A Critical Systemic Approach to Human Development in Education: A Case Study of the Ministry of Education in Saudi Arabia

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ABSTRACT

The case study of both public and private schools in Saudi Arabia is designed to contribute to the understanding of human development in education. The research defines human development in terms of students' ability to achieve their learning goals as well as to maximize their human potential. The research design includes the collection of data from public and private schools for boys and girls in two provinces in Saudi Arabia. A range of qualitative methods is used in the research, including documentary review, interviews, focus groups, and field notes. This research is funded by the Saudi government, and it has been approved by the Social and Behavioural Research Ethics Committee of Flinders University, South Australia (project number 6169).

This thesis critically reviews the process and content of education, in order to investigate the development of students' capabilities and the extent to which the educational outcomes are able to produce well-rounded graduates. Participants in the study are students, teachers, heads of schools, policy officers in education departments, and policy makers in the Ministry of Education. To sum up, the thesis draws on critical pedagogy to highlight key issues that arise in learning at the school level and recommends that workbooks linked with text books encourage students and learners to engage critically with the material and that the parallel curriculum should address social and environmental justice in line with the Millennium Goals and the Sustainable Development Goals.

Nussbaum's capabilities approach provides a holistic theory upon which to support policies for human development. A case is made for imbedding a gender mainstreaming approach in the structure, content and process of learning.

The thesis concludes that the education system needs to appreciate the importance of social and environmental diversity, in order to support the UN Sustainable Development Goals and to reward engagement in the learning process that will prepare students to become lifelong learners.

CANDIDATE DECLARATION

I certify that the thesis entitled

'Systemic Approach to Human Development in Education: A Case Study of

the Ministry of Education in Saudi Arabia'

Submitted for the degree of

DOCTOR OF PHILOSOPHY

is the result of my own work.

I certify that this thesis does not incorporate without acknowledgment any

material previously submitted for a degree or diploma in any university; and that

to the best of my knowledge and belief it does not contain any material previously

published or written by another person except where due reference is made in the

text.

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SIGNATURE:

DATE: September 2016

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LIST OF ACRONYMS

AIDS: Acquired immune deficiency syndrome

CA: Capabilities Approach

CAQDAS: Computer Assisted Qualitative Data Analysis Software

CP: Critical Pedagogy

CSH: Critical System Heuristic

CST: Critical System Thinking

DIS: Design of Inquiring System

FGD: Focus group discussion

HDI: Human Development Index

HDR: Human Development Report

HIV: Human Immunodeficiency Virus

GAT: General Achievement Test

GDP: Gross Domestic Product

GID: Gender in Development

GNI: Gross National Income

GNP: Gross National Product

GPA: Grade Point Average (Grading in Education)

IDS: Institute of Development Studies, University of Sussex, United Kingdom

MDGs: Millennium Development Goals

SBREC: Social and Behavioural Research Ethics Committee of Flinders University

SDGs: Sustainable Development Goals

TIMSS: Trends in International Mathematics and Science Study

UN: United Nations

UNESCO: The United Nations Educational, Scientific and Cultural Organisation

UNDP: United Nation Development Programme

UNICEF: The United Nations Children's Emergency Fund

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DEDICATION

This thesis work is dedicated to my parents who have supported my learning from an early age. This work is also dedicated to my family who have given me unconditional love and support.

CHAPTER ONE: BACKGROUND, STATEMENT OF PROBLEM AND RATIONALE

1.1 Introduction

The aim of this qualitative case study on education in Saudi Arabian public and private schools is to investigate the ability of students to develop capabilities for the future in an increasingly globalised world. The study addresses students' capabilities by arguing for education that fosters human development. This education has the potential to address development issues in social, economic, and environmental terms. Education for human development plays multiple roles in protecting individuals, developing a sense of social and environmental rights and responsibilities in short, medium and long term periods (Drèze and Sen, 2013, pp. 107–109; Stiglitz et al., 2010, p. 71). Therefore, by focusing on human development, we can achieve an education system that values lifelong learning, which is vital for securing society's wellbeing.

Education for human development exceeds the economic view to education that has dominated most of the education systems in the world (Unterhaltter et al., 2007; Walker, 2005). If the education system is supposed to contribute to development, then the policy and practice developed by the administration and teachers with learners needs to appreciate the full potential of education rather than merely focusing on economic aspects in providing income and wealth as is currently the case in Saudi education. Therefore, there is a need for education policies and governance to reflect the idea of development based on human needs and progress. The role of policy makers, administrators and teachers needs to be focused on human needs rather than on

economic bottom lines. If we think of education in this way, we can conceive of education as an endeavour involving active participation and empowerment, rather than simply knowledge achievement alone. In this way, education could go beyond the economic paradigm perspective on education.

Education that has an impact on people's quality of life and their opportunities has been pursued in developed countries, such as the United States and the United Kingdom (Nussbaum, 1997 & Walker 2005). These efforts were guided by human development approaches such as the Capabilities Approach (Sen, 1999; Nussbaum, 2011). For developing countries, the need to increase the role of education in human development is vitally important, as education can open the doors for more opportunities and help people overcome increased social and environmental challenges. In Saudi Arabia, the country faces many development challenges. These challenges include a high reliance on non-renewable energy sources in terms of oil exports, increased levels of urbanisation, and other health issues such as obesity and diabetes. Education for human development creates the potential to improve the quality of people's lives and advance human development in all of these areas (Sen, 1999, p. 296).

This study addresses the role of education in development by looking at students' capabilities to reach their learning and life goals (Sen, 1999; Nussbaum, 2011). The research design includes the collection of data from public and private schools for boys and girls in two provinces in Saudi Arabia. The aim of this study is to explore policies and governance challenges. To achieve this aim, the study explores the key issues concerning human capabilities in education with a) students, b) teachers, c) schools' administrations, d) officials in the education departments and the Ministry of Education's head office. The research addresses key human development

issues in terms of human capabilities to include the ability of students to be educated in a way that has meaning to their lives, the ability of people to lead healthy lives, to be safe, and to have control over their environments (Nussbaum, 2011).

Understanding human development in education is influenced by the idea of expanding people's capabilities for advancing students' development in learning and forming well-rounded human beings (Sen, 1999; Nussbaum, 2011). The investigation of human development in education is also informed by a wide range of human centred approaches. Firstly, by Critical System Thinking (CST) which has an emphasis on working with different stakeholders and across disciplines to understand an area of concern (Churchman 1971; Flood & Romm 1996; Midgley, 2000; McIntyre-Mills, 2006). The study is also gives special attention to gender needs and pedagogical challenges (Kabeer, 1994; Freire, 1970) that can give education more potential to play its important role in human development.

The purpose of this chapter is to provide a brief overview and introduction to this thesis. It gives an outline as to what the thesis is about, the rationale for the research, the research problem, and how I will approach the study problem in terms of methodology and research methods. In addition, this chapter includes its scope and limitations, its significance and its contribution to knowledge, and the objectives of the study. This chapter also establishes the context of the study by highlighting human development in Saudi Arabia, including background about the Ministry of Education, and explains the structure of Saudi public education.

1.2 Research Rationale

Since the United Nations issued the first Human Development Report in 1990, development has been increasingly recognised as advancing people's development in many aspects, including health, education, and standards of living. With this movement towards a more integrated and human centred approach to development (UNDP, 1990; Stiglitz et al., 2010), human development needs to be fostered through appropriate policies. These policies need to foster a sense of ecological citizenship (Dobson & Eckersley, 2006) and to foster ways to engage and listen to young people during their formal and informal education programs. Education policy thus needs to establish education systems that appreciate the wider role that education can play in development. The role of policy makers, administrators and teachers needs to be focused around sustainable development goals to meet human needs rather than only economic bottom line. This is also necessary to develop opportunities for students to understand their roles as future citizens and leaders who will support the Millennium Development Goals, the UN Sustainable Development Goals and the UN 2030 development agenda. If the education system is supposed to contribute to development in this new paradigm, then the question needs to be asked: education for what? Education for the economic bottom line, or education for human development (defined in terms of the Capabilities Approach)?

If education policy fails to recognise the role of education in promoting a wider view of development, then education has less meaning to people's lives. McKay and Romm (1992) contend that if education lacks meaning, it will not improve active participation and thus it will not support great human development (p. 26). Therefore, there is a demand for human development to be fostered through appropriate educational policies that address the need of development in different aspects.

While a variety of definitions of human development have been suggested, this study uses Amartya Sen's definition (2004), namely:

> Human development, as an approach, is concerned with what I take to be the basic development idea: namely, advancing the richness of human life, rather than the richness of the economy in which human beings live, which is only a part of it¹.

According to the above definition, the great potential that the human development approach has for education is in the way it sees the development of people, ideally, as the end goal. It means students being able to achieve their learning goals as well as being able to maximise their potential. This role of education—through the lens of human development—involves the full development of children's personalities and their capacity to benefit themselves and the community (Alkire, 2013, p. 14). According to Sen (1997, p. 1959), 'The benefits of education, thus, exceed its role as human capital in commodity production. The broader human-capability perspective would record - and value - these additional roles'. In this way, education needs to be addressed in a systemic manner in order to address the broader life of the students and at the same time to develop an understanding of what is required to protect the so-called 'wellbeing stocks' for the future generation (Stiglitz et al., 2010). These are defined as follows in the book: Mis-measuring our lives:

> 1. Material living standards (income, consumption and wealth), 2. Health, 3. Education, 4. Personal activities including work, 5. Political voice and governance, 6. Social connections and relationships, 7. Environment (present and future conditions), 8.

