social structures which force attention to religion's relations with gender. Thus, research in the future should examine the following aspects:

- To what extent should the secondary schools seek to influence the preferences of female students in choosing optional courses? To what extent should the school authorities try to encourage female students into areas of the curriculum, which are not traditional for their sex and/or gender roles?
- To what extent should organisational strategies aim to achieve compromises between organisational standards and national ethics of culture and religion, in order to encourage organisational changes in terms of communication in ruling organisations?

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APPENDIX A

THE SUMMARY OF THE TABLES

TABLE 1.0: SHOWS GROWTH FIGURE IN EDUCATION BETWEEN(1951-1986) IN LIBYA. (*National Planning Council in the Great Jamahiriya 2007*)

Year	Number	Literacy
1951	34000	Population literacy (20%).
1962	150000	Female literacy was (6%).
1977	980000	Overall literacy (51%) but females (31%).
1986	1245000	Literacy (54%) male, (46%) female.

TABLE 1.1 SHOWS STATISTICS OF GENERAL PEOPLE’S COMMITTEE FOR EDUCATION (*SGPCE*), 2008 IN LIBYA.

Level	Educational Stage	Number of Schools	Number of Classrooms	Number of Students	Female Students	Male Students	Number of Teachers
First stage	Basic	3397	40743	939799	618590	321209	119313
Second stage	Secondary	1033	10940	226000	133130	92870	39847
Third stage	Joint	72	1228	30697	10269	20428	3764
	Total	4502	52911	1196496	761989	434507	162924

TABLE 1.2: SHOWS TRAINING CENTRES AND NUMBER OF GENDERED PARTICIPANTS (1986-2000), (*LNRALLA 2000*).

Training Level	1986- 1990	1991- 1995	1996 - 2000
Gender	Females - Males	Females- Males	Females - Males
In House Training	20400 - 6300	35800 - 4000	62300 - 10000
Vocational Training centres	4000 - 23200	8000 - 26000	10000 - 40500
Other Training Centres	18600 - 49400	27300 - 72300	28300 - 81200

TABLE 1.3: SHOWS THE SAMPLE SIZES OF THE PARTICIPATANTS INVOLVED IN THE QUANTITATIVE DATA CLASSIFIED.

Age	Total	Percent	Stage	[2] Rural Schools* = 55%			[2] Urban Schools ** =45%		
				Male	& Female	= Total	Male	& Female	= Total
15	97	12.1	Year one	32	34	66	10	21	31
16	103	12.9	Year one	22	25	47	12	44	56
17	200	25.0	Year two	60	46	106	56	38	94
18	200	25.0	Year three	50	55	105	51	44	95
19	123	15.4	Year four	32	38	70	29	24	53
20	77	9.6	Year four	21	25	46	14	17	31
Total	800	100.0	Total	217	223	440	172	188	360

Total Number 440 = 55% Rural Schools* (Al-Nosour Khader and Al-Zahf Alkhader).

Total Number 360 = 45% Urban Schools ** (Al-Gartabya and Al-Fatah).

TABLE 1.4: SHOWS THE GENDER CHARACTRISTICS OF THE SAMPLE

Gender	Frequency	Per cent=%
Males	389	48.6%
Females	411	51.4%
Total	800	100%

TABLE 2.0: SHOWS THE PARTICIPANTS' DIRECTIONS OF THEIR STUDY CHOICES

Analysis	Gender		Arts	Sciences	Technology	Maths	Total
Percent	M48.6%	F51.4%	22.80%	35.80%	29.00%	12.50%	100.00%
Frequency	M-389	F-411	182	286	232	100	800
1st year	Males		15	31	23	7	76
	Females		35	43	33	13	124
2nd year	Males		20	40	38	18	116
	Females		20	31	19	14	84
3rd year	Males		21	35	30	15	101
	Females		30	28	27	14	99
4th year	Males		14	41	30	11	96
	Females		27	37	32	8	104

TABLE 2.1: SHOWS PARTICIPANTS' REASONS FOR CHOOSING THE COURSES

THE SUBJECT CHOICES				Total & %	Gender frequency males & females	
(A). I am doing what parents encourage me to do.				11.3% (90)	34	56
(B). I am doing what my gendered Peers encouraged me to do.				12.0%(96)	58	38
(C). My subject relates to my culture understanding.				6.4%(51)	26	25
(D). My subject choice relates to our religion influence.				13.9%(111)	56	55
(E). My course will lead to a good jobs.				15.6%(125)	53	72
(F). My teachers encouraged me.				11.8%(94)	41	53
(G). My subject choice related to the societal attitudes and experiences.				12.5(100)	54	46
(H). The subject is important for further study at University				11.4%(91)	47	44
(I). The best part of school subjects.				5.3%(42)	42	0
Variable	Gender	Mean	SD	t	df	Sig
RESEASONS FOR CHOOSING THE COURSE	Females	5.10	2.506	7.67	798	P= .002
	Males	4.57	2.245			

TABLE 3.0: SHOWS SUMMARY FIGURES FOR THE T-TEST ANALYSES FOR EQUALITY OF MEANS IN STUDENTS' GENDER PERCEPTION DIFFERENCES TOWARDS THE ASPECTS OF SCIENCES.

Variables	Gender	Mean	SD	t	df	Sig
All one has to do in science is to memories things	Male	1.94	1.27	-4.67	798	P= < .001
	Female	2.41	1.58			
Learning science successfully depends on having a good memory	Male	2.26	1.11	-4.66	798	P= < .001
	Female	2.68	1.4			

TABLE 3.1 SHOWS SUMMARY FIGURES FOR THE T-TEST ANALYSES FOR EQUALITY OF MEANS IN GENDER DIFFERENCES TOWARDS MATHEMATICS.

Variables	Gender	N	Mean	Std. Deviation	Mean Difference	t	df	Sig (2-tailed)
I find Mathematics an easy subject	Females	440	2.15	.852	.168	2.295	798	P= < .001
	Males	360	2.32	1.195				
I find mathematics to be very useful in daily life	Females	440	2.33	1,469	-341	2.295	798	P= < .001
	Males	360	1.99	1.377				
Variables	Schools	N	Mean	Std. Deviation	Mean Difference	t	df	Sig (2-tailed)
Some students can do mathematics, others cannot do mathematics	Rural	440	3.26	1.38	0.99	11.08	798	P= < .001
	Urban	360	2.28	1.09				
I find mathematics to be very useful in daily life	Rural	440	2.11	1.44	-0.12	-1.17	798	P= .243
	Urban	360	2.23	1.43				
Mathematics is not preparing me well for further study	Rural	440	1.83	0.74	-1.92	-29.4	798	P= < .001
	Urban	360	3.75	1.1				

TABLE 4.0 SHOWS SUMMARY FIGURES FOR THE T-TEST ANALYSES FOR EQUALITY OF MEANS IN GENDER PERCEPTION DIFFERENCES TOWARDS TEACHERS.

Variables	Gender	Mean	SD	t	df	Sig
I do not believe in just accepting what the teachers say without questions, success involves thinking of myself	Male	1.67	0.83	-4.9	798	P= < .001
	Female	2.03	1.23			

TABLE 4.1 SHOWS SUMMARY ANALYSES FOR EQUALITY DIFFERENCES OF STUDENTS' PARENTAL LEVEL OF EDUCATION.

Education Levels	None Education		Compulsory		High School		University	
	Father	Mother	Father	Mother	Father	Mother	Father	Mother
Percent	11.8%	34.0%	28.5%	32.3%	18.0%	18.8%	41.8%	15.0%
Total Frequency	94	272	228	258	144	150	334	120
1 st Year	12	30	58	80	32	46	98	44
2 nd Year	26	56	42	62	34	48	98	34
3 rd Year	16	70	58	66	38	38	88	26
4 th Year	40	116	70	50	40	18	50	16

TABLE 5.0 SHOWS SUMMARY FOR THE T-TEST ANALYSES FOR EQUALITY OF MEANS IN GENDER DIFFERENCES OF STUDENTS' PARENTAL LEVEL OF EDUCATION IN RURAL AND URBAN SCHOOLS.

LEVEL OF EDUCATION	SCHOOLS	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig 2-tailed	Mean Difference
FATHERS	Rural Schools	440	2.97	1.058	.050	2.186	798	.029	0.17
	Urban Schools	360	2.81	1.097	.058				
MOTHERS	Rural Schools	440	2.13	1.032	.049	-.533	798	.594	-.040
	Urban Schools	360	2.17	1.077	.057				

TABLE 5.1 SHOWS SUMMARY FIGURES FOR THE T-TEST ANALYSES FOR EQUALITY OF MEANS IN GENDER DIFFERENCES TOWARDS TECHNOLOGY.

Variables	Gender	Mean	Std. Deviation	t	df	Sig (2-tailed)		
Using technology system in learning is essential	Male	2.22	1.55	7.67	798	P= < .001		
	Female	3.09	1.67					
I enjoy new technology like computers in my learning process	Male	1.42	0.89	-2.88	798	P=.004		
	Female	1.63	1.18					
Variables	Schools	N	Mean	Std. Deviation	Mean Difference	t	df	Sig (2-tailed)
Using technology system in learning process is essential	Rural	440	2.11	1.44	0.96	8.49	798	P= < .001
	Urban	360	3.07	1.71				
I find handling technology difficult	Rural	440	4.17	0.74	1.92	29.4	798	P= < .001
	Urban	360	2.25	1.1				

Variables	Schools	N	Mean	Std. Deviation	Mean Difference	t	df	Sig (2-tailed)
It would help me get a good job in the future	Rural	440	2.2	0.93	0.23	3.98	798	P= < .001
	Urban	360	1.97	0.64				
Technology is only needed by those studying subjects like sciences	Rural	440	3.71	1.05	0.34	4.26	798	P= < .001
	Urban	360	3.37	1.21				

I enjoy practical work at school	Rural	440	2.29	1.05	-0.34	-4.26	798	P= < .001
	Urban	360	2.63	1.21				
I like the way my school is organized	Rural	440	1.83	0.74	-1.92	-29.4	798	P= < .001
	Urban	360	3.75	1.1				
My school has proper audio-visual aids for learning English	Rural	440	2.96	1.39	-1.38	-17.43	798	P= < .001
	Urban	360	4.34	0.63				

TABLE 6.0 SHOWS SUMMARY FIGURES FOR THE T-TEST ANALYSES FOR EQUALITY OF MEANS IN GENDER DIFFERENCES TOWARDS EXAMINATIONS.

Variables	Gender	Mean	SD	t	df	Sig		
Finding the ways to pass the examinations	Male	2.13	1.27	2.98	798	P= .003		
	Female	1.88	1.16					
My school results are getting worse	Male	3.93	1.33	-6.04	798	P= < .001		
	Female	4.45	1.07					
I think that examinations system affects the development of my skills	Male	2.31	1.21	-3.2	798	P= .001		
	Female	2.6	1.28					
The quality of tests and exams is vital to encourage students do better at school	Rural	440	2.13	0.94	-0.22	-2.98	798	P = < .003
	Urban	360	2.35	1.13				
In school tests and exams there is too much emphasis on memory skills	Rural	440	2.52	1.16	0.26	3.26	798	P = .001
	Urban	360	2.26	1.06				

TABLE 7.0 SHOWS SUMMARY FINDINGS FOR TEACHERS' AND STUDENTS' PERCEPTIONS OF THE EFFECTIVE AMENDMENTS TOWARDS THE PRESENT SECONDARY SCHOOL FORMAL ACADEMIC CURRICULUM.

<p>Materials</p> <p>Text Books</p>	<p>“Syllabus breakdown should have more space for reading”. (124)</p> <p>“Textbooks need to be revised”. (135)</p> <p>“Textbook must be loaded with activities so that the knowledge imparted is not only theoretical but practical as well”. (199)</p> <p>“The textbook may flexibly be exploited for the communicative competence of the learners”. (40)</p> <p>“Textbooks must contain activities which will improve not only writing skills but speaking as well”. (89)</p> <p>“The textbooks should focus on improving and developing of the language skills”.(97)</p>
<p>Methodology</p>	<p>“Presentation for confidence and speaking skills”. (62)</p> <p>“Communicative approaches should be used for better understanding”.(145)</p> <p>“Audio-visual aids must be used, they motivate students”. (187)</p> <p>“Teaching through Translation method (GTM)only is not correct”. (150)</p> <p>“GTM is mostly used in rural schools...modern technology and AV Aids are used only in advanced urban schools at provincial capitals”. (50)</p> <p>“Most of the time we are using the textbook only that is why we have to stick to the grammar translation method”.(97)</p> <p>“A teacher may want to do some experiments but we have to finish the course in the given time”. (80)</p> <p>“It is not only the textbook determining the directions of the teaching of English”.(76)</p> <p>“The conversational part is <i>very</i> minimum. This area is mostly neglected particularly in the rural schools in Libya”.(92)</p> <p>“The administration will not let teachers use any other teaching method”. (153)</p> <p>“Things are changing in private schools but it will take a lot of time in state schools”.(86)</p>
<p>Examination</p>	<p>“Evaluation system should be reconsidered as it is based on cramming and rote learning”.(43)</p> <p>“Computer based evaluation and learning so that students know their shortcoming and learn with their own pace”.(180)</p> <p>“Not only writing skill but the rest of three skills should also be evaluated”.(165)</p> <p>“Both objective and subjective types of questions should be included”. (30)</p> <p>“Students’ talking time should be maximised”. (67)</p>

<p>Students’ Participation</p>	<p>“Teachers should always encourage the students to converse in English”.(123)</p> <p>“A lighter, frank and encouraging environment can only provoke the motivated participation of the students”.(153)</p> <p>“We are not producing good listeners, good speakers” in the English language”.(92)</p> <p>“No great effort was made by teachers to develop and teach all the skills. All over the world speaking is followed by listening and writing by reading “but in Libya the whole situation is upside down”.(57)</p> <p>“To study biochemistry, and then into the private sector. Might have a husband and children”.(46)</p> <p>“ to study English. she was not sure what he might do after that, perhaps travel, writing, teaching, does want to get married and have children”.(59)</p> <p>“To study media studies, journalism, and then go to newspaper industry, journalism. She eventually wants to get married and have several children”.(78)</p>
<p>Classroom activities</p>	<p>“Students should be provided with all the audio-visual aids”.(142)</p> <p>“ the class sizes must be reduced to allow for more class activities”.(87)</p> <p>“Listening and speaking skills can only be evaluated if teachers are given facilities”.(42)</p> <p>“Students have the only model to listen to and that is teacher”. (28)</p>
<p>Teachers’ Training</p>	<p>“Teachers’ training would help teachers equip themselves with new skills”. (11)</p> <p>“Teachers should be trained to motivate the students”.(9)</p> <p>“Teachers should be provided opportunities on regular basis to participate in teaching training courses and workshops”. (6)</p> <p>“Each ELT teacher should be equipped with modern research carried out in the field of linguistics”. (5)</p> <p>“It is totally an utopian idea to demand from teachers the desired levels without giving them sufficient training and resources”.(63)</p> <p>“The future of the English will not improve unless drastic steps are taken (i.e concerned government employ some qualified teachers in primary schools on contract bases”.(82)</p>

(Numbers+ in brackets refer to the number of times the statements were repeated or supported).

TABLE: 7.1 SHOWS SUMMARY FINDINGS FOR TEACHERS' AND STUDENTS' PERCEPTIONS OF GENDER, RELIGION AND CULTURE INFLUENCES

<u>Domains</u>	<u>Core Ideas</u>
<p>The Impact of Religion On the Students' perceptions towards subject Choices and Directions</p>	<p>“Religion is need. It’s necessary for everything in this life, as humans need guidance”</p> <p>“The purpose of a person’s life is to worship God”.</p> <p>“The way I have always seen my religion is that it is guidance, it is just a route that makes it easier for you to live and follow”</p> <p>“It makes our live easy, it controls everything in details in our lives”</p> <p>“To me the crucial guidance is to the kinds of choices that you need to makes to be the best you can whether it’s with your life, your family or your job”</p> <p>“My religion is my first identity of my life. It plays an important role in all aspects of my life”</p> <p>“We are born Muslims and I live in a community society where all of them are Muslims, so it plays a critical role in all of our life aspects, at home, school or work”</p> <p>“It helps you to understand and learn things, how to be like for example, one of the best persons in this life”</p> <p>“You decision relates to your religion as a Muslim man, to raise your family with the right values”</p> <p>“It’s reality and guidance for our future because of the structure that is a part of religion”</p> <p>“The interesting thing attracted me to religion is the first word ‘Iqra’ (read) so the better you learn, the better you present your identity and yourself”</p> <p>“Even in education, we must think about religion to behave well and think for our future”</p> <p>I think that it is a duty and real guidance of every Muslim in this culture”</p>
<p>The Impact of Gender / Sex On Students' perceptions towards subject Choices and Directions</p>	<p>“Men and women are equal and should have equal access to education”</p> <p>“I belief that women are equal to men in regards to thinking and producing ideas and skills”</p> <p>“Women are as men in regard to their brain they are more intelligent than men”</p> <p>“Islam acknowledges gender differences, men and women are different but equal”</p> <p>“Women are so emotional and there are different biologically, women are physically weaker than men”</p> <p>“In our society women are different logically and biologically compared to men”</p> <p>“I belief that males and females have many obvious differences”</p> <p>“Allah said the male is not like the female. For this reason we must take this statement</p>

	<p>and put it in bold line and it in our mind”</p> <p>“Women should not be discriminated in our society based on their gender differences”</p> <p>“Differences between genders should not result in valuing one more than the other”</p> <p>“The men’s roles are more curial than women’s roles in our society today but women are important too for the family”</p> <p>Islam says that mothers are created to take care of children more than men do so”</p> <p>“Women can’t work in physical demanding jobs, there are some occupations that are unsuitable for women roles and gender division of labour is a global norm that occurs because of differences in abilities”</p> <p>“Islam does not limit the roles of women, prohibits oppression of women, and prioritises respect for women”</p> <p>“I think if you search in the source and the Qur’an, I don’t think that there specify that women can’t do certain jobs or things”</p> <p>“Muslim women are stereotyped and women face domination”</p> <p>“I think the most challenge for women is the economic imbalance in developing world where people have to struggle through to provide the most basic for their family”</p>
<p>The Impact of Culture On the Students’ perceptions towards subject Choices and Directions</p>	<p>“Culture and family as a source of gender role beliefs”</p> <p>“I think culture plays a crucial role in our directions”</p> <p>“Culture and your understanding of the roles and relationships with men and women are going to certainly more based on their culture and their experiences”</p> <p>“Culture is part of Islam and Islam is a part of culture, so they are complimentary”</p> <p>“The oppression of women should be attributed to culture, not to Islam”</p> <p>“I will say it is not because of Islam, it is because of society culture. The society culture has some components that are not relates to Islam”</p>

Domains	Categories	Core Ideas	Frequency
Religion / Culture	Similarities between culture and Islam; Islam's role in life guidance; Coping; Structure; Knowledge; Life Purpose;	<p>The influences my culture has had on me align with Islam.</p> <p>I use Islam for moral guidance.</p> <p>Religion is need. It's necessary for everything in this life, as humans need guidance.</p> <p>The way I have always seen my religion is that it is guidance, it is just a route that makes it easier for you to live and follow.</p> <p>Islam plays a role in all aspects of my life.</p> <p>I use Islam as a source of guidance for being kind to others.</p> <p>To me the crucial guidance is to the kinds of choices that you need to makes to be the best you can whether it's with your life, your family or your job.</p> <p>I think that it is a duty and real guidance of every Muslim in this culture.</p> <p>Faith helps you to overcome life's obstacles and tests.</p> <p>I enjoy the structure of Islam because it helps one to have.</p> <p>It's reality and guidance for our future because of the structure that is a part of religion</p> <p>Life-long learning is an important part of Islam.</p> <p>Islam give me a sense of purpose in life.</p>	Variant
	Difference between culture and Islam; Oppression of women;	<p>The poor treatment of women in Muslim countries is due to culture not religion.</p> <p>The oppression of women should be attributed to culture, not to Islam.</p> <p>I will say it is not because of Islam, it is because of society culture. The society culture has some components that are not relates to Islam.</p> <p>Islam does not limit the roles of women, prohibits oppression of women, and prioritises respect for women.</p>	Typical
	Marital practices; Obedience; Respect; Protection;	<p>Marriage practices in Libya are materialistic, had on women.</p> <p>I follow dietary laws set by Islam.</p> <p>Islam increased my sense of obligation to family.</p> <p>The Quran teaches us to respect our mothers and wives.</p> <p>Islam promotes the protection of women</p>	<p>Variant</p> <p>Typical</p> <p>Variant</p>

	Islam in Muslim countries; Social issues facing women;	<p>People in my country are more likely to practicing Muslims compared to Muslims in developed countries.</p> <p>The purpose of a person's life is to worship God.</p> <p>Stereotypes, oppression, sexism exists in all societies and is a major problem.</p> <p>Muslim women are stereotyped and women face domination.</p> <p>I think the most challenge for women is the economic imbalance in developing world where people have to struggle through to provide the most basic for their family.</p>	Variant
Gender/ Culture/ Religion	Source of gender roles beliefs; culture / family;	<p>My gender role beliefs depend on the culture I live in.</p> <p>Culture and family as a source of gender role beliefs.</p> <p>My father has influenced my beliefs about the role of men and treatment of women.</p> <p>You decision relates to your religion as a Muslim man, to raise your family with the right values.</p> <p>Women should not be discriminated in our society based on their gender differences.</p> <p>Differences between genders should not result in valuing one more than the other.</p> <p>Islam is the source of my beliefs and I can find support for my beliefs in Islam.</p> <p>My religion is my first identity of my life. It plays an important role in all aspects of my life</p> <p>My beliefs about gender role are guided completely by Islam.</p> <p>Having a belief system that fosters faith is important.</p>	<p>Typical</p> <p>Variant</p>
Culture/ Gender/ Religion	Cultural heritage;	<p>My culture is my country of origin.</p> <p>I think culture plays a crucial role in our directions.</p> <p>We are born Muslims and I live in a community society where all of them are Muslims, so it plays a critical role in all of our life aspects, at home, school or work.</p> <p>Culture and your understanding of the roles and relationships with men and women are going to certainly more based on their culture and their experiences.</p> <p>I belief that males and females have many obvious differences in our culture.</p> <p>The men's roles are more curial than women's roles in our society today but women are important too for the family.</p> <p>Islam says that mothers are created to take care of children more than men do so.</p>	Typical

	Intersection of culture and Islam; Historical relationship;	My culture and religion have a long history of impacting one another	Typical
	Influence of culture differentiating;	The practice of Islam can differ based on culture. My culture and Islam are intertwined and I cannot differentiate between the two.	Typical
	Historical Muslim men and women; Physical differences; Appropriateness of women's jobs;	Historically Muslim men had active social, economic and political roles and women had passive ones. Islam does not limit women roles to the homes. Women can have jobs that do not violate Islamic orders. Women are physically weaker than men. Physically demanding jobs are unhealthy for women. Differences in gender roles does not mean men and women are unequal. The Quran teaches us not to oppress women.	Variant Variant
Gender/ Culture/ Religion	Division of labour; Islam's acknowledgement; Emotional; Occupational roles; Biological differences but equal; Women's income; Work and family;	Hiring people based on abilities and gender roles show discrimination of women more than men. Women are as men in regard to their brain they are more intelligent than men. Differences between men and women are fact. Allah said the male is not like the female. For this reason we must take this statement and put it in bold line and it in our mind. Allah states that men and women are different. Men cannot bear children. It can be difficult for women to balance work and family roles. Women are so emotional and there are different biologically, women are physically weaker than men. Women can't work in physical demanding jobs, there are some occupations that are unsuitable for women roles and gender division of labour is a global norm that occurs because of differences in abilities. In our society women are different logically and biologically compared to men. Islam does not prohibit social interactions between men and women. Gender segregation prevents people from getting to know one another as complete individuals. Women do not have to contribute their money to the family.	Typical Typical Variant

	<p>Complementary roles; Personality mothers and fathers in Islam;</p>	<p>Men and women complement one another. Islam has allowed me to find peace in my heart. It helps you to understand and learn things, how to be like for example, one of the best persons in this life. It makes our live easy, it controls everything in details in our lives Development of personality traits depends on the environment, most Muslim families I know have dominant culture norms. Culture is part of Islam and Islam is a part of culture, so they are complimentary</p>	<p>Variant</p>
	<p>The impact of environment; Social Justice; Equality, Education; Aspirations;</p>	<p>The environment I live in affects me and has a major impact on my future live too. Muslims are responsible for challenging injustice. Men and women are equal. Men and women should have equal opportunities for education. I think if you search in the source and the Qur'an, I don't think that there specify that women can't do certain jobs or things. Men and women are equal and should have equal access to education. Even in education, we must think about religion to behave well and think for our future. The interesting thing attracted me to religion is the first word 'Iqra' (read) so the better you learn, the better you present your identity and yourself. Men and women are equal brainy. I belief that women are equal to men in regards to thinking and producing ideas and skills. Men and women have similar hopes and dreams.</p>	<p>Typical</p>

APPENDIX B

THE SUMMARY OF THE FIGURES

FIGURE 0.2 SHOWS HOW THE ORDER OF THE RESEARCH DATA BEEN TACKLED IN THE CURRENT RESEARCH STUDY USING SPSS

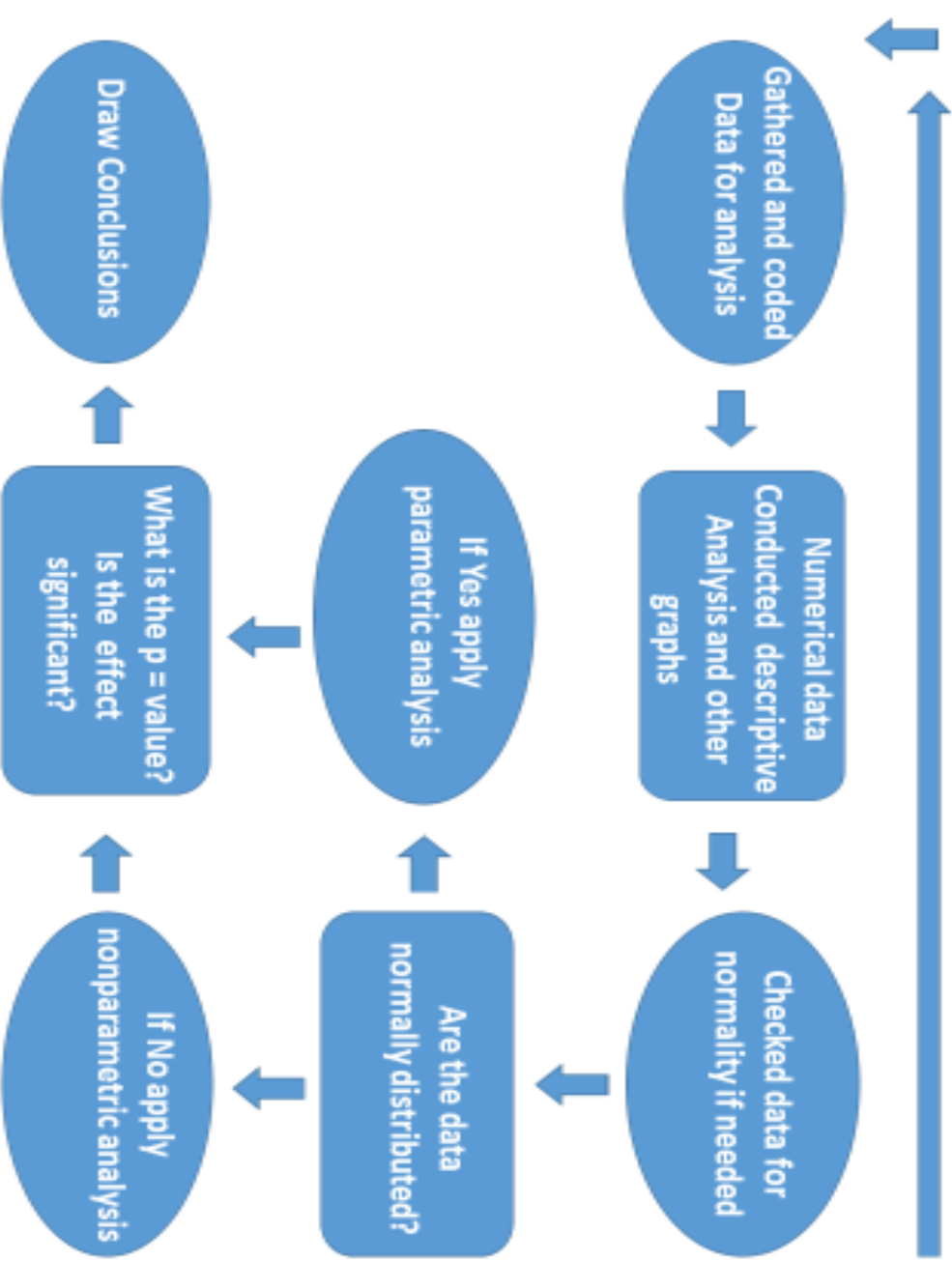


Figure 0.3. an example extract from current data analysis for further demonstration

TABLE 5.1 SHOWS SUMMARY FIGURES FOR THE T-TEST ANALYSES FOR EQUALITY OF MEANS IN GENDER DIFFERENCES TOWARDS TECHNOLOGY (e.g. using computers).

The total number of people in groups (N) SPSS calculates the means for each group in sample. If you like, check them against the values you got.