¹ An interview by Asia Society. Also available online http://asiasociety.org/amartya-sen-more-human-theory-development

Insecurity, of an economy as well as a physical nature (Stiglitz et al. 2010, p. 15 cited in McIntyre-Mills, 2014b).

This research also builds on McIntyre-Mills' work (2014 a, b, c) on many inter-related concepts to provide a basis for developing a multidimensional measure of capabilities and wellbeing in education. The aim is to equip students so they can think socially and environmentally about the issues that they will face in increasing globalised and challenging world. In this respect, we need to develop opportunities for students to understand their role as future leaders and good members of society.

In Saudi Arabia, education policies are developed based on the principle of preparing good citizens (National Education Policy, 1969; Ministry of Education, 2013). The challenge for Saudi education is to address human development based on expanding students' development opportunities, not just in terms of economic preparation. This has particular importance for the Saudi education system as it is usually criticised for falling short of achieving its economic goals. Thus, great emphasis is given to the lack of skilled national workers and the criticism tends to focus on the fact that the Saudi education is lacking in its preparation of students for the labour market (Ministry of Economy and Planning, 2013a, pp. 24-25). This study, however, argues that the current emphasis is only on economic goals and this has the potential to lead to an imbalance in the role of education in human development. Therefore, there is a demand for human development to be fostered through appropriate educational policies that address the need for the development of well-rounded students.

Education for human development in this study is investigated by exploring challenges that face students in achieving their learning and life goals, and to provide policy recommendations that can be used to enhance the role of education in human development.

1.3 Human development in Saudi Arabia

In the last few decades, Saudi Arabia has made good progress in terms of human development. According to the Human Development Report in 2015, human development in Saudi Arabia is categorised as 'very high'. The Human Development Report which measured life expectancy, schooling and income per capita ranked Saudi Arabia 39th among 188 countries (UNDP, 2015a, p. 208). This achievement is a significant improvement from 25 years ago. The First Human Development report in 1990 showed that the country achieved 'medium human development' (UNDP, 1990, p 111). The First Human Development report also points out how the economic progress that Saudi Arabia has made was far greater than its human development indicators (see the Human Development Report, UNDP, 1990, pp 14-16). Interestingly and despite the variations in the gross national income (GNI), Saudi Arabia has been able to achieve rapid growth consistently in human development over the last three decades. Table 1 depicts indicators related to education, health and income since 1990.

Year	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP\$)	HDI value
1990	69.0	10.8	5.7	36,073	0.690
1995	70.9	11.7	6.2	35,456	0.717
2000	72.4	12.6	6.7	36,710	0.744
2005	73.1	12.5	7.5	38,175	0.759
2010	73.7	14.6	8.2	46,131	0.805
2011	73.8	15.2	8.4	49,942	0.816
2012	74	15.6	8.5	51,680	0.826
2013	74.1	16.3	8.7	52,008	0.836
2014	74.3	16.3	8.7	52,821	0.837

Table number 1.1: Human development in Saudi Arabia from 1980 to 2014

Source: UNDP, 2015b

From the previous table, it is evident that one important area of progress the country has made is in term of life expectancy. The overall mortality level of the population increased from 53.9 years in 1970 to 74.3 years in 2014 (UNDP, 2015b; Ministry of Economy and Planning & UNDP, 2003, p. 47). This aspect of human development was a great challenge for Saudi Arabia during its unification in 1932 as a result of the widespread of infectious diseases and the few number of hospitals that existed. Immunisation and an increased number of hospitals were among the reasons that contributed to an increased level of life expectancy. The number of hospitals increased from 74 hospitals with 9,039 beds in 1970 to 452 hospitals with 64,368 beds in 2013 (Ministry of Economy and Planning, 2014, p.155). Saudi Arabia also was able to achieve the United Nation's Millennium Development Goals (MDGs) that related to health (Ministry of Economy and Planning & UNDP, 2014, pp. 67-85). The sixth international goal, which is to reduce child mortality, to improve maternal health, and to combat HIV/AIDS, malaria, and other diseases has been improved. However, there are still challenges that face further achievement in health and life expectancy. Among the most pressing health issues are the growing number of cases of diabetes and obesity. In this respect, the country ranked third in the top countries with the highest

level of obesity and diabetes (Ministry of Health, 2009, p. 53). Heart disease and stroke are the top reasons for death in Saudi Arabia according to the World Health Organization (WHO, 2016). Education can advance human development in terms of life expectancy and health in different ways. One possible way that education can enhance people's lifestyles is by giving boys and girls in schools more opportunities for play and physical activities.

Saudi Arabia also made progress in terms of the gross national income (GNI). This achievement was basically because of primary resources; in particular, oil exports. Oil accounts for a large part of the state's income. For instance, in 2013 oil revenues were responsible for 89.5 % of the national income (Ministry of Economy and Planning 2014, p. 47). The challenges the country faces in this respect is an increasing dependency on non-renewable energy. Oil has also faced more price pressure recently. Falling oil prices with a population growth rate at 2.21% (Ministry of Economy and Planning, 2013b, p. 8) have put more pressure on the country to create jobs and advance the economy. Education can open more channels for the Saudi economy to move beyond its traditional and unstainable role. One way is to reframe our approach to the economy by getting students to think differently about the role of the economy in development: to develop a stainable economy instead of an economy that emphasises profit at the expense of the environment and the fabric of society. Students needs to think about the future in a new post carbon future to protect 'wellbeing stocks' for future generations (Stiglitz et al., 2010).

In terms of sustainable development, Saudi Arabia has made good progress in achieving the United Nation's Millennium Development Goal (MDGs) that have related to the environment. This goal is 'to ensure environmental sustainability' (Ministry of Economy and Planning & UNDP, 2014, p. 95). However, the higher dependency on carbon resources creates more environmental

challenges. The country needs to sustain its natural resources and depends more on renewable energy, because it has to move eventually to a more carbon neutral form of energy supply. Saudi Arabia also faces other environmental challenges beside carbon emissions. One pressing environmental issue is the increased level of urbanisation where 60% of the Saudi population are now living in major cities (Ministry of Economy and Planning & UNPD, 2003, p. 30). This number is expected to grow in the future with an increased number of people moving to major cities. For example, the city of Riyadh's population jumped from 4.9 million in 2009 to 5.7 million in 2012 with a migration rate of 1.2% (Riyadh Municipality, 2016). This increased level of urbanisation creates more pressure on water and food security in a country that possesses few water and farming resources. Increased levels of urbanisation also creates an issue of waste management and the need to sustain resources and increase the level of recycling which is still only around 35% (Ministry of Economy and Planning, 2014, p. 110). Education can bring change in sustainability and better ways to sustain resources and our environment. This education enables students to think environmentally by connecting them to their environment (Romm, 2016).

In looking forward to human development in Saudi Arabia, we can see how education plays a direct role in advancing human development in many aspects. For example, education can bring change in people's health, income, and sustainability. To fully capture these aspects, education policies needs to be shaped around human development rather than profit. To develop an education system that is concerned more about human capability expansion (Sen, 2003). Therefore, education can address young people's personal development as well as serve the greater good of Saudi Arabia in social, economic, and environmental terms. To achieve this goal, education in Saudi Arabia needs to be addressed in a systemic way to ensure that quality of life for students is addressed, and curriculums are teaching students necessary skills. Therefore, the country can Page | 11

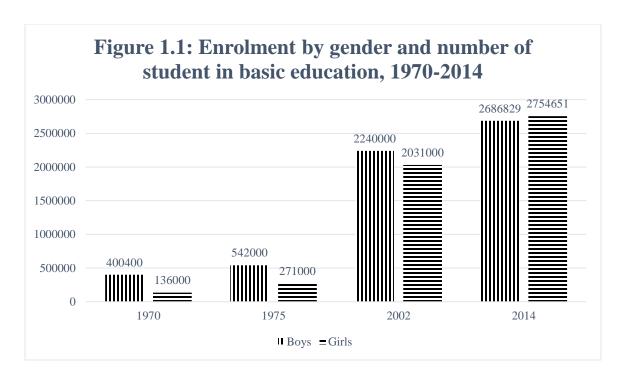
develop an understanding of what is required to protect wellbeing stocks for future generations (Stiglitz et al., 2010). In addition, students will be able to achieve their basic human capabilities so they can think socially and environmentally about the issues that they face.

1.4 Education in Saudi Arabia

Ninety years ago at the beginning of formal education in Saudi Arabia, the number of literate people was very low. Illiteracy was widespread all the country, with only four schools built (Ministry of Education, 2016). The beginning of formal education in 1925 faced the challenge of a high number of an illiterate population and a limited number of schools. Providing equal access to basic education for women was also out of reach because it was not socially acceptable in that period.

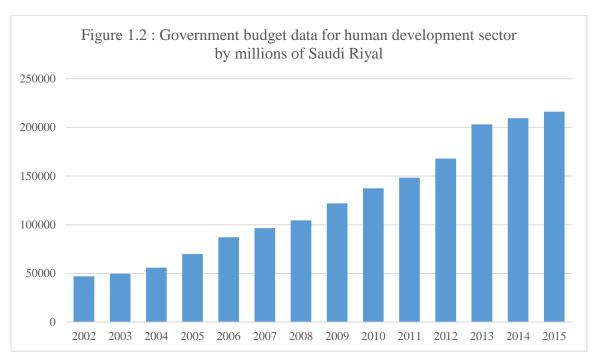
In 1938, the country joined the industrial revolution. Oil had been discovered, and education became a basic role in this transformation. Public education also benefitted from the rapid growth of income in building more schools. With the spread of schools across the state and free basic education, the number of students increased from 536.4 thousand students in 1969 to 5.4 million in 2013 with a yearly median growth of 5.4 % (Ministry of Economy and Planning, 2014, p. 155). The increased number of schooling allowed the country to overcome the challenge of widespread illiteracy. In 2014, the country achieved 94.4 % for adult literacy and 99.2 % for youth literacy. This lower level of illiteracy enabled Saudi Arabia to achieve the second goal on the list of the United Nation's Millennium Development Goals (MDGs) by achieving universal primary education (Ministry of Economy and Planning & UNDP, 2014, p. 46).

Saudi Arabia was able also to overcome the challenge of women's education over time. The increased number of schools and the community awareness of the importance of women's education has played an important role. The gender gap in school enrolment dropped from a 2.2:1 male/female ratio in 1975 to a 1:1 ratio in 2002 (Ministry of Economy and Planning & UNDP, 2003, p. 58). Also, the country succeeded in achieving the target of the 'Dakar Framework' to eliminate gender disparity in primary and secondary education (Ministry of Education, 2008, p. 18). Table 2 illustrates enrolment by gender in basic education from 1970 to 2014 which highlights the growing number of girls in schools. Saudi Arabia also achieved the third MDG goal, which concerns gender equality and empowerment. Enrolment for girls increased from 82% in 2001 to 97.8% in 2013, while enrolment for boys increased from 84% to 95.3% in the same period (Ministry of Economy and Planning & UNDP, 2014, p. 55).



Sources: Ministry of Economy and Planning & UNDP, 2003, p 58; Ministry of Economy and Planning 2014, pp. 155-157; Ministry of Education 2015.

While the country succeeded in overcoming illiteracy and eliminating gender disparity, the challenge was to provide education that contributed positively to development. The government announced many plans to improve the system and allocated generous funds to achieve this goal. These development initiatives were usually combined with increased funding for education. Spending on education has doubled over the last three decades to reach 9.5% of the GDP in 2002, an increase of the 3.5% of the GDP in 1970 (Ministry of Economy and Planning & UNDP, 2003, p. 62). Spending on education continues getting a higher share of the national budget compared to other countries. In 2006, for example, spending on education, as a percentage of the GDP was 6.2% compared to France at 6.0%, Germany at 5.1%, Japan at 4.9% and Turkey at 3.7% (Ministry of Economy and Planning, 2010, p. 358). Table 4 shows the increased spending on human development over the last 10 years, which includes the education share of the annual budget (one dollar equals 3.75 Saudi Riyal).



Source: Ministry of Finance, Kingdom of Saudi Arabia, 2016

1.4.1 Public Education in Saudi Arabia

The Ministry of Education is the main body responsible for public and higher education in Saudi Arabia. The Ministry's name and responsibilities have changed over time from its establishment until today. The Ministry of Education was established in 1925 under the name of 'Directorate of Knowledge', and it was responsible only for boys' education. Girls' education officially started 35 years later in 1960 under the General Office for Girls' Education (Ministry of Education, 2016). In 2002, education for boys and girls, from kindergarten to high school, merged into one ministry, which was the Ministry of Knowledge. One year later in 2003, the Ministry changed its name from the Ministry of Knowledge to the Ministry of Nurturing and Education. In 2015, the Ministry of Nurturing and Education and the Ministry of Higher Education became one

ministry with the name Ministry of Education (Ministry of Education, 2016). Figure number (1) shows the current organisation of education under the responsibilities of the Ministry of Education.

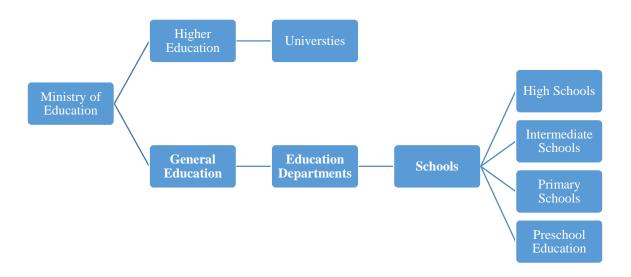


Figure number 1.3: The current organisational of education under the responsibilities of Ministry of Education in Saudi Arabia

Public education is part of the responsibility of the Ministry of Education. Public education in Saudi Arabia includes schooling from kindergarten, primary, intermediate and high school levels. The primary level consists of six years of schooling, three years at the intermediate level, and three years at the secondary level. The academic year is divided into two semesters, and each semester consists of four months, not including national holidays. School terms dates follow the Islamic Calendar- Hijri Calendar. Each academic year usually starts in September and ends in June in the next year according to the Gregorian calendar.

To manage public education, the Ministry follows a central system. The Ministry's head office has central departments that are responsible for managing public education in the country. The Ministry also has a department for public education in each province. Table number 2 shows the key responsibilities of the Ministry of Education.

Key centralised responsibilities of the Ministry of Education

- Development and planning.
- Learning supervision.
- Students' guidance and counselling.
- Buildings and infrastructure.
- Admission and examination.
- Training.
- Administration and finance.
- Private education.
- Gifted education.
- Special education.
- Quality management.

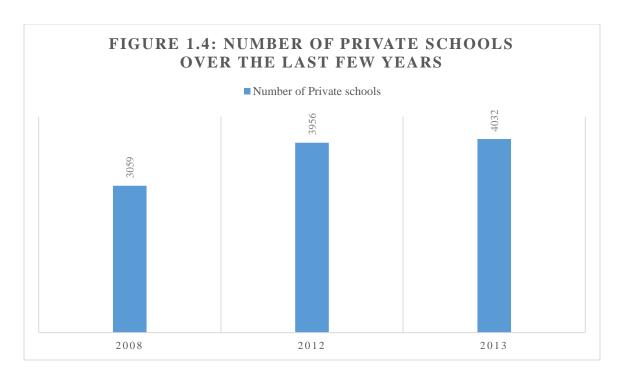
Table number 1.2: Key centralised responsibilities of the Ministry of Education; Source: Ministry of Education (2011, p. 16)

Schools in Saudi Arabia are single-sex institutions; boys and girls have different schools. In boys' schools, all teachers, staff, and head of the school are males. Similar gender segregation is also present in girls' schools where all schools' teachers, staff, and head of school are females. The Ministry imposes similar rules and regulations for both genders. The Ministry also sets the national standard curriculum. Those curriculums are very much the same for boys and girls in public and private schools. Through the central supervisory system, the Ministry of Education makes sure that students study the same curriculum.

The majority of schools are public schools (also known as government schools) which are funded by the government to provide free education to all citizens and also for other residents who

speak Arabic as their first language. According to the National Education Policy, 'All types and phases of education are free. The State does not demand education fees' (National Education Policy, 1969, p. 27). The number of public schools according to the Ministry of Education (2015) are 26,606 schools, 12,665 for boys and 13,941 for girls, which consist of (85.8%) of public education schools in the country.

There is also a growing role for private education. The Ministry of Education has a target to increase the role of private education in the next few years (Ministry of Economy and Planning, 2010, p. 390). Figure number (2) shows the growing number of private schools in the last few years. According to the Ministry of Education (2015), there are 688,215 students studying in private schools, 388,767 male students and 299,448 female students who represent (12.65%) of students studying in public education schools which are (5,441,480) (Ministry of Education, 2015).



Sources: Ministry of Economy and Planning, 2010, p. 390; Ministry of Education, 2014; Ministry of Education, 2015.

While private schools are self-funded schools with some support from the government, there is little difference between private and public education. Schools in both sectors have more similarities than differences. Private and public schools teach the same textbooks, have very similar number of school hours and adhere to the central supervision system. According to Article number (XIV) of the Private Education Act in Saudi Arabia:

Private schools need to follow the national curriculum that is applied in public schools. The Organising department could give some private schools the permission to teach an extra subjects or to increase school time (Private Education Act, 1975, p. 3)

The clear difference between public and private schools is in school management. The Ministry gives private schools more autonomy in staff hiring and management.

1.5 Statement of the Problem

Saudi Arabia is working to prepare its large population for the future, where 27.33% of citizens are under the age of 15 (Central Department of Statistics, 2016). Thus it is important to understand to what extent schools are preparing students to be active citizens in the future. In this respect, the overall picture from official documents do not give a complete picture. It only gives us an overall picture from a quantitative perspective. This to include expansion in enrolment, the number of schools for both genders, and large expenditures on education. As Nussbaum (2000b) points out, 'Years of schooling, everyone would admit, are an imperfect proxy for education' (p. 242). The other most used indicator is spending on education. However, this important input does not tell us about the process of education or the quality of the output (Bold et al., 2011, p. 1).