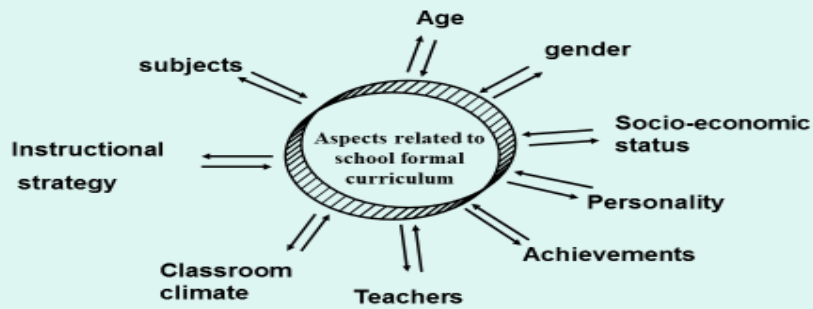
WHAT IS YOUR GENDER?	N	Mean	Std. Deviation	Std. Error Mean
I enjoy using new technology like computers in my learning process. Male	389	1.42	.806	.045
Female	411	1.63	1.101	.058

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
I enjoy using new technology like computers in my learning process.	Equal variances assumed	26.941	.000	-2.881	798	.004	-.214	.074	-.359	-.068
	Equal variances not assumed			-2.904	799.138	.004	-.214	.074	-.358	-.069

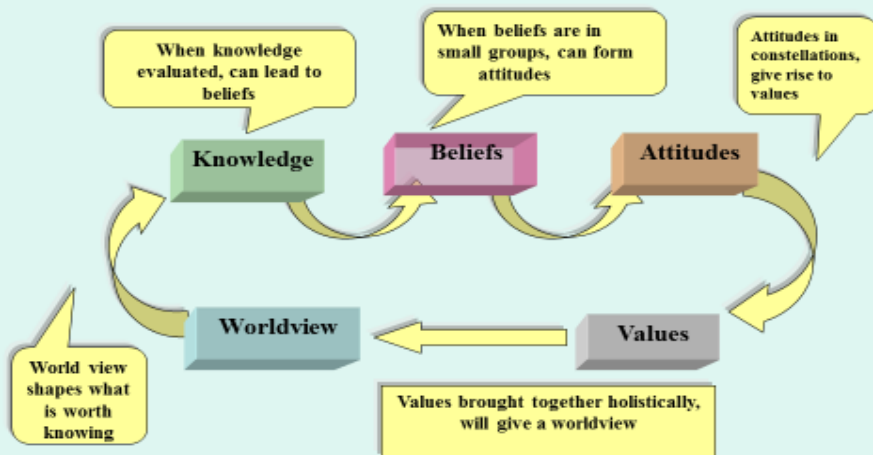
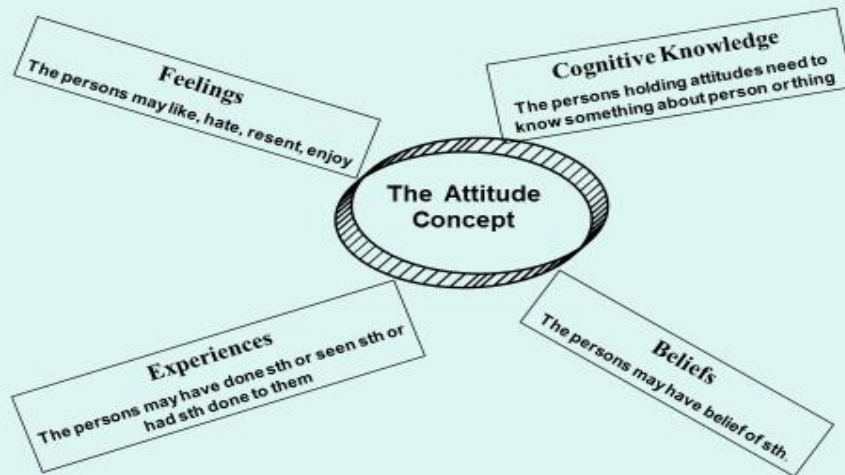
The significant figure here lets us know which of two rows of figures to look at. SPSS has tested the variance of two groups and given us two sets of figures, the one we use will depend on whether the variance is the same for each group. If the figure here is less than 0.05 use the low set of figures. In this case the lower ones (since there is a significant difference in variances).

The figure we are after is under Sig.(2-tailed). If the figure (the p-value) is less than 0.05 we can reject the null hypothesis (The null hypothesis says there is no difference). In our example we can reject the null hypothesis (0.004 is less than 0.05), so we can accept the alternative hypothesis that says there is a significant difference between gender groups. The descriptive statistics will enable us to say in which direction the difference lies, then we will be able to interpret the results of this.

Figure 0.4. The Questionnaire design: on the students' attitudes and experiences towards aspects related to school formal curriculum



THE ATTITUDE CONCEPT



An Analysis of Words Related to Attitude Source: Derived from (Oraif 2007, p.41)

FIGURE 1.0: ILLUSTRATES THE STAGE STRUCTURE OF EDUCATIONAL SYSTEM IN LIBYA.

Stage	Year Group	Age	Period
Primary	1-6	6ys - 12ys	6 years
Middle	7-9	12ys - 15ys	3 years
Secondary	10-13	15ys - 19ys	4 years

FIGURE 1.1. ILLUSTRATES THE OVERALL STRUCTURE OF EDUCATION SYSTEM IN LIBYA

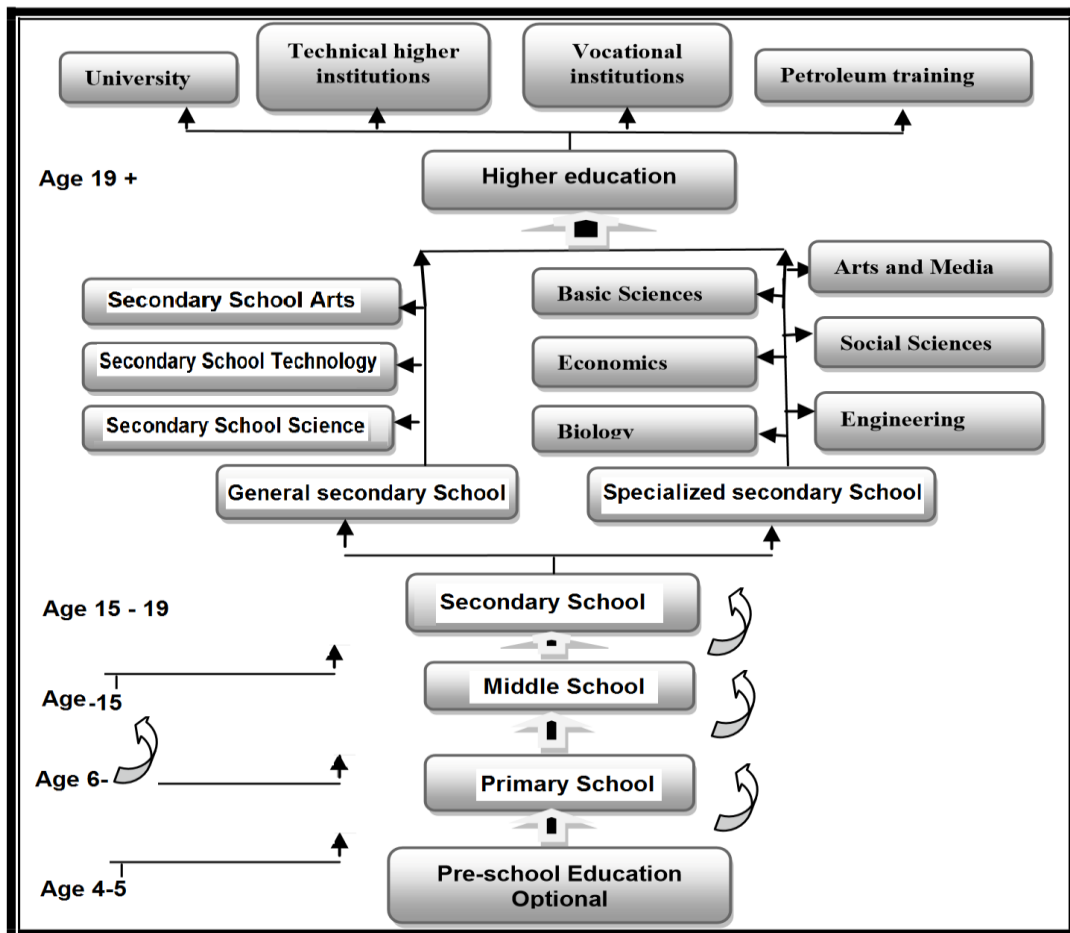


FIGURE 1.2: ILLUSTRATES THE CURRICULA, IN TERMS OF SUBJECTS TO BE STUDIED IN THE COMPULSORY EDUCATION STAGE IN LIBYA.

Schools	Primary	Primary	Middle	Secondary
Grades	1st-3th	4th-6th	7th-9th	10th-13th
	Arabic	Arabic	Arabic	Arabic
	Mathematics	Mathematics	Mathematics	Computing
	Religion	Religion	Religion	Religion
	Physical Ed.	Physical Ed.	Physical Ed.	Physical Ed.
	Painting	Painting	Painting	English
		Culture	Culture	Culture
		Science	Biology	
		History	Chemistry	
		Geography	Physics	Plus choice by
			History	Subject
			Geography	Direction
			English	

FIGURE 1.5: SHOWS THE PARTICIPANTS' DIRECTIONS OF THEIR STUDY CHOICES CATEGORISED.

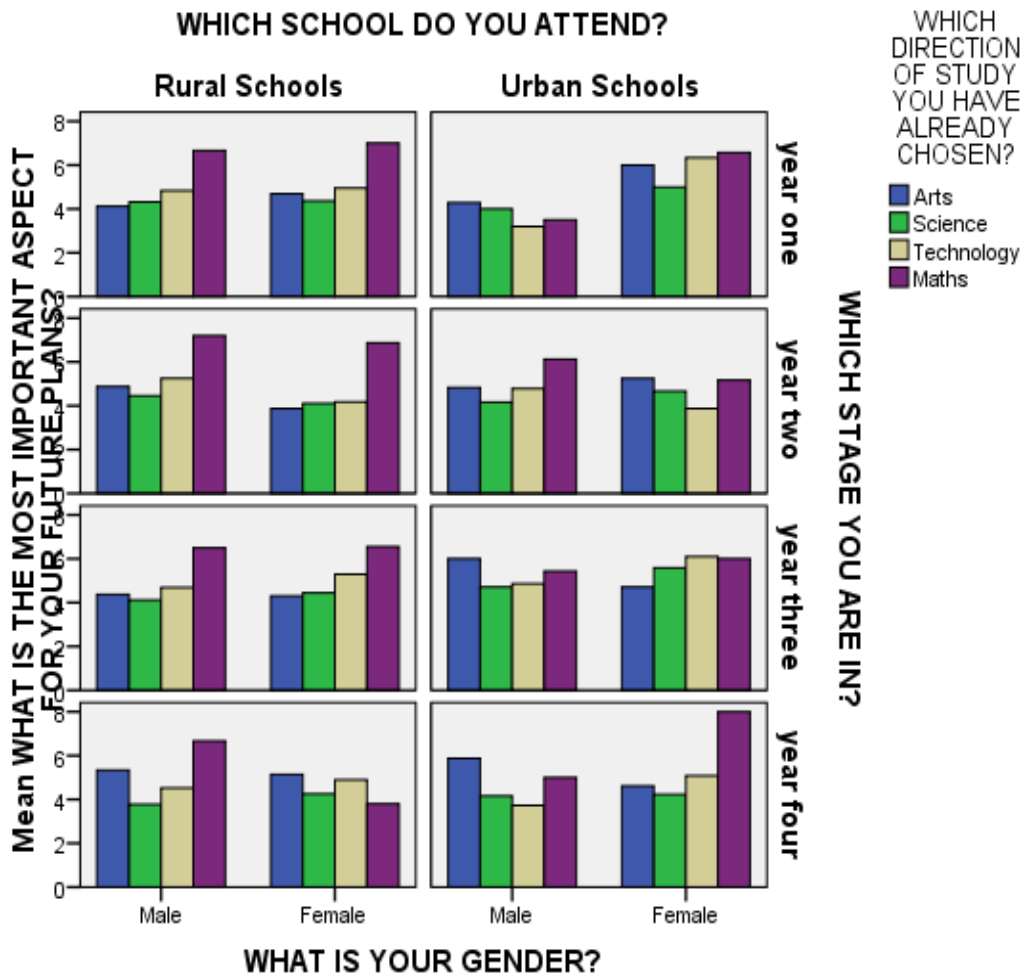


FIGURE 2.0: ILLUSTRATES GENDER GAP DIFFERENCES IN PARTICIPANTS' REASONS FOR THEIR STUDY COURSE DIRECTIONS.