Some aspects of Saudi education pertaining to students' human development in education remain unclear and need further research. From the human capability perspective (Sen, 1999; Nussbaum, 2011) it is necessary to investigate students' opportunities for being well-informed citizens. In this view, we need to know whether students are able to build learning capabilities. That is how education can bring change about students' ability to think, to reason, and to be able to develop life learning skills. Also, we need to know whether students are able or not to build life capabilities through having an opportunity for participation in decision making at schools, and are healthy and safe. This study argues that improvement on these aspects can increase the potential of education in the development process. Stiglitz et al. (2010, pp. 72-3) highlight that the mainstream education policies fail to address ways to enhance student's human capabilities.

To understand the role that the Saudi education system can play in developing capable young people, the research problem is 'what are the challenges that face students in achieving their learning goals as well as maximising their human potential?' To address the research problem, the research questions are:

- To what extent is the education system directed to developing well-rounded human beings?
- To what extent are students able to achieve their learning capabilities?
- To what extent are students able to achieve their life capabilities?

1.6 Policy Context

The purpose of this section is to locate the research problem within its policy context. The policy context of this research is related to national and international efforts that recognise education as a central effort to achieve human development. At the international level, the

Millennium Development Goals and the UN Sustainable Development Goals put education as central in achieving universal development goals. At the national level, the National Education Policy (1969) and the Strategic Plan for Public Education (Ministry of Education, 2013) are the key document policies for public education in Saudi Arabia. Table 1.3 summarises these key policy documents.

Year	Policy document
1969	National Education Policy.
2000	The Millennium Development Goals (MDGs)
2013	The Strategic Plan for Public Education.
2015	The Sustainable Development Goals (SDGs).

Table number 1.3: The policy context of public education

At the international level, the Millennium Development Goals (MDGs) represent one of the leading efforts to advance development in different aspects. The second goal of the eight Millennium Development Goals is related directly to education. It is to 'achieve universal primary education'. Many countries around the world were inspired to achieve universal basic education for its children especially less developed countries where many children are left behind without the ability to read and write.

The Millennium Development Goals achieved its time line in 2015. Starting from 2016, the world approaches the next 15 years with 17 new development goals. The role of education in pushing forward sustainable development is now highly recognised in the United Nations new agenda for sustainable development. The Seventeen Sustainable Development Goals (SDGs) put 'Quality Education' as the fourth goal to achieve sustainable development by 2030. According to

the United Nations (UN), the fourth goal is to 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all' (2016). The goal for education in the international agenda for the next 15 years is consistent with the goal of this study which is about enabling Saudi students to become lifelong learners and to become well-rounded human beings.

In Saudi Arabia, the key relevant policy documents are the National Education Policy and the Strategic Plan for Public Education. Those two official documents support education for human development by an emphasis on education doing the right thing (Flood & Romm, 1996). Both the National Education Policy and the Ministry Strategic Plan stress that the purpose of personal education is to develop well rounded human beings who can make a difference for themselves, their communities and for national development. According to the National Education Policy, the education goal is:

Providing students with Islamic values, instructions and ideals, enabling them to obtain knowledge and various skills, promoting constructive behavioural inclinations, developing society economically, socially and culturally, and preparing individuals for becoming a useful member in building their society (National Education Policy, 1969, p. 5).

Based on the National Education Policy developed four decades ago, many educators count on the Strategic Plan for Public Education (Ministry of Education, 2013). According to the Ministry Strategic Plan for Public Education, the vision for Saudi general education until 2022 is as follows:

Student achieves their highest potential, have integrated personality, participant in community development, and affiliated to

their religion and their country, through high-quality education system (Ministry of Education, 2013, p. 16).

The strategic plan developed lately to provide new directions for the Ministry is designed to achieve its ambitious vision for Saudi students by 2022. The previous vision is in line with education for human development that this study attempts to explore. Figure (1.5) summarises the strategic goals for public education in Saudi Arabia until 2022.

•Enable schools and education departments for managing and directing development.

•Improving curricula, teaching methods, and evaluation to have positive impact on student learning.

•Providing equal learning opportunities and support systems for all students.

•Providing kindergarten education for all.

•Create a learning environment consistent with the requirements of learning in the twenty first century.

•Promote students' health, care, and build their character and discipline.

•Strengthen areas of cooperation with families and communities to support learning culture.

•Develop a teacher professionalism system.

•Increased technical efficiency in the education system.

•Improve governance, leadership, incentives, and educational policy to sustain school's development.

Figure number 1.5: The strategic goals for Saudi general education until 2022

Source: Ministry of Education, 2013

From the previous highlighted policy documents, it is evident that education is increasingly recognised as central to human development endeavours both nationally and internationally. The Saudi National Education Policy, The Ministry of Education Strategic Plan, The Millennium Developments Goals (MDGs), and The Seventeen Sustainable Development Goals (SDGs) share one message that education is more than education for human capital. It is about education that can bring to change in our lives. It is about the way people can positively contribute to development processes as well as living in ways that respect others and the environment. This strong commitment towards people's lives through appropriate policies will remain rhetorical if it has not been applied in the way it should be.

1.7 Aims and Objectives

This study investigates the ability of students to develop capabilities for the future in an increasingly globalised world. To realise this goal, students' needs are not just literacy and numeracy, but also include building the capacity to be good citizens in the future. Therefore, enhancing human development for students is the goal of the study and it examines how to achieve it in terms of expanding their capabilities. This research holds a Capabilities Perspective (Sen, 1999; Nussbaum, 2000a; 2011) and aims to enhance the delivery of education through making policy recommendations on ways to improve the life and learning capabilities of boys and girls in public and private schools.

By conducting case studies of public education in Saudi Arabia, this study has specific objectives. The objectives are to:

- **Investigate** policy and governance challenges that face the Ministry of Education to achieve education for human development.
- **Identify** if there are any disparities between provinces, the public and private sector, and between gender groups in terms of human development.
- **Provide** policy recommendations that promote human development in the education system.
- Enhance the role of education in human development outcomes for Saudi students.

1.8 Significance of the Study and the Contribution to Knowledge

It is important for every nation to graduate well-educated students who have the ability to participate positively in their country's development. In this respect, education systems need to show leadership to enable students to achieve their learning and life goals. Such understanding is important to guide policy interventions that respond to students' development needs. In this regard, this study provides more insight of how we evaluate the successful application of education policies. It is expected that this case study in education will contribute to improving the quality of education outcomes, in particular, for education to reflect positively in people's lives.

By highlighting the key challenges that face Saudi students, the contributions of the study also include the following:

- A better understanding of what it takes to achieve improved educational outcomes, not just in terms of academic achievement but also in producing well-rounded human beings.
- Thinking about how to achieve human development in terms of policy and governance, which requires thinking about the whole system and the environment in which it serves (the social environment and the ecosystem). The researcher hopes the study will

influence education policy in Saudi Arabia to develop and implement more policies centred around human development needs. It makes a case for policy makers, administrators' and teachers' roles to be focused on fostering human development to meet students' learning and development needs.

1.9. The research methodology

To understand the research problem and achieve the study objectives, the research applies a qualitative approach. Based on the inductive nature of the qualitative research, this approach can inform the way the study explores human development challenges in public education. According to Creswell (2009), qualitative research is 'a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem' (p. 4). Qualitative research also has the advantages of offering in depth descriptions and providing a detailed analysis of the human experience (Sarantakos, 2005, p. 45).

The design of inquiry utilises a case study approach. The case study of this research is the Ministry of Education in Saudi Arabia. The design of inquiry is concerned with public education in Saudi Arabia, which starts from kindergarten to high school. The qualitative tools that were used in the research include a contextual study of documents to review the different discourses, field notes, semi-instructed interviews and focus group discussions to address the views of different stakeholders.

The participants are officials in the Ministry of Education's head office and education departments, principals, teachers and students. The researcher collected data on three levels:

- 1. Policy makers in the Ministry of Education's head office.
- 2. Policy officers in education departments, spanning the Central Province (Riyadh) and one of the border provinces.

3. The researcher, in cooperation with education departments, selected eight high schools to conduct interviews and focus groups discussions. Due to the fact that schools in Saudi Arabia are single-sex institutions, the selected schools include schools for boys and schools for girls from each province from the public and private sectors. In the boys' schools, the researcher interviewed the heads of the schools and teachers. Focus groups discussions in each school were conducted with teachers and with students. The female co-researcher followed the same process for data collection in the girls' schools.

Chapter Three provides more details about the research methods including the process of data collection and the number of participants involved in the study.

1.10 Theoretical Framework

To understand human development in education, the study draws basically on the Capabilities Approach and the idea of expanding peoples' capabilities to achieve development (Sen, 1999; Nussbaum, 2000a; 2011). The focus is to identify challenges facing students to expand their capabilities in a way that students can improve their learning and their overall development. This approach had a great influence on human development studies across different disciplines. At the international level, it has had great influence on establishing the first Human Development Report from the United Nations in 1990. According to the Capabilities Approach, when judging development, we need to consider the principle of individuals as the end goal of development, not as a means to achieve specific results (Sen, 2003, p. 41). In this way of thinking about development, the question should be 'what is each person able to do and to be?' (Nussbaum, 2011, p. 18). According to Robeyns (2003, p. 6), 'Well-being and development should be discussed in terms of people's capabilities to function.'

The research problem in education has unique characteristics. To capture those characteristics, the study also consults education theory that supports the humanisation of the education process. More particularly, Critical Pedagogy (Freire, 1970; Giroux, 2011; Wink, 2011). Critical Pedagogy puts emphasis on the idea of education that fosters creating critical capabilities. This is in support of an understanding of the human-oriented process that reflects the wider role of education in development.

Also, to develop more understanding of the research problem, this case study of Saudi education also uses a system thinking approach. The system thinking approach that the study relies on is based on Critical System Thinking (Churchman 1971; Midgley, 2000; McIntyre, 2006; 2016). Critical System Thinking is defined by Churchman (1968, p. 231) as follows: 'A systems approach begins when first you see the world through the eyes of another'. The researcher applies the idea of appreciating different viewpoints in the study by using dialogue to create one shared area of concern. The study seeks to collect data from different people from different levels in the education system; the Ministry's head office, education departments, and schools. The study also represents diverse viewpoints from students, teachers, heads of schools, and officials in the Ministry and education departments. Also, the theoretical review includes the Gender Relations Approach (Kabeer, 1994) to enhance the life chances of girls through gender mainstreaming. Chapter two provide more details about the key concepts and the theoretical framework.

1. 11 Scope and Limitation

The term 'education system' in this study refers to public education in Saudi Arabia, which includes schooling from kindergarten to high school. This system operates under the Ministry of Education. The scope of the study includes different levels of responsibilities: the Ministry's head office, education departments, and schools. Eight high schools were selected from two provinces in Saudi Arabia; Riyadh, and one in the border province. Those schools include private and public schools for girls and boys. The scope of the study does not include international schools.

In term of research limitations, this study is based on a case study in a specific context. It seeks to examine and identify policy challenges affecting human development in the public education system in Saudi Arabia. The focus is on how expanding people's capabilities can improve students' learning and their overall development. For the purpose of this study, human development is defined in terms of expanding people's capabilities (Sen, 2003). One area of strength in the case study design is that it provides an in-depth understanding of the research problem. However, there are limitations on the generalisation of case study results.

1.12 Organisation of the Thesis

This dissertation has eight chapters. This chapter gives an outline as to what the thesis is about, the rationale for the research and how I will approach the study problem in terms of methodology and research methods. It also provides a brief overview and introduction to the thesis and outlines the research problem, objective of the study, significance of the study and its contribution to knowledge, and its scope and limitations. The context for the research has been highlighted in this chapter. It includes an overview of human development in Saudi Arabia, the structure of public education in Saudi Arabia, and the policy context for the study.

Chapter Two discusses the key concepts I am using in this dissertation. There, I discuss Critical System Thinking because this study has a system-oriented approach to education to look at service users and providers within the broader context of Saudi education. Also, the theoretical review includes theories that inform our understanding of human development in education namely; the Capabilities Approach, Critical Pedagogy, and the Gender Relations Approach. Chapter two also include the human development framework for this study which is based on Nussbaum's (2011) 10 central capabilities.

Chapter Three introduces the research strategy and design. It also discusses data collection procedures. In this respect, I give details about my fieldwork trip, recruitment strategy, and the number of participants. The data analysis process is explained in more detail in chapter three along with ethical considerations to protect participants' identities. Chapter Three also provides more details about my auto-ethnography which is self-reflection about me and how my experience informs the understanding of the research problem.

Chapter Four discusses findings related to challenges facing students in the Saudi public education to be perceived as a human capability. The focus is to answer the first research question: 'to what extent is the education system directed to developing well-rounded human beings?'

Chapter Five investigates the process of teaching and learning in schools. The purpose is to address the second research question: 'to what extent are students achieving their learning capabilities?' Therefore, the discussion is around findings related to challenges facing students to achieve their learning goals, in order to be critical and well-informed students.

Chapter Six provides detailed results about the challenges for fostering human development in education in terms of life capabilities. It investigates policies and governance

challenges that students face in maximising their human potential through giving opportunities for participation and improving their level of autonomy. It is also intended to address policies and governance challenges which students face in order to enjoy a healthy life, be safe, and have opportunities to create positive emotions and hope towards their learning. This chapter addresses the third research question: 'to what extent are students able to achieve their life capabilities?'

Chapter Seven address the challenges that face Saudi students in becoming well-rounded students using Critical System Thinking. The investigation is explored by using Ulrich's (1983) 12 questions that provide systemic analysis for social systems in terms of what is the case compared to what ought to be the case.

Chapter Eight is the conclusion for this study. The conclusion chapter highlights key findings, policy recommendations, and suggestions for further research.

2.1. Introduction

This chapter discusses the key concepts I am using in this dissertation, namely Critical Systems Thinking and the Capabilities Approach. Critical Systems Thinking (Churchman 1971; Ulrich, 1983; Flood & Romm 1996; Midgley, 2000; McIntyre-Mills, 2006) is the core approach used in this system-oriented approach to education which addresses service users and providers within the broader context of Saudi education. The a posteriori or Consequentialist Critical Systems Thinking Approach considers the current situation in Saudi education and then makes recommendations on what ought to be done in terms of public policy. For this reason I draw on the Capabilities Approach (Nussbaum, 2011) which is normative and based on the a priori norms to guide education. The Capabilities Approach focuses on shifting development perspectives based on what each person is able to do and to be: that is, to what extent people have the freedom to follow their dreams and to achieve their goals.

This chapter also reviews theories that inform the understanding of human development in education. Critical Pedagogy (Freire, 1970; Giroux, 2011) highlights what learning for human development is about. This is the process of teaching and learning that helps learners to be critical and well informed citizens in the future. The Gender Relations Approach (Kabeer, 1994) focuses on gender needs in development. Kabeer's approach highlights the different levels of institutions

for successful gender mainstreaming among gender groups. This chapter also presents the Human Development Framework used in this study, which is based on Nussbaum's 10 Central Capabilities. The last section of this chapter reviews the governance framework suggested by Stiglitz et al. (2010). The governance framework suggests a variety of integrated measurements that appreciates the wider perspective of education in human development, to ensure the process of education is achieving an education that expands student learning and life capabilities.

2.2 Critical System Thinking to Address Current Education and to Make Suggestions Concerning Education Policy

The thesis begins with the intention to ensure that students are learning to be capable citizens in the future for the good of themselves and their country. For this reason the thesis focuses on the need to address the challenge to enhance a critical thinking approach that challenges the traditional view of education. The approach addresses the needs of many stakeholders and at the same time provides the opportunity to work across many disciplines. Critical Systemic Thinking offers a comprehensive understanding of contemporary problems. It means thinking about whole complex situations which includes perceptions and meanings expressed by diverse stakeholders (Midgley, 2000, McIntyre-Mills, 2003; Burns, 2007). For the purpose of this study, it involves working with students, teachers, administration, and policy makers to reflect upon how to achieve education for human development. In this respect, the systemic view can integrate multiple views to ensure that quality of life for the students is addressed, and the curriculums are teaching them necessary skills. Such necessary skills include equipping them so that they can think socially and environmentally about the issues that they face in an increasingly globalising and challenging world.

Service users, providers and policy makers need to understand that education needs to support an understanding of our interconnectedness (Capra, 1996, p. 32). According to Capra (1996), it is important then to think of the interconnected and the interdependent of a social problem (p. 3). In education, System Thinking means thinking of learning issues in the classroom through the wider context of schools and the challenges which face each gender in order to achieve good learning outcomes. To appreciate the interconnected and interdependent in gender development means to appreciate cultural and social norms in a community.

Critical Systems Thinking addresses the contextual understanding of a greater whole to provide a creative solution to complex problems (Jackson, 2003, p. XIX). According to Midgley (2000), approaching social problems can be described as a systemic intervention if it meets at least three conditions. Firstly, it provides a boundary judgment for who is included or excluded from decisions related to the problem. Secondly, the systemic intervention should provide opportunities for different theories to explore the issue. Finally, the intervention should provide opportunities for engagement for people who have a stake in the problem (p. 104).

From the discussion in the preceding paragraph, we can see how important is to think systemically to solve social problems. The theoretical positions of System Thinking can make an important contribution to our understanding of the role of education in human development. It can provide a holistic understanding of the development of different aspects of human needs. It is necessary to include reasoning capability, and students' safety and health when thinking about preparing them well for the future (Nussbaum, 2011).

The understanding of social problems in System Thinking contrast the Reductionism approach. Reductionism is an old traditional view of thinking about a social problem. In the

Reductionism view, problems are seen as isolated from their context (Capra, 1996, p3). The Reductionism view was based on the dominant of scientific thinking in which A is caused only by B in way that separate A and B from its context (Flood, 1999, pp. 84-5). However, a social problem is not as simple as A is caused by B. One main criticism of Reductionism thinking is that it is a narrow way of thinking and perceiving social issues (Jackson, 2003, p. 11). By contrast, System Thinking appreciates how social problems need to be placed in their context and the important of drawing meaning from its connections. Critical Systemic Thinking also draws on multiple views to social problems. Thus, it has the potential to include a deeper understanding of a social problem to avoid the dogmatism of one single view to the problem (Reynolds & Holwell, 2010, p. 6). The advantage of System Thinking for engaging different perspectives brings us to Critical System Thinking (CST) as this study is concerned about how to bring different ideas and perspectives from service users and service providers to investigate human development in education.