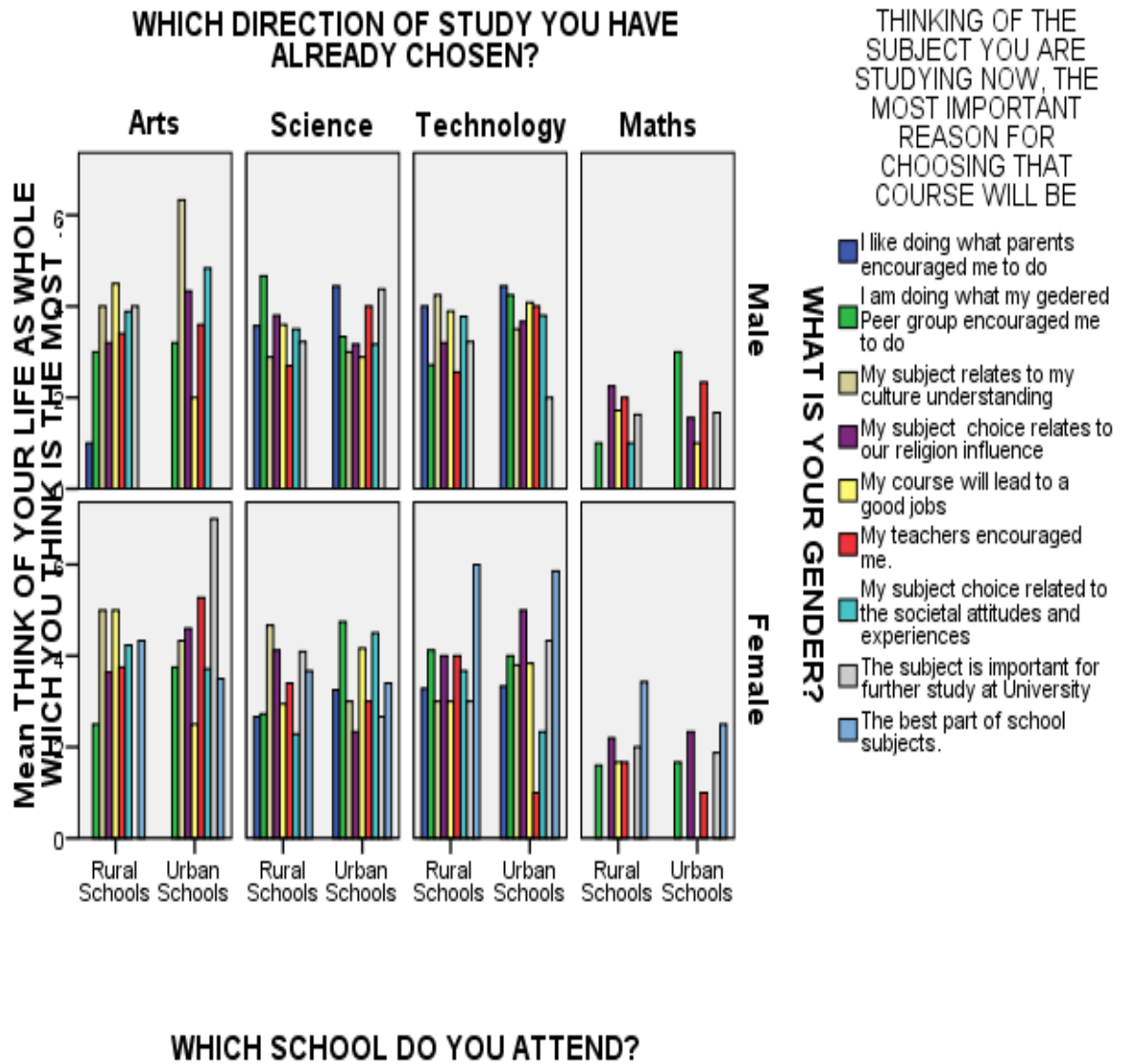


FIGURE: 2.1 ILLUSTRATES REASONS FOR CHOOSING THE STUDY COURSE DIRECTIONS CATEGORISED

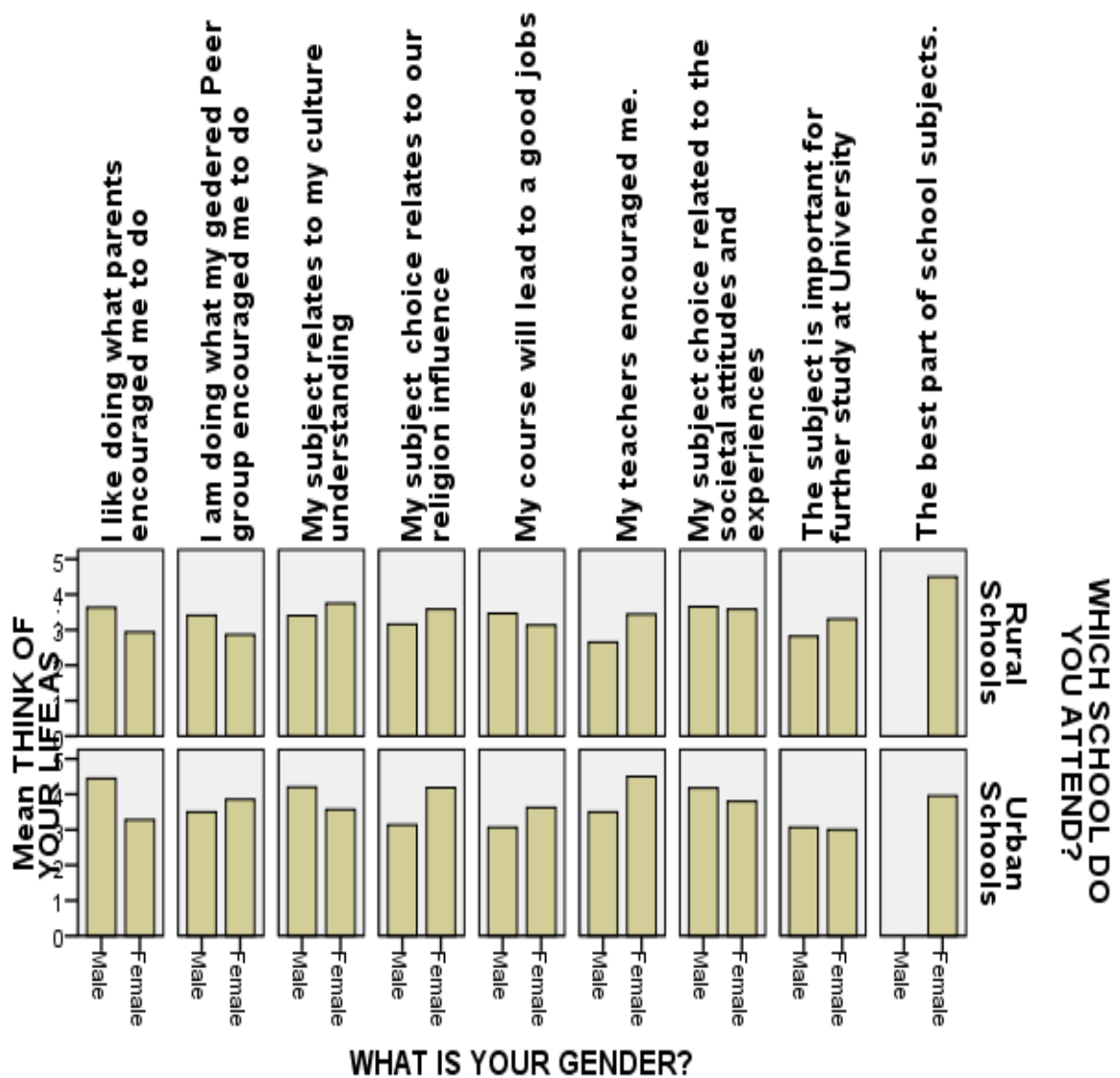


FIGURE 3.0: ILLUSTRATES GENDER GAP DIFFERENCES IN PARTICIPANTS' INTERESTS FOR THE STUDY SUBJECT DIRECTINS IN RURAL AND URBAN SCHOOLS.

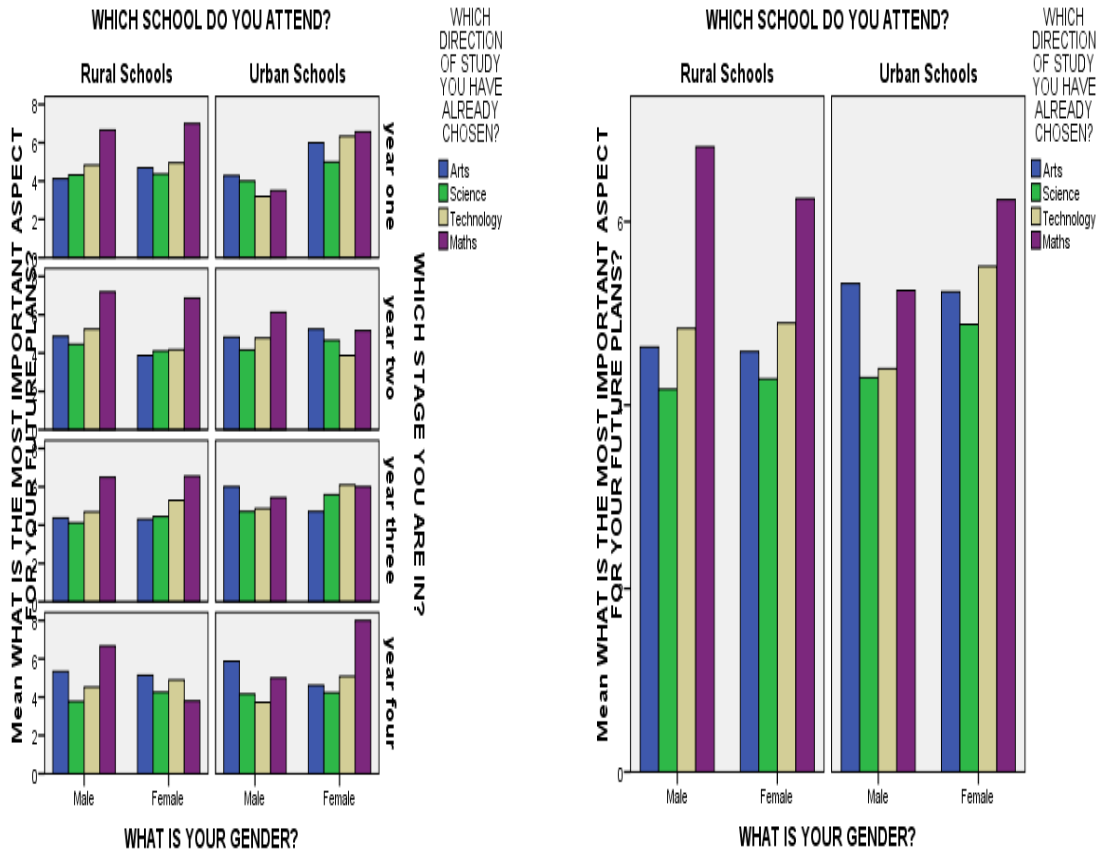


FIGURE 3.1: ILLUSTRATES GENDER GAP DIFFERENCES IN STUDENTS' PERCEPTIONS TOWARDS MATHEMATICS.

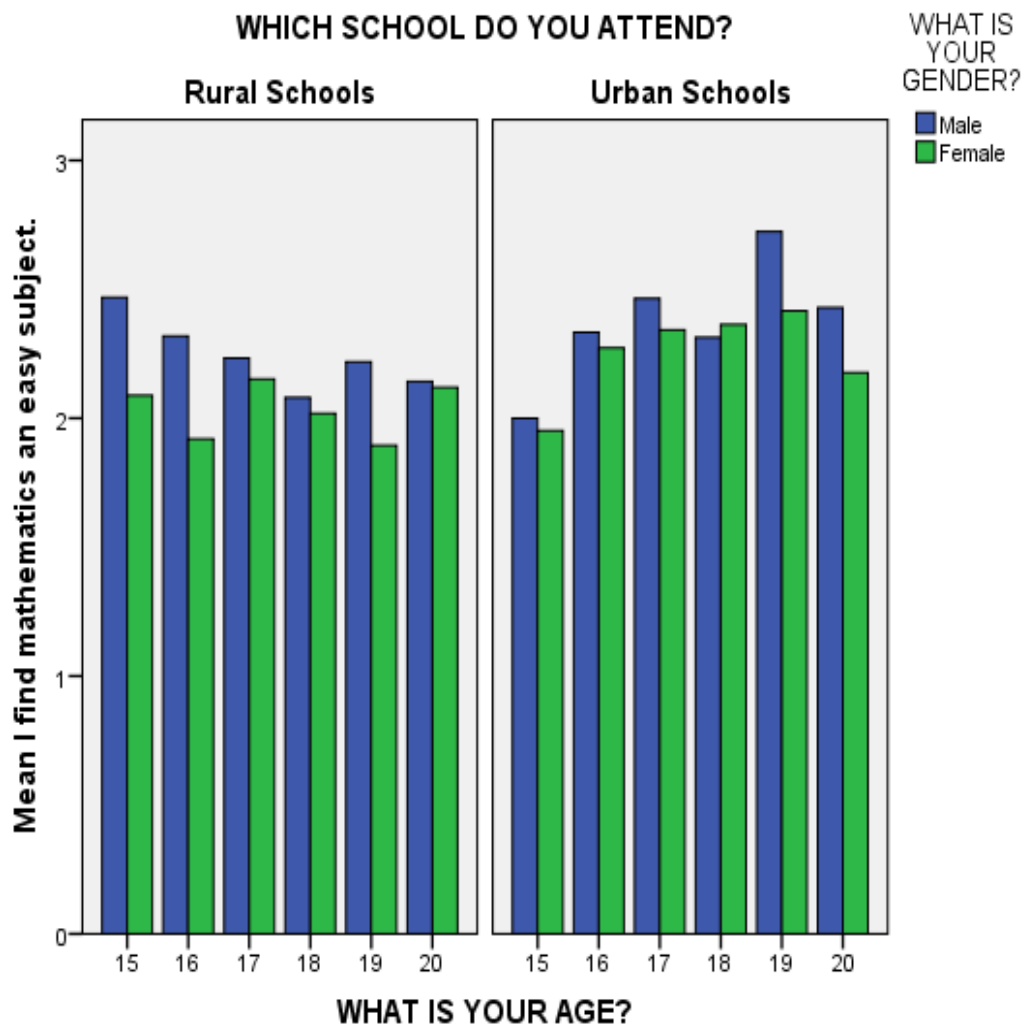


FIGURE 4.0: ILLUSTRATES GENDER GAP DIFFERENCES IN STUDENTS' BELIEF PERCEPTIONS TOWARDS THEIR TEACHERS.

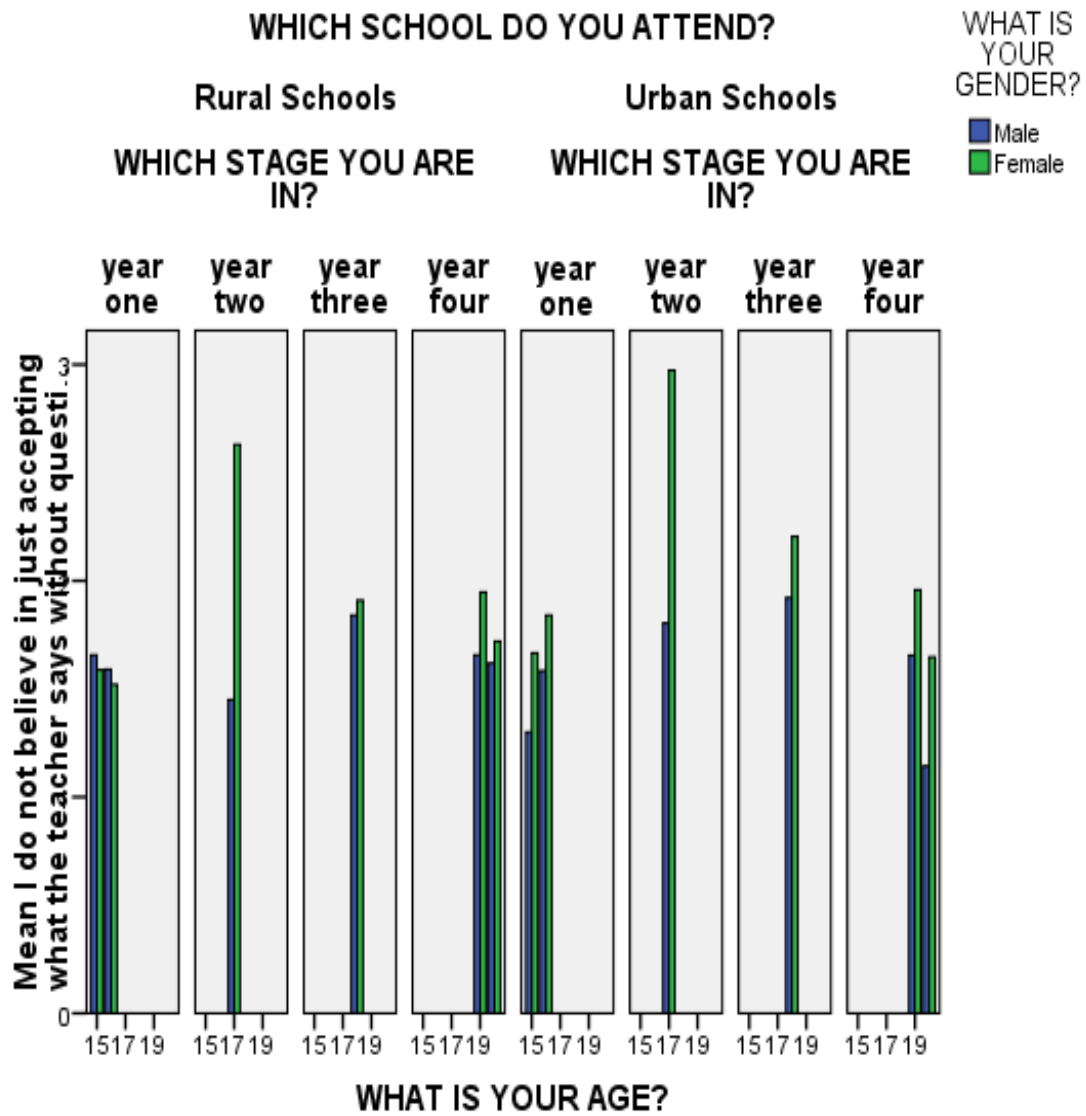


FIGURE 4.1: ILLUSTRATES GENDER GAP DIFFERENCES IN STUDENTS PARENTAL EDUCATION CATEGORISED IN RURAL AND URBAN SCHOOLS.

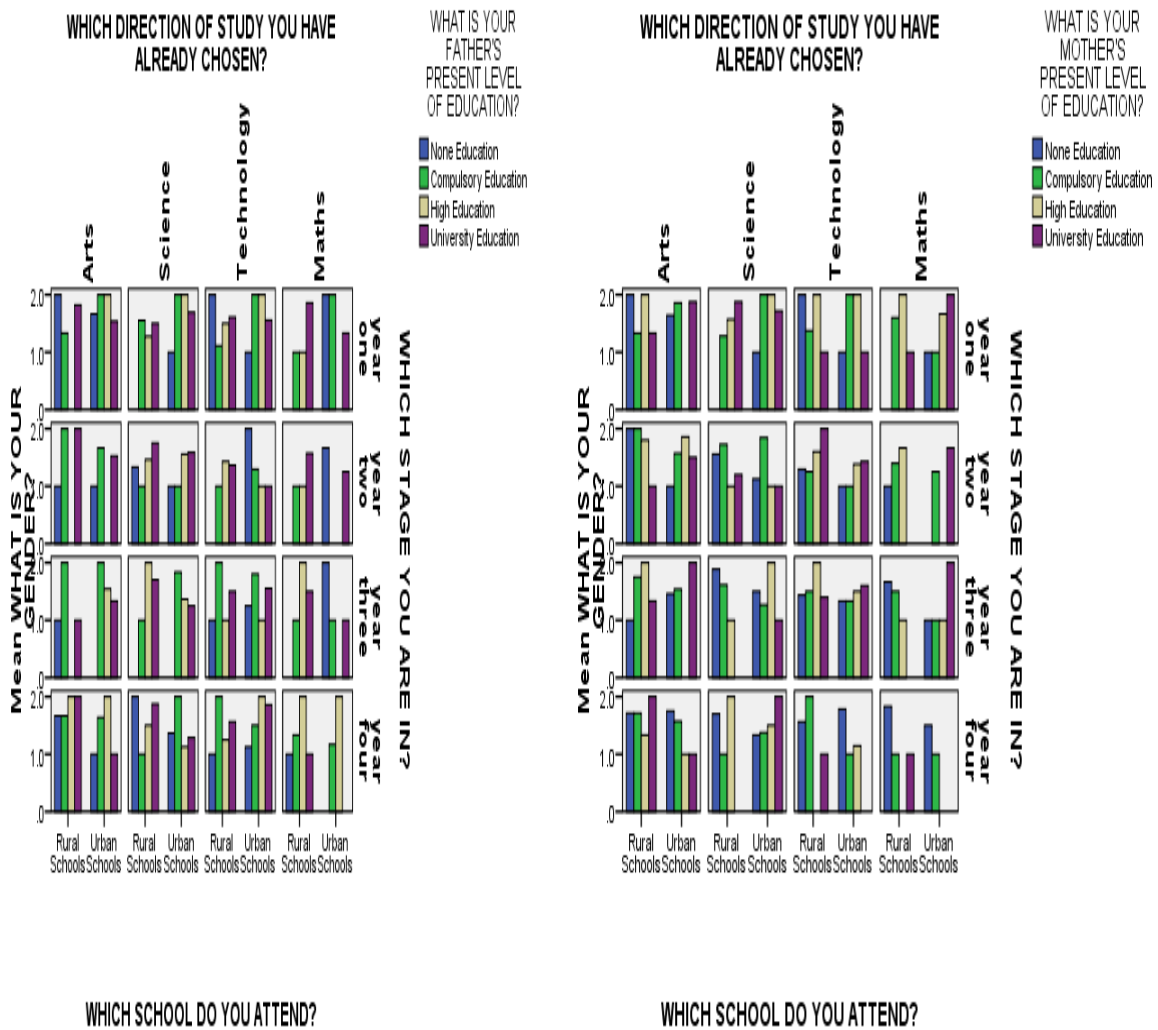


FIGURE 5.0 ILLUSTRATES GENDER GAP DIFFERENCES IN STUDENTS' ENTRY MEANS OF SUBJECT DIRECTIONS AT SECONDARY SCHOOL LEVEL.

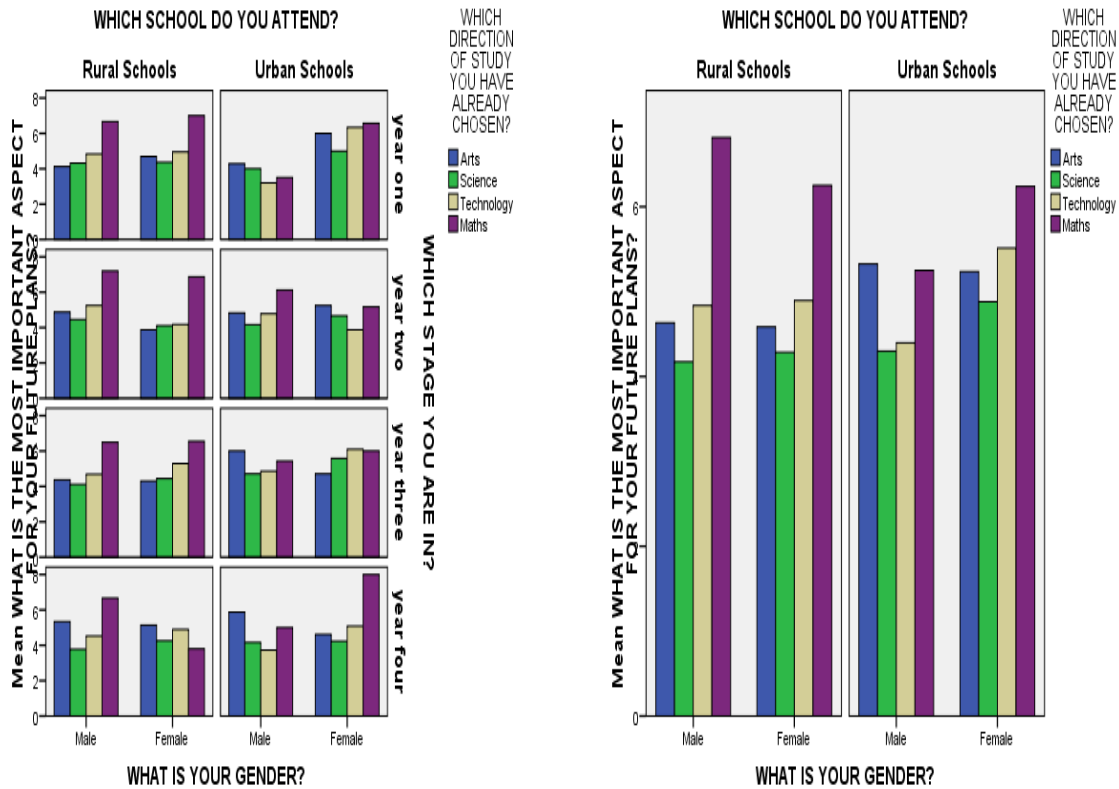
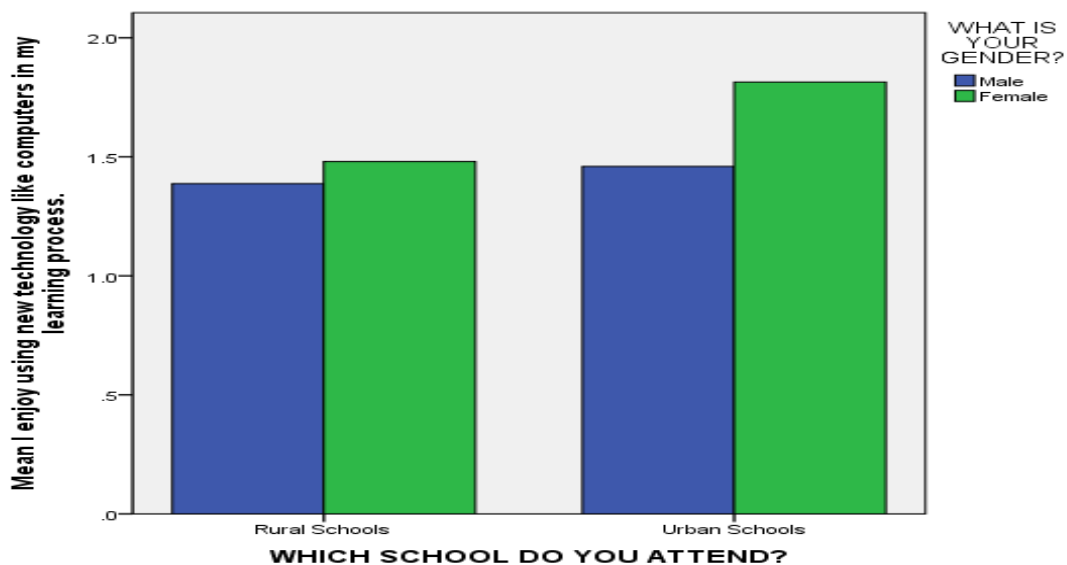


FIGURE 5.1 ILLUSTRATES GENDER DIFFERENCES IN STUDENTS' PERCEPTIONS OF USING THE TECHNOLOGY FOR THEIR STUDY

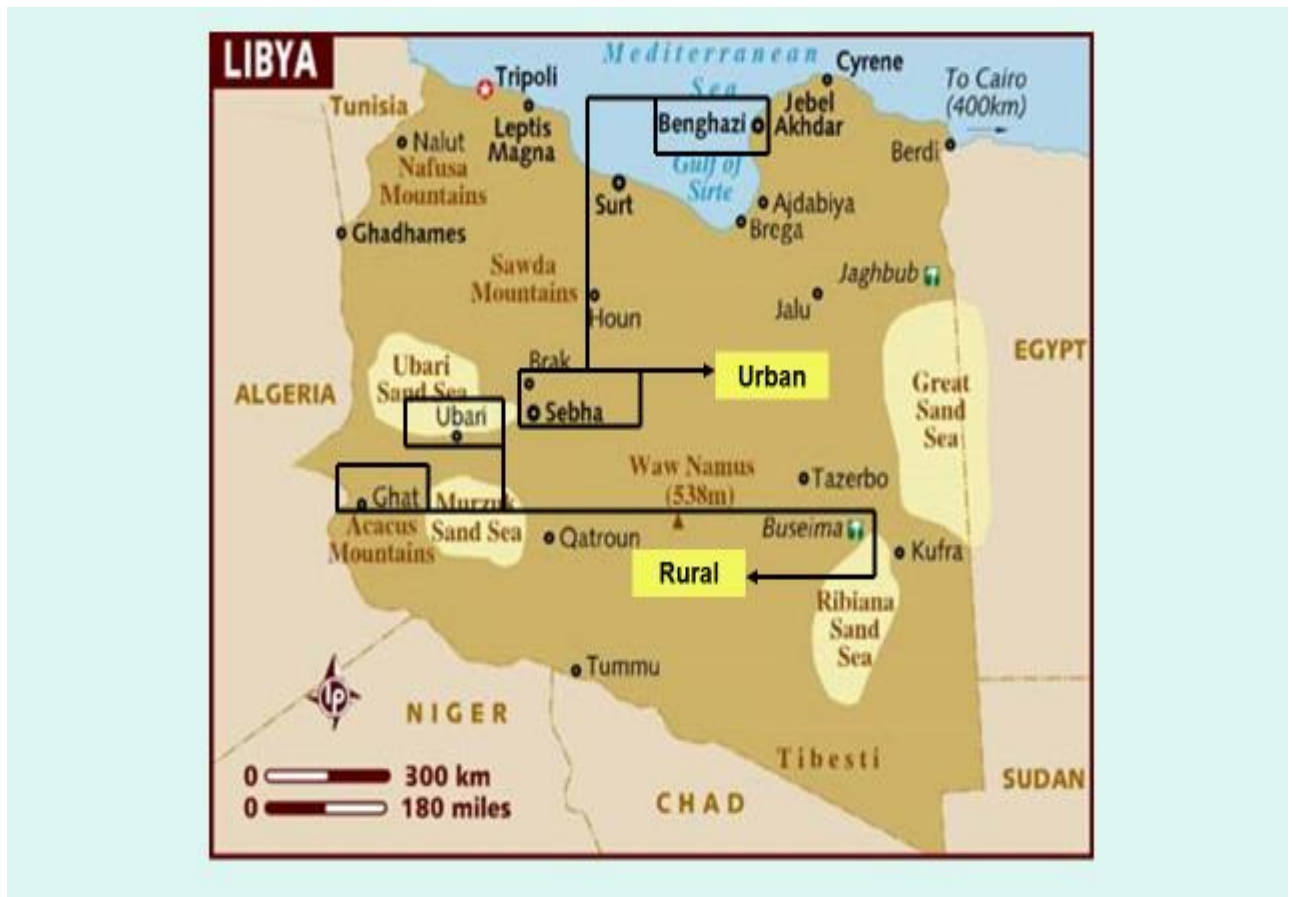


APPENDIX C

LOCATION FOR THE DATA COLLECTION IN LIBYAN SCHOOLS

FIGURE 6.0 SHOWS THE MAP WHICH ILLUSTRATES THE CHARACTERISTICS OF SCHOOLS AND THEIR LOCATIONS FOR THE CURRENT DATA COLLECTION AT SECONDARY SCHOOL LEVEL IN LIBYA

Government schools are included in this study. Schools are considered as urban if they are in the main city or major towards the Shabiya (large area). Schools are considered rural if they are outlying districts or small towns (Mantaqa) or Villages (Qarya). Selected schools cover coastal (sahal) areas, agricultural and pastoral farming areas, and desert (Sahara) areas.



APPENDIX D

QUESTIONNAIRES AND INTERVIEWS USED IN THE STUDY WITH LIBYAN STUDENTS

FIGURE 7.0 ILLUSTRATES THE FORM OF QUESTIONNAIRE OUTLINES IN ENGLISH VERSION

To Whom It May Concern:

Dear ALL.

My name is Najmi Khalil. I am a full-time postgraduate student in the Graduate School Arts, Humanities and Education, Nottingham Trent University, UK. I am going to distribute a questionnaire which will ask you about your experiences and your attitudes towards the formal academic curriculum (subjects, teaching methods, text books, examination system) at secondary school level.

The questionnaire will be distributed to male and female students in number of urban and rural schools to explore the differences and similarities in their gendered experiences and attitudes towards formal academic curriculum in different educational environments

Your participation is totally voluntary and anonymous and those who do not want to take part are free to do so. Please do not write your name or the name of your institution anywhere on the questionnaire. Please let me know if any volunteer students would like to be involved in short interview to discuss some of the issues raised by my questionnaire in a little more detail. Please e-mail me: najmikhilil@yahoo.com.

Information you provide will be anonymous and kept secretly in a locked cabinet. All students are free to withdraw from the research at any time up to the point where I will write up my findings. All of the information collected from the questionnaires will be destroyed at the end of this project.

Thank you in anticipation.

*Yours faithfully,
Najmi Khalil Bobker*

University of Nottingham Trent
The Graduate School Arts, Humanities and Education United Kingdom

Questionnaire

This questionnaire is designed to find out your views about your learning experiences. Your answers will not affect your school marks. Please express your honest feelings as this will help us better understand your learning. Most questions can be answered by ticking a box.

(1) Your age:	Stage	Your gender:	<input type="checkbox"/> male	<input type="checkbox"/> female
(2) Which school do you attend?		<input type="checkbox"/> urban school <input type="checkbox"/> rural school		
(3) How many brothers and sisters do you have?		Brothers.....	Sisters.....	
(4) How many students usually are in your class?		<input type="checkbox"/> Less than 20	<input type="checkbox"/> - 20	<input type="checkbox"/> -30 <input type="checkbox"/> -40
		<input type="checkbox"/> -50		
(5) What is your parents' present level of education?		None	compulsory	high university
		Father	<input type="checkbox"/>	<input type="checkbox"/>
		Mother	<input type="checkbox"/>	<input type="checkbox"/>
(6) Directions of study you have already chosen or are considering:				
<input type="checkbox"/> Arts-based <input type="checkbox"/> Science-based <input type="checkbox"/> Technology-based <input type="checkbox"/> Mathematics-based				

(7) Thinking of the subject you are studying now, the most important reason for choosing that course will be. Tick only ONE.	Tick ONE BOX
(A). I like doing what parents encouraged me to do.	
(B). I am doing what my gendered Peers encouraged me to do.	
(C). My subject related to my culture understanding	
(D). My subject choice relates to our religion influence.	
(E). My course will lead to a good jobs.	
(F). My teachers encouraged me.	
(G). My subject choice relates to the societal attitudes and experiences.	
(H). The subject is important for further study at University	
(I). The best part of school subjects.	