To think about policy and governance challenges for human development in education, Critical System Thinking (CST) involves engaging people who have lived experience (Churchman, 1968). In other words, the emphasis is on testing out ideas not only with experts or top management officials, but also to include the perspective of individuals who experience the situation (McIntyre-Mills, 2008). In education, listening to the voices of students, teachers and building policies is a more inclusive process rather than the exclusion of people who face the problem. Extending the testing process ensures that the empirical evidence is rigorous and is not the result of a top down narrowly defined approach or narrowly framed research design and process.

Based on the work of Churchman (1971; 1979) Ulrich (1983) Flood (1999) Midgley, (2000) and McIntyre-Mills (2006), a boundary critique plays a central role in Critical System Thinking (CST). A boundary critique means to critically evaluate who is included or excluded from system analysis (Ulrich, 2005, p. 2). In the meantime, it provides a framework to apply Churchman's (1979) ideas of 'unfolding' and 'sweeping in' (Flood, 1999, p. 64). Unfolding is related to values, and according to McIntyre-Mills (2006), the systemic process of unfolding values is to understand that we see the world in a way which means that our understanding of reality is filtered by our own values and affected by our political, cultural, and environmental context. Thus, to overcome those limitations or 'enemies', we need to unfold values to understand a social problem and its context (p. 3). 'Sweeping in', on the other hand, is related to the context which refers to the process of making unfolding values possible by sweeping in ideas from a wider context (McIntyre-Mills, 2006, p. 3).

The work of Ulrich (1983) provides a practical framework to apply CST ideas of boundary critique and Churchman's (1979) ideas of 'unfolding' and 'sweep in'. Ulrich (1983) set 12 questions that critically describe the case and what ought to be the case for systemically investigating social issues. See table (2.1).

Sources of	Social roles	Specific concerns	Key problems	
influence	(Stakeholders)	(Stakes)	(Stakeholding issues)	
Sources of	1. Beneficiary	2. Purpose	3. Measure of improvement	
motivation	Who ought to be/ is the	What ought to be/is the	What ought to be/is S's	
	intended beneficiary of	purpose of S?	measure of success	TDI.
	the system (S)?			The
Sources of control	4. Decision maker	5. Resources	6. Decision environment	involved
	Who ought to	What conditions of	What conditions of success	
	be/is in control	success ought to be/are	ought to be/are outside the	
		under the control of S?	control of the decision maker?	
	of the conditions of			
	success of S?			
Sources of	7. Expert	8. Expertise	9. Guarantor	
knowledge	Who ought to be/is	What ought to	What ought to be/are regarded	
	providing relevant	be/are relevant	as assurances of successful implementation?	
	knowledge and skills for	new knowledge and		
	S?	skills for S?		
Sources of	10. Witness	11.Emancipation	12. Worldview	The
legitimacy	Who ought to be/ is	What ought to be/are the	What space ought to be/	affected
	representing the interests	opportunities for the	portunities for the	
	of those negatively	interests of those	is available for reconciling	
	affected by but not	negatively affected to	differing worldviews	
	involved with S?	have expression and	regarding S among those	
		freedom from the	involved and affected?	
		worldview of S?		

Table 2.1: The boundary critique and questions. Source: Ulrich & Reynolds, 2010, p. 244.

In education, Ulrich's (1983) 12 questions could be used to look at the purpose of education, describing key factors that affect the system. In the first round of analysis, the 12 questions are used to describe the current situation. In the second round of evaluation 'ought to be' is used to compare the analysis with what should be the case. The suggested status of the system 'ought to be' can then be used to make policy directions for the systemic intervention.

2.2. 1. Critical System Thinking in Policy Research

Critical System Thinking in policy research helps to address areas of concern by enabling participants to think through issues through asking questions and considering scenarios so that they can make policy suggestions based on considering the values of different stakeholders.

The approach uses dialogue to explore areas of difference and overlap and where possible to co-create an area of shared concern. The process enables decision making after ideas have been explored very carefully (McIntyre, 2003). For example, in education, the service providers and the service users may have different points of view based on the different interests they have. The question then is how do we narrow the perceived needs of the service providers and the service users to enhance education outcomes? Here Critical System Thinking can help in growing an area of shared understanding through conversations with different stakeholders to systemically test out ideas. The more we test ideas, the closer we get to the truth (McIntyre-Mills, 2006, p. 4). In education, the value of appreciating how an area of concern can be understood from many different points of view is important in thinking how to position young people in the global economy and digital world to appreciate and understand different arguments.

One way of applying CST in education can be found in the work Flood and Romm (1996) in which they articulate the idea of System Thinking in three learning loops. In their book *Diversity Management* (1996) they define System Thinking in terms of 'creating and managing diversity and tension rather than the traditional idea of manufacturing harmonious, perfect wholes' (Flood & Romm, 1996, p. 11). In contrast from the previous definition, diversity management here is not about management of human beings but management in terms of different discourses. Flood and Romm (1996) argue for diversity approaches in thinking about our thinking. This is thinking about different ontological and epistemological perspectives to achieve diversity for managing social problems. For this purpose, Flood and Romm (1996) introduce the triple loop learning as a way of engaging and thinking from different point of views and perspectives. The three loops of learning are:

i) Action learning Loop 1: Are We Doing Things Right?

This step involves considering whether the service providers are doing things right. The question addresses the process for achieving the system goals. In Saudi general education, for example, the goals of students and teachers is shaped by achieving specific outputs in terms of academic grades. Using this loop, students may ask: are they achieving higher grades? Teachers may ask whether they are helping students to achieve higher grades. The Ministry of Education and education departments may ask how well or badly schools are doing in achieving particular grades.

This learning loop is also helpful in thinking about the process of teaching and learning in schools together with service users and providers to investigate the current pedagogical approach and to help students to think critically. This step enables service users and providers to consider

whether the process of teaching and learning also contributes to helping students develop lifelong learning habits. These concerns are addressed in chapter five of this study. In chapter five, the process of teaching and learning is investigated in terms of to what extent are students able to be critical, to develop lifelong learning skills, and become well-informed citizens.

ii) Action learning Loop 2: Are We Doing the Right Thing?

This step considers questions about the goals and tasks of the organisation. In so doing, it explores the purpose of the system compared to actual practice. In Saudi public education, the question in this loop could be: is achieving higher grades the right goal? Alternatively, do we also need more than academic achievement to achieve better human development? This is because education is not about just achieving grades in a narrow functional sense. It is actually about creating well-rounded citizens being able to care about issues of the day such as the UN Sustainability Goals which is in line with Nussbaum's (2011) 10 central capabilities.

This loop is central in thinking about the purpose of the system which been addressed in Chapter Four. The main concern in Chapter Four is to answer the second research question 'To what extent is the education system directed towards developing well-rounded human beings?'

iii) Action Learning Loop 3: is Rightness Buttressed by Mightiness or does Mightiness Determine What is Considered Right?

This loop of learning asks about power in terms of in whose opinion and who decides? Is it only in the opinion of those who are an authority (power) who decide or does the decision include others who have a stake in the issue? To go back to the example of Saudi education, who decides what they are doing are important factors that demonstrate education outcomes. The purpose of

education being simply for getting higher grades is debatable, and this involves the process of getting people to learn specific materials so they can pass their exams. Issues of power and control are addressed in chapter seven in terms of Critical Systems Heuristics (CSH), the 12 questions designed by Ulrich (1983).

Triple Loop Learning (Flood & Romm, 1996) can enable better thinking about education policy. It explores the negative implications of rote learning and achieving grades in a narrow functional sense. It also can be used to explore the extent to which well-rounded citizenship is actually achieved, in order to create capabilities for current and future generations (Sen, 1999; Nussbaum, 2011). Achieving education that addresses human capabilities, however, cannot be achieved unless we transform our approach to education to use a more Critical Systemic Approach such as CSH (Ulrich, 1983) and Diversity Management (Flood & Romm, 1996).

2.3 Human Development

For many years, the standard way of thinking about development was limited to an economic view. That is, development needs to bring about progress in wealth and income. Many scholars, including Nobel Prize winners such as the economists Amartya Sen and Joseph Stiglitz, have challenged the idea of the economy being the only goal of development. For example, Sen (1999) defines development in terms of the freedom for people to achieve valuable outcomes (p. 292). Stiglitz (2002) argues that development is social change apart from a better use of resources and building capital (p. 27). He also points out the insufficiency of the economic view of development, which treats workers as if they were input that are much the same as other resources (p. 10).