(8) Think of your life as whole which you think is the most important aspect for you. Tick only ONE.	Tick ONE BOX
(A). My creative ability	
(B). My willingness to take risks	
(C). My academic achievement	
(D). My sociality	
(E). My attractiveness	
(F). My sport skill	
(G). My popularity	

(9)What is the most important aspect for your future plans? Tick only ONE.	Tick ONE BOX
(A). Having a family	
(B). Travelling abroad	
(C). Training to be a teacher	
(D). Working as an engineer	
(E). Working in art, music or drama	
(F). Training to be a doctor, nurse, or health worker	
(G). Leaving school as soon as possible to take a job	
(H). Going to university and having good qualifications.	

Think of your study. Please tick ONE of the five blocks given for each statement that best indicates and reflects your opinion from **strongly agree to strongly disagree**. Please try to answer every question, even if you are not absolutely sure.

SA=Strongly Agree A=Agree N= neutral D=Disagree SD=Strongly Disagree

(10) From your experience at school. Tick ONE box on each line to show how far you agree with each statement.	SA	A	N	D	AD
(A). I enjoy using new technology like computers in my learning process.					
(B). I do <i>not</i> believe in just accepting what the teacher says without question, success involves thinking for myself.					
(C). I like exams which give me an opportunity to show I have ideas of my own.					
(D). I prefer to learn the facts and then be tested on them in short questions.					
(E). My school does not have enough computers.					
(F). There are too many students in my class.					
(G). We cannot call anything scientific knowledge if it is not absolutely true.					
(H). I believe it is the job of the teacher to supply me with all knowledge.					
(I). All one has to do in science is to memorise things.					

(11) What are your opinions about learning process in secondary school? Tick ONE box on each line	SA	A	N	D	AD
(A). I feel I am coping well.					
(B). I have found school work easy.					
(C). I think I am not wasting my time at school.					
(D). My school results are getting worse.					
(E). Generally, I am enjoying school.					
(F). The school work is relevant to my needs.					
(G). My parents are interested in my education.					

(12) What are your opinions about learning approaches? Tick ONE box on each line	SA	A	N	D	AD
(A). I prefer working in a group.					
(B). I find my teachers' feedback very helpful.					
(C). I enjoy practical work at school.					
(D). I like the way my school is organized.					
(E). Examinations do help me to learn better.					
(F). Most subjects at school are relevant to our real life.					

(13) Thinking about the way you like to learn at secondary school. Tick ONE box on each line	SA	A	N	D	AD
(A). Having a good memory is essential					
(B). I prefer to rely heavily on reading books.					
(C). I often see ideas in terms of mental pictures					
(D). Finding the best ways to pass the examinations.					
(E). I prefer to rely heavily on clear explanations from the teacher.					
(F). I like to understand things rather than simply memorise them					

(14) Looking back on your school experience, how do you feel about your studies in Arabic language? Tick ONE box on each line	SA	A	N	D	AD
(A). I find studying Arabic grammar difficult.					
(B). My studies in Arabic prepare me well for further study.					
(C). It is essential to be able to write Arabic clearly and accurately.					
(D). Too much emphasis was placed on Arabic literature in my studies.					

(15) Looking back on your school experience, how do you feel about your studies in English language? Tick ONE box on each line	SA	A	N	D	AD
(A). Tests and examinations in English Language seem unrelated to Language skills					
(B). English language will help me in my future career.					
(C). Most of the time we use mother tongue during the English lessons.					
(D). My school has proper audio-visual aids for learning English.					
(E). Learning English should be started at early stage of school levels.					
(F). Use of the audio-visual aids will enhance learning English Language.					

(16) Looking back on your school experience, how do you feel about your studies in science subjects? Tick ONE box on each line.	SA	A	N	D	AD
(A). It would help me get a good job in the future.					
(B). Science is often far too difficult to understand.					
(C). Science textbooks are much dominant by English language.					
(D). Learning science successfully depends on having a good memory.					

(17) Looking back on your school experience, how do you feel about your studies in Technology? Tick ONE box on each line.	SA	A	N	D	AD
(A). Using technology system in learning process is essential.					
(B). I find handling technology difficult.					
(C). Technology is only needed by those studying subjects like sciences.					
(D). Having a good memory is essential for handling technology.					

(18) Looking back on your school experience, how do you feel about your studies in mathematics? Tick ONE box on each line.	SA	A	N	D	AD
(A). I find mathematics difficult.					
(B). I find mathematics to be very useful in daily life.					
(C). Mathematics is not preparing me well for further study					
(D). Some students can do mathematics, others cannot do mathematics					

FIGURE 7.1 ILLUSTRATES THE FORM OF QUESTIONNAIRE OUTLINES IN ARABIC VERSION

تاريخ : /

إلى من يهمه الأمر

.الطلاب الأءاء / المعلمين

اسمي نجمي خليل أنا طالب دراسات عليا بدوام كامل في كلية الدراسات العليا، العلوم الإنسانية و التربية، جامعة نوتنغهام ترنت ، المملكة المتحدة. وانا سأقوم لإجراء المقابلات والتي سوف أسألك عن التجارب الجندرية الخاص بك و المواقف والمعتقدات الجندرية الخاص نحو المناهج الأكاديمية الرسمية (الموضوعات ، وطرق التدريس والكتب المدرسية ، ونظام الفحص) على مستوى المدارس الثانوية.

وسوف يتم توزيع استبيان على الطلاب والطالبات في عدد من المدارس في المناطق الحضرية والريفية لاستكشاف أوجه الشبه والاختلاف في النوع الاجتماعي تجاربهم ومواقفهم تجاه المناهج الدراسية الرسمية في بيئات تعليمية مختلفة.مشاركتم طوعية تماما و مجهولة المصدر و أولئك الذين لا يريدون المشاركة هي حرة في أن تفعل ذلك. من فضلك لا تكتب اسمك أو اسم مؤسستك في أي مكان على الاستبيان. وسمحوا لي أن أعرف إذا كان أي الطلاب المتطوعين ترغب في أن تشارك في مقابلة قصيرة لمناقشة بعض القضايا التي أثارها الاستبيان الخاص بي في أكثر من najmikhail@yahoo.com.ذلك بقليل من التفصيل . يرجى مراسلتي عبر البريد الإلكتروني :

المعلومات التي تقدمها تكون مجهولة المصدر وستبقى سرا في خزانة مقفلة. جميع الطلاب أحرار في الانسحاب من مشاركة في البحث في أي وقت يصل إلى النقطة التي سأكتب استنتاجاتي . سيتم مسح كافة المعلومات التي تم جمعها من المقابلات في نهاية هذا المشروع

شكرا على مشاركتكم

تفضلوا بقبول فائق الاحترام ،

نجمي خليل ابوبكر

جامعة نوتنغهام ترينت
كلية الدراسات العليا للفنون، العلوم الإنسانية والتربية والتعليم
المملكة المتحدة

الاستبيان

تم تصميم هذا الاستبيان لمعرفة وجهات نظركم حول خبرات التعلم الخاص بكم. سوف لن يؤثر على إجاباتكم علامات مدرستكم. يرجى التعبير عن مشاعركم الصادقة والخاصة بكم وهذا سيساعدنا على فهم أفضل وسائل التعليم والتعلم الخاصة بكم يمكن الإجابة على معظم الأسئلة وذلك بوضع علامة صح في المربع

(1) أنتى <input type="checkbox"/>	ذكر <input type="checkbox"/>	جنسك:	مرحلة
(2) المدرسة في المناطق الريفية <input type="checkbox"/>	المدارس في المناطق الحضرية <input type="checkbox"/>	المدرسة التي تدرس فيها (2)	
..... الأخوات	 الإخوة	
(4) 50- <input type="checkbox"/>	40- <input type="checkbox"/>	30- <input type="checkbox"/>	20- <input type="checkbox"/>
20 أقل من <input type="checkbox"/> كم عدد الطلاب وعادة ما تكون في صفك (4)			
جامعي <input type="checkbox"/>	متوسط <input type="checkbox"/>	إلزامي <input type="checkbox"/>	لا شيء <input type="checkbox"/>
ما هو مستوى والديك الحالية للتعليم (5)			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	الأب <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	الام <input type="checkbox"/>
: واتجاهات دراسة كنت قد اخترت بالفعل أو تفكر (6)			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
علوم رياضيات	علوم تكنولوجيا	علوم علمية	ادبي الفنون

(7) التفكير في هذا الموضوع كنت تدرس الآن، فإن أهم سبب لاختيار هذا بالطبع يكون. وضع علامة واحدة فقط.	وضع علامة واحدة
(أ) أحب فعل ما شجعتي الأهل للقيام به.	
(ب) وأنا أفعل ما شجعتي زملائي من نفس الجنس للقيام به.	
(ث) موضوعي متعلق بمدى فهمي للثقافتنا.	
(ج) اختيار موضوعي يتعلق لتأثير ديننا.	
(ح) اختياري موضوعي سوف يؤدي إلى وظائف جيدة.	
(خ) شجعتي أساتذتي.	
(د) يتعلق اختيار موضوعي إلى المواقف والخبرات المجتمعية.	
(ذ) هذا الموضوع مهم لاستكمال المزيد من الدراسة في جامعة.	
(ر) أفضل جزء من المواد الدراسية.	

(8) التفكير في حياتك ككل والتي تعتقد ما هو/هي الجانب الأكثر أهمية بالنسبة لك. وضع علامة واحدة فقط (8)	وضع علامة واحدة
(أ) قدرتي الإبداعية.	
(ب) رغبتني في الاستعداد لتحمل المجازفة.	
(ث) انجازاتي الأكاديمية.	
(ج) سلوكي الاجتماعي.	
(ح) جاذبتي الشخصية.	
(خ) مهارتي الرياضية.	
(د) جاذبية شعبيتي.	

وضع علامة واحدة	ما هو الجانب الأكثر أهمية لخطتك المستقبلية؟ وضع علامة واحدة فقط (9)
	تكوين ووجود الأسرة. (أ)
	السفر إلى الخارج (ب)
	تدريب كي أصبح معلم (ث)
	اعمل كمهندس (ج)
	اعمل في الفن أو الموسيقى أو الدراما (ح)
	تدريب أن كي أكون طبيبا أو ممرض، أو العاملين الصحيين (خ)
	ترك المدرسة في أقرب وقت ممكن لاجاد وظيفة عمل. (د)
	الذهاب إلى الجامعة والحصول على مؤهلات جيدة. (ذ)

التفكير في دراستك. يرجى وضع علامة صح واحدة

على الكتل المربعات الخمس كي يعطى لكل مربع بيان يشير أفضل ويعكس رأيك من انك توافق بشدة الي أنك تختلف بشدة. يرجى محاولة الإجابة على كل سؤال، حتى لو كنت غير متأكد تماما

غير موافق بشدة = SD أوافق = D محايد = N أوافق = A أوافق بشدة = SA

من تجربتك في المدرسة. وضع علامة صح في مربع واحد في كل سطر لإظهار مدى اتفاقك مع (10) كل بيان.	SA	A	N	D	AD
أنا أستمتع باستخدام التكنولوجيا الجديدة مثل أجهزة الكمبيوتر في عملية التعلم. (أ)					
لا أعتقد أن في مجرد قبول ما يقول المعلم فقط دون شك، النجاح ينطوي التفكير. (ب)					
أحب الامتحانات التي تعطيني فرصة لإظهار أفكارى وقدراتي. (ث)					
أنا أفضل أن معرفة الحقائق ومن ثم يتم اختبار عليها في أسئلة قصيرة. (ج)					
مدرستي ليس لديها ما يكفي من أجهزة الكمبيوتر. (ح)					
هناك عدد كبير جدا من الطلاب في صفي. (خ)					
ونحن لا يمكن استدعاء أي شيء المعرفة العلمية إذا لم يكن صحيحا على الإطلاق. (د)					
وأعتقد أنه من مهمة المعلم تزويدي مع جميع المعارف. (ذ)					
كل واحد ما عليه ان يقوم به في مجال العلوم هو حفظ الأشياء عن ظهر القلب. (ر)					

ما هي آرائكم حول عملية التعلم في المدرسة الثانوية؟ وضع علامة مربع واحد في كل سطر (11)	SA	A	N	D	AD
أشعر وأنا التأقلم بشكل جيد. (أ)					
لقد وجدت العمل المدرسي سهل. (ب)					
أعتقد أنني لا أضيع وقتي في المدرسة. (ث)					
نتائجي المدرسية تزداد سوءا. (ج)					
عموما، أنا أستمتع المدرسة. (ح)					
اعمال المدرسية هي ذات الصلة لاحتياجاتي. (خ)					
والذي مهتما في دراستي. (د)					

ما هي آرائكم حول نهج التعلم؟ وضع علامة صح في مربع واحد في كل سطر (12)	SA	A	N	D	AD
أنا افضل العمل في مجموعة. (أ)					
أجد تعليقات المعلمين مفيدة جدا. (ب)					
أنا أستمتع العمل التطبيقي الفعلي في المدرسة. (ث)					
أنا أحب الطريقة التي نظمت والتي تسير عليها مدرستي. (ج)					
الامتحانات تساعدني على التعلم بشكل أفضل. (ح)					
معظم المواد في المدرسة هي ذات الصلة لحياتنا الحقيقية. (خ)					

التفكير في الطريقة التي ترغب في التعليم والتعلم في المدرسة الثانوية وضع علامة صح (13) في مربع واحد في كل سطر	SA	A	N	D	AD
وجود ذاكرة جيدة أمر ضروري. (أ)					
أنا أفضل أن تعتمد بشكل كبير على قراءة الكتب. (ب)					
كثيرا ما أرى الأفكار من حيث الصور الذهنية. (ث)					
إيجاد أفضل السبل للاجتياز الامتحانات. (ج)					
أنا أفضل أن اعتمد بشكل كبير على تفسيرات واضحة من المعلم. (ح)					
أود أن أفهم الأمور بدلا من مجرد حفظها. (خ)					

إذا نظرنا إلى الوراء على تجربتك المدرسية، وكيف هو شعورك حيال دراستك في اللغة (14) العربية؟ وضع علامة صح في مربع واحد في كل سطر	SA	A	N	D	AD
أجد دراسة قواعد اللغة العربية صعبة. (أ)					
درستي في اللغة العربية تعد لي جيدا لمزيد من الدراسة. (ب)					
فمن الضروري أن يكون قادرا على الكتابة العربية بشكل واضح ودقيق. (ث)					
وضعت الكثير من التركيز على الأدب العربي في دراستي. (ج)					

إذا نظرنا إلى الوراء على تجربتك المدرسية، كيف هو شعورك حيال دراستك في اللغة (15) الإنجليزية؟ ضع علامة صح في مربع واحد في كل سطر	SA	A	N	D	AD
الاختبارات والامتحانات في اللغة الإنجليزية تبدو غير ذات صلة لمهارات اللغة. (أ)					
واللغة الإنجليزية تساعدني في مستقبلي المهني. (ب)					
معظم الوقت ونحن نستخدم لغتهم الأم خلال دروس اللغة الإنجليزية. (ث)					
مدرستي بها الوسائل السمعية والبصرية المناسبة لتعليم وتعلم اللغة الإنجليزية. (ج)					
تعلم اللغة الإنجليزية يجب أن تبدأ في مرحلة مبكرة من المراحل الدراسية. (ح)					
واستخدام الوسائل السمعية والبصرية تحفيز وتعزيز لتعلم اللغة الإنجليزية. (خ)					

إذا نظرنا إلى الوراء على تجربتك المدرسية، كيف هو شعورك حيال دراستك في المواد (16) العلمية؟ وضع علامة صح في مربع واحد في كل سطر	SA	A	N	D	AD
من شأنه أن يساعدني على الحصول على وظيفة جيدة في المستقبل. (أ)					
العلوم العلمية هي في كثير من الأحيان تكون من الصعب جدا أن نفهما. (ب)					
كتب العلوم هي المهيمنة بكثير باللغة الإنجليزية. (ث)					
تعلم العلوم العلمية يعتمد نجاحه اساسا على وجود ذاكرة جيدة. (ج)					

إذا نظرنا إلى الوراء على تجربتك المدرسية، كيف هو شعورك حيال دراستك في علوم (17) التكنولوجيا؟ وضع علامة صح في مربع واحد في كل سطر	SA	A	N	D	AD
استخدام نظام التكنولوجيا العلمية في عملية التعلم أمر ضروري. (أ)					
أجد صعوبة التعامل مع وسائل التكنولوجيا. (ب)					
. وهناك حاجة فقط لوسائل التكنولوجيا من قبل أولئك الذين يدرسون مواضيع مثل العلوم العلمية. (ث)					
وجود ذاكرة جيدة أمر ضروري لاستخدام وسائل لتكنولوجيا المناولة. (خ)					

إذا نظرنا إلى الوراء على تجربتك المدرسية، كيف هو شعورك حيال دراستك في علوم (18) الرياضيات؟ وضع علامة صح في مربع واحد في كل سطر	SA	A	N	D	AD
أجد صعوبة في علوم الرياضيات. (أ)					
أجد علوم الرياضيات مفيدة جدا في حياتنا اليومية. (ب)					
. علوم الرياضيات لا تعدنا جيدا للمزيد من الاستمرار في الدراسة. (ث)					
يمكن لبعض الطلاب القيام بدراسة علوم الرياضيات، لا يمكن للآخرين القيام بدرستها. (خ)					

إذا نظرنا إلى الوراء على تجربتك المدرسية، كيف هو شعورك حيال أنظمة الاختبارات والامتحانات؟ (19) وضع علامة صح في مربع واحد في كل سطر.	SA	A	N	D	AD
أعتقد أن نظام الامتحانات يؤثر سلباً على تطوير مهاراتي. (أ)					
نوعية الاختبارات والامتحانات أمر حيوي لتشجيع الطلاب تفعل ما هو أفضل في المناهج الدراسية. (ب)					
في الاختبارات المدرسية والامتحانات هناك الكثير من التركيز على مهارات الذاكرة حفظ وليس (ث) ..الفهم					

اقتراحاتكم لتحسين التعليم والتعلم. (مع الأخذ في الاعتبار الكتب المدرسية، والمنهجية، والفحص والمشاركة الطلاب في
النشاطات الصفية أثناء عملية التدريس)

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أشكركم على ملء هذا الاستبيان.

FIGURE 8.0 ILLUSTRATES THE FORM OF INTERVIEWS OUTLINES FOR BOTH THE STUDENTS AND TEACHERS IN ENGLISH VERSION

Date: / 2009

To Whom It May Concern:

Dear ALL

My name is Najmi Khalil. I am a full-time postgraduate student in the Graduate School Arts, Humanities and Education, Nottingham Trent University, UK. I am going to conduct interviews which will ask you about your gendered experiences and your gendered attitudes and beliefs towards the formal academic curriculum (subjects, teaching methods, text books, examination system) at secondary school level. The interviews will be conducted with male and female students and teachers in number of urban and rural schools to explore the differences and similarities in their gendered experiences and attitudes towards formal academic curriculum in different educational environments

Your participation is totally voluntary and anonymous and those who do not want to take part are free to do so. Please do not mention your name or the name of your institution anywhere on the interviews. Please let me know if any volunteer students would like to be involved in further interview to discuss some of the issues raised by my short interview in a little deep and more details. Please e-mail me: N0072799@ntu.ac.UK, najmikhalil@yahoo.com.

Information you provide will be anonymous and kept secretly in a locked cabinet. All students are free to withdraw from the research at any time up to the point where I will write up my findings. All of the information collected from the interviews will be destroyed at the end of this project.

Thanks for your anticipation.

*Yours faithfully,
Najmi Khalil Bobker*

Students' Interviews: (maximum 45 minutes)

Introduction

Get students to relax and talk.-Take no notes. - Make sure they know you are not in authority. Inform students that participation is totally voluntary and anonymous and those who do not want to take part are free to do so. Inform students that information they provide will be anonymous and kept secretly in a locked cabinet and they can withdraw from it at any time and it will be destroyed at the end of this project. *Starts:* Tell me about yourself: hobbies, interests...etc. What is your favourite subject? Why? What do you like least? Why? Have you ideas about what you want to do when you leave school?

(1)Area of Study

- (a) Science, arts, or technology? Reasons for choice? If any? Are you enjoying it? How?
- (b) Why this subject important to you? Why do you dislike others?
- (c) How you have got on in the past?
- (d) Which is the most difficult subjects to understand? Why?

(2)The Examinations

- (a) What is the best way to pass your testes and exams? Why? Do you like learning things off by heart? Why?
- (b) What is best/worst about exams? What do you think the important of exams?
- (c) How do you try to understand ideas or things about your study?

(3)Applications- relevance

- (a) What does your religion mean for you? What role does Islam have, if any, in guiding those beliefs in your life? What your belief about the roles of men and women? Prompt: Are your cultural beliefs about gender roles different from your religious beliefs?
- (b) Do you believe men and women are more similar or different (towards the choice of subjects)? In what ways and why? Probe: Physically, emotionally, mentally, socially, etc...)? What makes a subject meaningful for you?

(c) What is your cultural heritage upon gender and do you believe it has impacted your beliefs/ views on men and women in society? If yes how? What does gender mean to you on your subject choice?

(d) What do you think influences people to be gender stereotypes towards the school subjects? Probe: What cultural, societal, and or personal events influence/ affects/motivates/encourages people to become gender stereotypes?

(e) Your suggestions for the improvement of teaching and learning (Keeping in mind the textbook, methodology, examination and your participation in the classroom activities during the teaching of process), If you were to plan what was to be taught, how would you change things?

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Thanks for your participation on this interview.

*Yours faithfully,
Najmi Kahlil Bobker*

Teachers' Interviews: (maximum 45 minutes)

Introduction - Get teachers to relax and talk - Take no notes - Make sure they know you are not in authority. Which schools do you teach? What subjects do you teach? Do you like teaching? Why? What is most satisfying aspect(s) about teaching today?

(1) Your subject

- (a) Why you are interested in your subject?
- (b) Why is it important for your students?
- (c) Is the syllabus you have as good as it might be ? Why?

(2) About Your students

- (a) What are the most demanding problems with your students today?
- (b) What would you like the most to achieve for your students? Why?
- (c) What motivated your students about your subject? Males or females? How?
- (d) What is your view about the curriculum in the relation to students' future?

(3) The Examinations

- (a) To what extent do the needs of passing exams affect your teaching?
- (b) What do you think the importance of exams? What should exams test? Can you see better ways to assess students?

(4) Applications- relevance

- (a) What does your religion mean for you? What role does Islam have, if any, in guiding those beliefs in your life? What your belief about the roles of men and women? Prompt: Are your cultural beliefs about gender roles different from your religious beliefs?
- (b) Do you believe men and women are more similar or different (towards the school subjects)? In what ways and why? Probe: Physically, emotionally, mentally, socially, etc...)? What makes a subject meaningful for you and your students?
- (c) What is your cultural heritage upon gender and do you believe it has impacted your beliefs/ views on men and women in society? If yes how? What does gender mean to you on your subject choice?
- (d) What do you think influences people to be gender stereotypes towards the school subjects? Probe: What cultural, societal, and or personal events influence/ affects/motivates/encourages people to become gender stereotypes?

(e) Your suggestions for the improvement of teaching and learning (Keeping in mind the textbook, methodology, examination and your participation in the classroom activities during the teaching of process), If you were to plan what was to be taught, how would you change things?

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Thanks for your participation on this interview.

*Yours faithfully,
Najmi Kahlil Bobker.*

FIGURE 8.1 ILLUSTRATES THE FORM OF INTERVIEWS OUTLINES FOR BOTH THE STUDENTS AND TEACHERS IN ARABIC VERSION

تاريخ : / 2009

إلى من يهمله الأمر

الطلاب الأعضاء / المعلمين

اسمي نجمي خليل أنا طالب دراسات عليا بدوام كامل في كلية الدراسات العليا، العلوم الإنسانية و التربية، جامعة نوتنغهام ترنت ، المملكة المتحدة. وانا سأقوم لإجراء المقابلات والتي سوف أسألك عن التجارب الجندرية الخاص بك و المواقف والمعتقدات الجندرية الخاص نحو المناهج الأكاديمية الرسمية (الموضوعات ، وطرق التدريس والكتب المدرسية ، ونظام الفحص) على مستوى المدارس الثانوية

سيتم إجراء المقابلات مع الطلاب والمعلمين من الذكور و الإناث في عدد من المدارس في المناطق الحضرية والريفية لاستكشاف أوجه الشبه والاختلاف في النوع الاجتماعي تجاربهم ومواقفهم تجاه المناهج الدراسية الرسمية في بيئات تعليمية مختلفة

مشاركتم طوعية تماما و مجهولة المصدر و أولئك الذين لا يريدون المشاركة هي حرة في أن تفعل ذلك. من فضلك لا تذكر اسمك أو اسم مؤسستك في أي مكان على المقابلات. وسمحوا لي أن أعرف إذا كان أي الطلاب المتطوعين ترغب في أن تشارك في مزيد من مقابلة لمناقشة بعض القضايا التي أثارها بلدي مقابلة قصيرة في القليل من التفاصيل العميقة و ، N0072799@ntu.ac.UK : أكثر من ذلك. يرجى مراسلتي عبر البريد الإلكتروني najmikhilil@yahoo.com .

و المعلومات التي تقدمها تكون مجهولة المصدر وستبقى سرا في خزانة مغلقة. جميع الطلاب أحرار في الانسحاب من مشاركة في البحث في أي وقت يصل إلى النقطة التي سأكتب استنتاجاتي . سيتم مسح كافة المعلومات التي تم جمعها من المقابلات في نهاية هذا المشروع

شكرا على مشاركتكم

تفضلوا بقبول فائق الاحترام ،

نجمي خليل ابوبكر

مقابلات الطلبة الحد الأقصى 45 دقيقة

مقدمة

لا تأخذ أية ملاحظات . - تأكد من أنهم يعرفون أنك لست في السلطة و أعلم الطلاب أن المشاركة طوعية تماما و مجهولة المصدر و أولئك الذين لا يريدون المشاركة هي حرة في أن تفعل ذلك. إعلام الطلاب أن المعلومات التي يقدمونها سوف تكون مجهولة المصدر وأبقى سرا في خزانة مغلقة وأنها يمكن أن تنسحب منه في أي وقت ، وسوف يتم مسحها في نهاية هذا المشروع. بداية: أخبرني عن نفسك : الهوايات والاهتمامات ... الخ ما هو الموضوع المفضل لديك؟ لماذا؟ ماذا تريد من أفكار حول ما تريد القيام به عند مغادرة المدرسة؟

منطقة الدراسة (1)

- (أ). العلوم ، والفنون، أو التكنولوجيا؟ أسباب اختياره ؟ إن وجدت ؟ هل الاستمتاع به ؟ كيف؟
(ب). لماذا هذا الموضوع مهم بالنسبة لك ؟ لماذا يكرهون الآخرين؟
(ج). كيف كنت قد حصلت عليه في الماضي؟
(د). ما هي الموضوعات الأكثر صعوبة في تفهم؟ لماذا؟

و الامتحانات (2)

- (أ). ما هو أفضل وسيلة لتمرير الامتحانات الخاصة بك ؟ لماذا؟ هل تحب تعلم أشياء عن ظهر قلب ؟ لماذا؟
(ب). ما هو أفضل / أسوأ حول الامتحانات؟ ما رأيك المهم من الامتحانات؟
(ج). كيف يمكنك محاولة فهم الأفكار أو الأشياء عن دراستك ؟

التطبيقات ذات صلة (3)

- (أ). ماذا يعني بالنسبة لك دينكم ؟ ما الدور الذي يقوم به الإسلام ، إن وجدت ، في توجيه تلك المعتقدات في حياتك ؟ ما إيمانكم حول دور كل من الرجل والمرأة ؟ موجه: هل المعتقدات الثقافية الخاصة بك حول أدوار الجنسين تختلف في المعتقدات الدينية الخاصة بك ؟
(ب). هل تعتقد الرجال و النساء هم مشابهة أو مختلفة أكثر (نحو اختيار المواضيع) ؟ ولماذا؟ التحقيق: جسديا وعاطفيا وعقليا واجتماعيا ، الخ ...) ؟ ما الذي يجعل الموضوع ذات مغزى وفائدة بالنسبة لك؟
(ج). ما هو التراث الثقافي الخاص بك على اختلاف نوع الجنس و هل تعتقد أنها أثرت معتقداتك إذا كان الجواب نعم كيف؟ / وجهات النظر حول الرجال والنساء في المجتمع ؟ ماذا يعني الجنسين لك على اختيار نفس موضوع الدراسي الخاص بك ؟
(د) ما رأيك في التأثيرات الناس لتكون القوالب النمطية الاجتماعية نحو المواد الدراسية ؟ التحقيق : فيما يتعلق بالثقافية و المجتمعية ، و الأحداث الشخصية أو التأثير / يؤثر / يحفز / تشجع الناس على أن يصبحوا القوالب النمطية الاجتماعية ؟
(ذ). اقتراحاتكم لتحسين التعليم والتعلم (مع الأخذ في الاعتبار الكتب المدرسية، و المنهجية ، والفحص و مشاركتكم في النشاطات الصفية أثناء تدريس العملية) ، لو كنت تستطيع أحداث التغيير، كيف تغيير الأشياء؟

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شكرا لمشاركتكم في هذه المقابلة

مقابلات المعلمين (الحد الأقصى 45 دقيقة)

مقدمة

- احصل على المعلمين للاسترخاء والتحدث - عدم اتخاذ أي ملاحظات - تأكد من أنهم يعرفون أنك لست في السلطة. المدارس التي يدرسون فيها؟ ما هي المواضيع؟ هل يحبون عملية التدريس؟ لماذا؟ ما هو الجانب الأكثر عن تدريس اليوم؟

(1) موضوعك

- (أ) لماذا كنت مهتما في الموضوع الخاص بك؟
(ب) لماذا هو مهم لطلابك؟
(ج) هل المنهج لديك جيدة كما أنه قد يكون؟ لماذا؟

(2) معلومات عن الطلاب الخاصة بك

- (أ) ما هي المشاكل الأكثر تطلبا مع الطلاب اليوم؟
(ب) ماذا تريد أكثر لتحقيق لطلابك؟ لماذا؟
(ج) ما الدافع طلابك حول الموضوع الخاص بك؟ الذكور أو الإناث؟ كيف؟
(د) ما هي وجهة نظرك حول المناهج الدراسية في المستقبل فيما يتعلق الطلاب؟

(3) و الامتحانات

- (أ) إلى أي مدى احتياجات امتحانات عابرة تؤثر على التعليم الخاص؟
(ب) ما رأيك عن أهمية الامتحانات؟ ما ينبغي حول امتحانات الاختبار؟ يمكنك أن ترى أفضل السبل لتقييم الطلاب؟