To overcome the limitations of the economic paradigm, an alternative approach that support a wider view to development is needed. According to McIntyre- Mills (2013, p. 144) the way out of the traditional view to growth and progress is by expanding our view of development. In this way, one promising approach that exceeds the limitation of the economic paradigm to development is rooted in 'the human development approach' (See for example Sen, 1999; Nussbaum, 2011; McIntyre-Mills, 2014b; Fukuda-Parr 2003; Deneulin & Shahani, 2009). Development in the new approach is defined in term expanding people's capabilities (Sen, 2003). In other words, 'the worthwhile capabilities people value' (Alkire, 2010, p. 40). This view to the development approach is focused around people's needs, which give it more potential for application in different aspects of their lives (Alkire & Deneulin, 2009, p. 4). One potential implication is in education, and the ability to investigate how education can advance life chances of people, not only the market.

The Human Development Approach began to have practical applications in 1990 with the development of the first Human Development Index (HDI) by the United Nations. The first Human Development Report was based on measuring multiple aspects of people's lives, such as health, education, standard of living and income (UNDP, 1990). The units of analysis are human beings and their capabilities to achieve different functions in their lives. The key message of the first Human Development Report was:

People are the real wealth of a nation. The basic objective of development is to create an enabling environment for people to enjoy long, healthy and creative lives. This may appear to be a simple truth. But it is often forgotten in the immediate concern with the accumulation of commodities and financial wealth (UNDP, 1990, p. 9).

Through many years of publications, the Human Development Reports also address other development issues usually neglected by economic measures, such as sustainability, gender, and poverty². The wide variety of aspects related to people lives give development a wider view to overcome the old framework which was around economic growth and increasing the number of gross domestic product (GDP).

Measuring development in the new way of looking at development brings new ways of valuing our lives and the environment on which we depend. At the same time, it gives a different picture from what the mainstream economic development usually shows. For instance, economic growth in some countries does not match its human development, while some countries, despite their lower incomes, have achieved better levels of human development (See Human Development Report, UNDP, 1990). For instance, in 1990 Saudi Arabia achieved 'Medium Human Development' with the HDI value at 0.702. The report pointed out that what Saudi Arabia achieved in term of human development did not match its wealth and economic growth (UNDP, 1990, pp. 14-5). Recent indicators show how Saudi Arabia has closed the gap in its human development. Interestingly, rapid growth in human development has increased consistently over the last three decades despite the variation in the gross national product (GNP) (UNDP, 2015b).

When the United Nations introduced the term of human development in 1990 at the international level, the term was not widely used or recognised. Through the many publications of the Human Development Reports and the writing and research of many scholars such as Haq

² Each year the Human Development Report explore an in-depth one issue related to human development. This issue is usually used as the main theme for the report. For example, the Human Development Report in 1995 focused on gender issues in development. Poverty was the theme for the report in 1997. In 2011, sustainability was the focus of the report. The 2015 report, which the latest, is about 'Work for Human Development'.

(1995), Sen (1999), Nussbaum (2000a; 2011), and McIntyre-Mills (2014b), the term of human development has gained more recognition. Now, there is increased recognition of development as human development rather than wealth and economic performance. Most of the Human Development Reports terms and ideas influence measuring development around the world. For example, Saudi Arabia in cooperation with United Nations Development Programme (UNDP) produced its first national Human Development Report in 2003. The report shows human development indicators in health, education, labour and human resources, social care, and urban and regional development (Ministry of Economy and Planning & UNDP, 2003).

The movement to the Human Development Approach gained more momentum recently. An important contribution comes from the seminal work of the Commission on the Measurement of Economic Performance and Social Progress (Stiglitz, Sen, & Fitoussi, 2009). The commission was created for developing a more integrated view of development. One of the key messages of the commission's report was 'the time is ripe for our measurement system to shift emphasis from measuring economic production to measuring people's well-being' (p. 12). The commission also reframes the approach to development to focus on more integrated ways of achieving progress in terms of wellbeing (and not merely the economic bottom line) that highlights the need to measure our lives differently and makes the case along with Costanza et al. (2014) that development needs to protect society and our environment. Therefore, the basic assumption about development should be about making progress in different aspects of our lives not only in terms of the gross domestic product (GDP) (Nussbaum, 2011, p. 1).

2.4 The Capabilities Approach

The previous section highlighted how the Human Development view helped in developing a greater appreciation of individual and social progress in many aspects. One important contribution that roots the Human Development Approach comes from the Capabilities Approach (CA). The Capabilities Approach and its idea of human capabilities has become central in evaluating human development since the first Human Development Report was introduced (UNDP, 1990). The Capabilities Approach was developed by the economist Amartya Sen who won the Nobel Prize in 1998. Sen (2007) defines the Capabilities Approach as:

The capability approach to a person's advantage is concerned with evaluating it in terms of his or her actual ability to achieve various valuable functionings as a part of living (p. 271).

The Capabilities Approach in economic literature was a reaction to the Utilitarianism Approach, which focused on economic growth as a form of development and evaluation. Instead, the Capabilities Approach shifted the perspective and as a result, the evaluation focused on thinking about development. It shifted the emphasis to 'what people are actually able to do and to be', instead of measuring production to judge people's wellbeing (Nussbaum, 2003, p. 33). This shifts emphasis on people being ends in themselves to development and the argument for thinking about people needs in different aspects was usually ignored by the Utility Evaluation (Deneulin & McGregor, 2010, p. 509): for example, the ability of people to be healthy and well educated.

The Capabilities Approach emphasises the importance of our view on human development. That is, the motivational beliefs that stand behind development policies in the world. Our view to development as described by Sen (2003, p. 41) is that humans should be regarded as ends for

themselves not only as a means to achieve specific goals. Sen identifies 'capability perspective' as the best way that underlies a normative view of development (1999 & 2005). According to Sen (1999, p. 81) the Capability Perspective affects human development evaluation. Based on the change in the basic assumptions about development, education should play a wider role. The normative foundation for education policies should recognise the importance of education that develops overall human beings.

The Capabilities Approach criticises development evaluation that does not address people's capabilities. The example that Sen usually uses to explain this idea is about two people; one forced to face hunger and the other one who chooses to fast (Sen, 1999, p. 75). Both individuals have similar nutritional functioning but of course, they have completely different capabilities to choose. The one who has chosen to fast has the capability of eating. The other one has no choice other than to face hunger. The previous example illustrates the importance of evaluating people's capability when considering their level of development. On the other hand, the previous example shows how focuses on outputs and people's achievements may give a false picture about the quality of their lives. In this way, Sen (1987, p. 23) argues that development need to focus not merely on functioning but also on capability. A focus only on outcomes or achieved functioning leads to limited views about progress or the quality of peoples' lives (Walker & Unterhalter, 2007, p. 5). In education, focusing only on academic outputs, for example, hides the various abilities available to different students. Students in well-equipped schools with good teachers have more capabilities to achieve good results. On the other hand, students in less equipped schools with poor teaching have less opportunities to achieve good results. A focus only on academic results or 'functionings' will not tell us about unequal opportunity to access good education. It also covers different advantages or disadvantages for students to engage actively in making a difference in their lives.

The previous paragraph shows how freedom is an important aspect of the Capabilities Approach. In development planning and evaluation, it is crucial to consider enhancing peoples' capability to be and to do. In this way, the Capabilities Approach offers a theoretical framework for human development in terms of expanding people's capabilities (Sen, 2003). From this point of view, Sen (1999) argues that the Capabilities Approach has an extensive reach to evaluate social justice in human development compared to other mainstream approaches (p. 86). The most practical example Sen has used to explain the extensive reach of the Capabilities Approach is in the area of poverty analysis (see for example Sen, 1981; 1999). Sen (1981; 1985; 1999) argues for poverty to be considered as a capability deprivation more than economic indicators. The evidence he provides is from both developed and less developed countries. From a capability perspective, poverty is not merely the lack of wealth or resources, rather it is a limited ability to convert resources to utilities (Sen, 1999; pp. 87-110). Thinking of poverty as capability deprivation means thinking in terms of people's ability to convert resources to valuable outcomes especially for people with special needs (Sen, 1999, pp. 87-110). Using this new view of poverty, Sen shows how poverty may exist in developed and less developed societies clearly as a lack of basic capabilities, not only as a lack of income (p. 89). The previous example about poverty also shows how it is important for public policy to go beyond people's actual performance; the investigation should include their ability to be and do. Improving people's being and doing will lead to overcoming more than investment in resources and other means to well-being. In education, it means thinking of students' capabilities to use and benefit from a school's resources. Such understanding requires more empowerment for students instead of them playing a passive role in their schools.

The key terms that Sen used to illustrate his approach are 'capability' and 'functionings'. The notion of capability means the substantive freedom a person has to achieve his or her goals (Sen, 1999, p. 74), while the concept functionings describes achievements (Sen, 1987, p. 23). In education, writing and reading are examples of functionings whereas capability refers to having the freedom to achieve these literacy skills. Other important concepts in the Capabilities Approach are agency freedom. Sen (1985, pp. 204-5) describes being free to decide and having the freedom to be the agent responsible for one's life as so-called agency freedom. In human development, 'agency freedom' is moving from being passive recipients of development results to real opportunities for individuals to form their lives in line with their aspirations and goals (Sen, 1999, p. 11). That is, the ability of people to have a level of freedom to decide on their development.