التطبيقات ذات صلة (3)

(أ) ماذا يعني بالنسبة لك دينكم؟ ما الدور الذي يقوم به الإسلام، إن وجدت، في توجيه تلك المعتقدات في حياتك؟ ما إيمانكم حول دور كل من الرجل والمرأة؟ موجه: هل المعتقدات الثقافية الخاصة بك حول أدوار الجنسين تختلف في المعتقدات الدينية الخاصة بك؟

(ب) هل تعتقد الرجال والنساء هم مشابهة أو مختلفة أكثر (نحو اختيار المواضيع)؟ ولماذا؟ التحقيق: جسديا وعاطفيا وعقليا واجتماعيا، الخ ...)؟ ما الذي يجعل الموضوع ذات مغزى وفائدة بالنسبة لك؟

(ج) ما هو التراث الثقافي الخاص بك على اختلاف نوع الجنس و هل تعتقد أنها أثرت معتقداتك إذا كان الجواب نعم كيف؟ / وجهات النظر حول الرجال والنساء في المجتمع؟ ماذا يعني الجنسين لك على اختيار نفس موضوع الدراسي الخاص بك؟

(د) ما رأيك في التأثيرات الناس لتكون القوالب النمطية الاجتماعية نحو المواد الدراسية؟ التحقيق: فيما يتعلق بالثقافية والمجتمعية، و الأحداث الشخصية أو التأثير / يؤثر / يحفز / تشجع الناس على أن يصبحوا القوالب النمطية الاجتماعية؟

(ذ) اقترحاتكم لتحسين التعليم والتعلم (مع الأخذ في الاعتبار الكتب المدرسية، والمنهجية، والفحص و مشاركتكم في النشاطات الصفية أثناء تدريس العملية)، لو كنت تستطيع أحداث التغيير، كيف تغيير الأشياء؟

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شكرا لمشاركتكم في هذه المقابلة

FIGURE 9.0 ILLUSTRATES THE FORM OF ETHICAL CLEARANCE CHECKLIST

JOINT INTER COLLEGE ETHICS COMMITTEE

Art & Design and Built Environment

Arts, Humanities and Education

Ethical Clearance Checklist

(TO BE COMPLETED FOR **ALL** INVESTIGATIONS INVOLVING PARTICIPANTS)

All staff wishing to conduct an investigation involving participants in order to collect new data in either their research or teaching activities, and supervisors of research students who wish to employ such techniques are required to complete this checklist before commencement. It may be necessary upon completion of this checklist for investigators to submit a full application to the Joint Inter College Ethics Committee (JICEC). Where necessary, official approval from the JICEC should be obtained **before** the research is commenced. This should take no longer than one month.

IF YOUR RESEARCH IS BEING CONDUCTED OFF CAMPUS AND ETHICAL APPROVAL FOR YOUR STUDY HAS BEEN GRANTED BY AN EXTERNAL ETHICS COMMITTEE, YOU MAY NOT NEED TO SEEK FULL APPROVAL FROM THE JICEC. HOWEVER, YOU WILL BE EXPECTED TO PROVIDE EVIDENCE OF APPROVAL FROM THE EXTERNAL ETHICS COMMITTEE AND THE TERMS ON WHICH THIS APPROVAL HAS BEEN GRANTED.

If you believe this statement applies to your research, please contact your College Research and Graduate Studies office

IF YOUR RESEARCH IS TRANSFERRING INTO NOTTINGHAM TRENT UNIVERSITY AND APPROVAL WAS OBTAINED FROM YOUR ORIGINATING INSTITUTION, THERE IS A REQUIREMENT ON THE UNIVERSITY TO ENSURE THAT APPROPRIATE APPROVALS ARE IN PLACE.

If you believe this statement applies to your research, please contact your College Research and Graduate Studies office with evidence of former approval and the terms on which this approval has been granted.

IT IS THE RESPONSIBILITY OF INDIVIDUAL INVESTIGATORS AND/OR SUPERVISORS TO ENSURE THAT THERE IS APPROPRIATE INSURANCE COVER FOR THEIR INVESTIGATION.

If you are at all unsure about whether or not your study is covered, please contact the Finance & Operations Manager in your College to check.

Name and Role of Principal Investigator/Director of Studies: KEVIN FLINT

(Please underline principal investigator where appropriate)

Name of Research Student (if applicable) NAJMI KHALIL BOBKER HAMMADI

School:

THE GRADUATE SCHOOL ARTS, HUMMANITIES AND EDUCATION AT NTU.

Title of Investigation:

AN EXPLORATION OF THE GENDERING MEDIATING STUDENTS' ATTITUDES AND EXPERIENCES
IN THE FORMAL ACADEMIC CURRICULUM AT SECONDARY SCHOOL LEVEL IN LIBYA

Section A: Investigators

Do investigators have previous experience of, and/or adequate training in, the methods employed?

<u>Yes*</u>	No
--------------------	----

Will junior researchers/students be under the direct supervision of an experienced member of staff?

<u>Yes*</u>	No
--------------------	----

Will junior researchers/students be expected to undertake physically invasive procedures (not covered by a generic protocol) during the course of the research?

Yes	<u>No*</u>
-----	-------------------

Are researchers in a position of direct authority with regard to participants (eg academic staff using student participants, sports coaches using his/her athletes in training)?

Yes	<u>No*</u>
-----	-------------------

**** If you select ANY answers marked **, please submit your completed Ethical Advisory Checklist accompanied by a statement covering how you intend to manage the issues (indicated by selecting a ** answer) to the JICEC.**

Section B: Participants

Vulnerable Groups

Does your research involve vulnerable participants? If not, go to Section C

If your research does involve vulnerable participants, will participants be knowingly recruited from one or more of the following vulnerable groups?

Children under 18 years of age (please refer to [published guidelines](#))

<u>Yes*</u>	No
--------------------	----

People over 65 years of age

Yes	<u>No*</u>
-----	-------------------

Pregnant women

Yes	<u>No*</u>
-----	-------------------

People with mental illness

Yes	<u>No*</u>
-----	-------------------

Prisoners/Detained persons

Yes	<u>No*</u>
-----	-------------------

Other vulnerable group (please specify)

Yes	<u>No*</u>
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* Please submit a full application to the JICEC.

Chaperoning Participants

If appropriate, eg studies which involve vulnerable participants, taking physical measures or intrusion of participants' privacy:

Will participants be chaperoned by more than one investigator at all times?

Yes*	No	N/A
-------------	----	-----

Will at least one investigator of the same sex as the participant(s) be present throughout the investigation?

Yes*	No	N/A
-------------	----	-----

Will participants be visited at home?

Yes*	No*	N/A
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* Please submit a full application to the JICEC.

If you have selected N/A please provide a statement in the space below explaining why the chaperoning arrangements are not applicable to your research proposal:

Advice to Participants following the investigation

Investigators have a duty of care to participants. When planning research, investigators should consider what, if any, arrangements are needed to inform participants (or those legally responsible for the participants) of any health related (or other) problems previously unrecognised in the participant. This is particularly important if it is believed that by not doing so the participants well being is endangered. Investigators should consider whether or not it is appropriate to recommend that participants (or those legally responsible for the participants) seek qualified professional advice, but should not offer this advice personally. Investigators should familiarise themselves with the guidelines of professional bodies associated with their research.

Section C: Methodology/Procedures

To the best of your knowledge, please indicate whether the proposed study:

Involves taking bodily samples

Yes †	No*
----------	------------

Involves procedures which are likely to cause physical, psychological, social or emotional distress to participants

Yes †	No*
----------	------------

Is designed to be challenging physically or psychologically in any way (includes any study involving physical exercise)

Yes †	No*
----------	------------

Exposes participants to risks or distress greater than those encountered in their normal lifestyle

Yes	No*
-----	------------

Involves use of hazardous materials

Yes	No*
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*** Please submit a full application to the JICEC**

† If the procedure is covered by an existing generic protocol, please insert reference number here ____
If the procedure is not covered by an existing generic protocol, please submit a full application to the JICEC.

Section D: Observation/Recording

Does the study involve observation and/or recording of participants? If yes please complete the rest of section D, otherwise proceed to section E

Yes*	No
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Will those being observed and/or recorded be informed that the observation and/or recording will take place?

Yes*	No
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*** Please submit a full application to the JICEC**

Section E: Consent and Deception

Will participants give informed consent[<] freely?

Yes*	No
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If yes please complete the **Informed Consent** section below.

*If no, please submit a full application to the JICEC.

[<] Note: where it is impractical to gain individual consent from every participant, it is acceptable to allow individual participants to "opt out" rather than "opt in".

Informed Consent

Will participants be fully informed of the objectives of the investigation and all details disclosed (preferably at the start of the study but where this would interfere with the study, at the end)?

Yes*	No
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Will participants be fully informed of the use of the data collected (including, where applicable, any intellectual property arising from the research)?

Yes*	No
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For children under the age of 18 or participants who have impairment of understanding or communication:

- will consent be obtained (either in writing or by some other means)?

<u>Yes*</u>	No
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- will consent be obtained from parents or other suitable person?

<u>Yes*</u>	No
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- will they be informed that they have the right to withdraw regardless of parental/ guardian consent?

<u>Yes*</u>	No
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For investigations conducted in schools, will approval be gained in advance from the Head-teacher and/or the Director of Education of the appropriate Local Education Authority?

<u>Yes*</u>	No
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For detained persons, members of the armed forces, employees, students and other persons judged to be under duress, will care be taken over gaining freely informed consent?

<u>Yes*</u>	No
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* Please submit a full application to the JICEC

Does the study involve deception of participants (ie withholding of information or the misleading of participants) which could potentially harm or exploit participants?

Yes	<u>No*</u>
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If yes please complete the **Deception** section below.

Deception

Is deception an unavoidable part of the study?

Yes	<u>No*</u>
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Will participants be de-briefed and the true object of the research revealed at the earliest stage upon completion of the study?

Yes	<u>No*</u>
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Has consideration been given on the way that participants will react to the withholding of information or deliberate deception?

Yes	<u>No*</u>
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* Please submit a full application to the JICEC

Section F: Withdrawal

Will participants be informed of their right to withdraw from the investigation at any time and to require their own data to be destroyed?

<u>Yes*</u>	No
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* Please submit a full application to the JICEC

Section G: Storage of Data and Confidentiality

Please see University guidance on https://www.ntu.ac.uk/intranet/policies/legal_services/data_protection/16231gp.html. You will need your user name and password to gain access to this page on the Staff Intranet.

Will all information on participants be treated as confidential and not identifiable unless agreed otherwise in advance, and subject to the requirements of law?

<u>Yes*</u>	No
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Will storage of data comply with the Data Protection Act 1998?

<u>Yes*</u>	No
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Will any video/audio recording of participants be kept in a secure place and not released for use by third parties?

<u>Yes*</u>	No
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Will video/audio recordings be destroyed within six years of the completion of the investigation?

<u>Yes*</u>	No
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*** Please submit a full application to the JICEC**

Section H: Incentives

Have incentives (other than those contractually agreed, salaries or basic expenses) been offered to the investigator to conduct the investigation?

Yes	<u>No*</u>
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Will incentives (other than basic expenses) be offered to potential participants as an inducement to participate in the investigation?

Yes	<u>No*</u>
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**** If you select ANY answers marked **, please submit your completed Ethical Advisory Checklist accompanied by a statement covering how you intend to manage the issues (indicated by selecting a ** answer) to the JICEC.**

Compliance with Ethical Principals

If you have completed the checklist to the best of your knowledge without selecting an answer marked with *, ** or † your investigation is deemed to conform with the ethical checkpoints and you do not need to seek formal approval from the JICEC.

Please sign the declaration below, and lodge the completed checklist with your College Research and Graduate Studies office.

Declaration

I have read the Ethics & Governance Statement

. I confirm that the

above named investigation complies with published codes of conduct, ethical Principals and guidelines of professional bodies associated with my research discipline.

Signature of Principal Investigator

Signature of Student (if appropriate)

..... *Najmi Khalil Bobker Hammadi*

Signature of Academic Team Leader

.....Dr Kevin J Flint



If the provision for Compliance with Ethical Principals does not apply, please proceed to the **Guidance from JICEC** section below.

Guidance from JICEC

If, upon completion of the checklist you have selected ANY answers marked **, please submit your completed Ethical Advisory Checklist accompanied by a statement covering how you intend to manage the issues (indicated by selecting a ** answer) to the JICEC.

If, upon completion of the checklist, you have selected an answer marked with * or † it is possible that an aspect of the proposed investigation does not conform to the ethical Principals adopted by the University. Therefore you are requested to complete a full submission to the JICEC. A full submission to JICEC comprises of

- this form,
- a project proposal*
- an additional statement of up to 800 words outlining the ethical issues raised by the project and the proposed approach to deal with these.

*The document may be any of the following: Project Approval Form (RD1PA), Transfer Form (RD2T), Annual Monitoring Form, or a Case for Support for an external funding proposal e.g. AHRC.

Checklist OK to file

OR

Forward form & attachments to JICEC

Signature of ADR/JICEC Chair

Date

ADDITIONAL STATEMENT:

The main objective of this statement is to confirm any ethical issues raised by the project and the proposed approach to deal with issues. By referring to the British Educational Research Association (BERA) guidelines on research ethics, the research is essential to advance knowledge and to improve the quality of teaching and learning of formal academic curriculum in Libyan secondary school levels. The (CRPD) is not needed in order to carry out the research project and the UK police check is not required for access to Libyan schools.

However, according to (BERA) guidelines this research will involve a vulnerable young people (children ages 17-20 years old) as subjects of the research context who are indispensable. Information available from research on other individuals cannot answer the questions posed in relation to the study of teenagers. By referring to Articles 3 of the United Nations Convention (UNC) on the rights of the child, I confirm that in all actions concerning this young people I will be responsible for ensuring that the best interests of these young participants are primary protected and respected.

The Research will not begin until participants have voluntary informed consented to participating in it. Participants would freely give their consent. The consent of young peoples' participation in research will be obtained formally from; the authority school organization which sponsors for my research PhD; the head school teachers where I have regular and legal access as member of staff and; from participants' parents.

In order to secure of participants' voluntary informed consent and avoid deception, the participants will be informed the norm for the conduct of research, i.e. where, when, its purpose and their contribution, any potential implications that participation or even the project itself might have for participants or for their interests, what their participation will involve for them, the voluntary nature of their participation, storage,

access to and publication of information they provide, i.e. questionnaires and interview tapes, gathered after the research has been completed.

Participants will be informed of their right to withdraw from the research for any or no reason, and at any time. The participants' refusal to participate in research project will be respected and I will not use coercion or duress of any form to persuade participants to re-engage with my research work.

The study method (questionnaires/ interviews) will be 100% surveys which will be appropriate for young people and psychological safety of the participants during the research. The research will not involve sensitive personal questions that cause emotional or other harm to be approved. All questions used in questionnaires and interviews are standards and will be translated from English to Arabic to assist the students' cognitive understanding since not all Libyan students can read, speak or understand English.

A clear and full explanation of research procedure will be given to the participants in a manner appropriate to participants' levels of comprehension to avoid 'bureaucratic burden', and to ensure that the questionnaires and interviews are applied under appropriate conditions where the respondents do not feel that there is any pressure to give 'desirable' answers.

Reference

British Educational Research Association (BERA) guidelines

<http://www.bera.ac.uk/files/2008/09/ethical1.pdf>.

University Ethics Guidelines Web link:

http://www.ntu.ac.uk/research/ethics_governance/index.html