Another important idea that the Capabilities Approach insists on is *value*. Capability and functioning have no meaning if it has no value for people. This how the Capabilities Approach gives attention to peoples' diversity of needs and their personal choices. People should be given the opportunity to decide what is important and what is not as important (Sen, 1999, p. 31).

People's choices and what they value, however, has its limitations. The limitations come from what been called the *adaptive preference* (Nussbaum, 2000a, 2011; Sen, 1999). The *adaptive preference* means some people adapt to unfair or poor life conditions (Nussbaum, 2000a, p. 135). As a result, people may report higher self-satisfaction, which may mask their suffering and struggles. In this case, the Capabilities Approach refuses to build social policies only based on people's reported satisfaction. The reason, according to Sen (1999, p. 62) and Nussbaum (2000a, p. 112), is because people may adapt to circumstances that may be lower than the threshold of human dignity and the basic rules of social justice.

The issue of adaptive preferences was evident in Nussbaum's (2000a) work about women's development in India. She found that women who have employment under poor working conditions with very low payment seem to be unaware of their unfair situations. In one instance, one woman who works in brick work does not complain about the lower payment she takes compared to men doing the same task (p. 18). Issues of adapted preference may happen in schools. Girls may adapt for having less time for physical activities. Students may adapt to devaluing their voices because they have been demotivated to take part in decisions related to their lives.

The Capabilities Approach emphasises equality based on fair circumstances for people to achieve their goals (Sen, 1999). In this respect, the Capabilities Approach stands in opposition to the Utilitarian Approach and people's adaptive preferences. Nussbaum (2011) goes even further in terms of defending a list of basic human capabilities. The ten central capabilities developed for human development are to be achieved by enhancing the capability for all human beings so they have voices and their basic needs have been met (see Nussbaum's Capabilities Approach in this Chapter/ Section 2.4.2).

The Capabilities Approach also gives attention to resources. The view the Capabilities Approach has to resources differs from a welfare approach to development. Resources are important but only as a capability input, not as the final goals of development. What is more important, however, is the ability for people to convert those resources to valuable outcomes (Walker, 2010, p. 900). In this way resources work as instruments to achieve functioning. In other words, resources are a means to enhance people lives, not an end in itself. For example, in schools, infrastructure is supposed to play its instrumental role in supporting student capability in learning as well as in other aspects of their human development. Students and teachers need to have freedom

to use and benefit from a school's resources in a way that improves their education and their human development.

Information and measurement as proxy for human development are important. Sen (1999) warns about information manipulation that may happen in the traditional way of evaluating people's development when the policy focuses on one indicator to evaluate people's capabilities (p. 132). The example Sen (1999) gives is using income as the basis for incentive to foster people's nutrition, health, or education. In times of famine, some families resorted to starving one of their children to get food aid on returns (pp. 131-2). In education, relying only on academic achievement in quantitative measurements may encourage students and school administrations to work to reach specific numbers that hide their individual struggles or other human development aspects such as health or safety.

The Capabilities Approach also stresses the need to avoid *tragic choices*. Tragic choice in human development occurs when people are forced to choose between two important aspects of their development. In other words, it is when social policies undermine an aspect of people's lives in order to give priority to the importance of another (Nussbaum, 2011, p. 37). In education, for example, tragic choices can happen when students have limited recess time that make them choose to eat their food at the cost of not playing and socialising with other students or the opposite scenario. From the Capabilities Approach point of view, policy makers have the responsibility to give students reasonable choices between play and nutrition in way that give them the ability to achieve balanced human development.

The Capabilities Approach influences development research and evaluation across different areas of human lives. At the international level, the notion of human capabilities has been

used in the Human Development Index since its inception in 1990. For example, the term 'expanding people's capabilities' was used in the first Human Development Report to discuss international development in life expectancy, literacy and basic incomes (UNDP, 1990, pp. 19-22). In addition, the Capabilities Approach has been used by different researchers to evaluate different parts of people's life spanning health, poverty, and equality. The research by Drèze and Sen (2013) on development in India presents an example of the Capability Approach in practice. By defining development as 'an expansion of people's basic freedom, or human capabilities', they identified many challenges facing India such as illiteracy, health issues, and inequality (Drèze & Sen, 2013, pp. ix-x).

2.4.1 Human development, capabilities, and thinking about education

In his book Reflections on Human Development, Huq (1995) questions the way social policy undermines the simple idea of development. He says:

After many decades of development, we are discovering the obvious-that people are the means and the end of economic development. Often, this simple truth gets obscured because we are used to talking in abstractions, in aggregates, in numbers (p. 3).

This view to some extent can be found in the way education policies frame students' learning in schools. While the role of education is to make a significant contribution to the life chances of all people, the traditional view of education emphasises on preparing people for work for the sake of economic growth (Unterhalter et al., 2007, p. 15; Walker 2005, p.104; McClure, 2014, p. 475). One major drawback of the economic growth paradigm to education is the limited view of the human role in development. This instrumental role limited the potential of education

to produce skilled labourers for the sake of increasing the production capacity of individuals and the economy (McClure, 2014, p. 475). Stiglitz (2002) points out that from the liberal globalist economic view to development, people are perceived as input much the same with other resources (p. 10). The result from this narrow focus on education has the potential of depriving people from the wider benefits education can bring to development. According to Sen (1997) 'Despite the usefulness of the concept of human capital as a productive resource, it is important to see human beings as ends in themselves and not merely in terms of a form of human capital' (p. 1960).

The shortfall of the economic approach to education reflect the needs for a development paradigm that provide a wider view of education apart from preparing people for work. One way to achieve the human development to education is through the Capabilities Approach. The fundamental idea of human beings as an 'ends' (Sen, 1999) can guide education policy to address human development in education in a more comprehensive way. Firstly, education has an intrinsic value to people and can be justified without thinking of its benefits (Unterhalter, 2003). This is the ability of people to be educated in a way that has meaning to their lives. On the other hand, education can bring instrumental value for people. For example, it can give them a good job and a decent income (Unterhalter, 2009, p. 208). Both views are important. It can help students achieve their instrumental goals of employment and at the same time address their learning and life capabilities. It is important to develop an understanding of the education role in enhancing the wellbeing of humans, not the GDP. This fundamental shift to education also needs to value the environment as an end in itself and not as a means to an end. Thus the intrinsic values need to be appreciated, rather than emphasising its instrumental benefits that are not sustainable. Whether or not education is successful depends on whether education is improving the short, medium and long terms conditions of lives.

By integrating the different roles that education can play, focusing on capabilities can help people to achieve proper development. The Capabilities Approach to education means students are able to achieve their learning goals as well as achieving their potential. The education role through the human development lens involves the full development of children's personalities, their capacity to benefit themselves and the community (Alkire, 2013, p. 14). Human Capability supports developing education policies based on human development that give education its benefits including preparing people for employment (Unterhalter, 2009, p. 214). This potential comes from the notion of capabilities and functioning which challenge the limitation of education for economic growth (Walker, 2005, p. 104). This capability perspective can help policy makers to overcome the limited view that education is merely for developing human resources for economic growth. On the other hand, this broader role of education takes into account issues like social justice in education, safety, and health. Walker (2010, p. 900 cites Sen, 2003) as follows:

While the capability approach accommodates an expansion of human capital approaches in which education is important as a means to developing human resources and agency for economic ends, it also emphasises the value of intrinsic ends.

Sen and Nussbaum's work has many examples of the intrinsic implication of education that can advance human development in different aspects. For instance, Sen (1997) points out that the full understanding of education roles in development needs to consider three interrelated roles; 'the well-being and freedom of people; their indirect role through influencing economic production: and their indirect role through influencing social change' (Sen, 1997, p. 1960). Nussbaum (1997, pp. 10-11) argues that education should cultivate three fundamental capacities:

a critical examination of one reality and life, world citizenship that includes common concern of global issues, and a narrative imagination of others' perspectives.

Preliminary work to apply the Capabilities Approach in education includes many scholars. Saito (2003) examines the Capability Approach potential for application within the education system, especially in the areas related to enhancing students' opportunities to exercise their capabilities. The paper concludes that:

Research on the relationship between the capability approach and education is necessary for the enhancement of both the approach and of education, since there is a crucial interrelationship and interaction between the two (p. 29).

Unterhalter (2003) focuses on the application of the Capabilities Approach in education to think about social justice. She distinguishes between two different point views in thinking about education using the Capabilities Approach as a theoretical lens. The first is that education should be thought about in terms of freedom, which is a student being able to achieve certain outcomes and being free to exercise their own agency. For example, the freedom to achieve academic success and being free from discrimination and insult. The second is in terms of functioning or achievement. For example, evaluating education in terms of schooling and academic achievement (pp. 6-7). She also emphasises on the benefits that the application of the Capabilities Approach can bring to education (p. 9). Another contribution also comes from Unterhalter et al. (2007). They discuss the mainstream approaches to education; namely: human capital theory, structuralist accounts of schooling, post-structuralist work, and ethnographic studies. They conclude that these approaches lack addressing human development needs in a broad view. They introduce the

Capabilities Approach as a way of thinking about human development in the education realm because it offers more potential to expand people's capabilities (p. 3).

In conclusion, the previous theoretical and practical applications show how the Capabilities Approach can be used to think about human development in education. The Capabilities Approach's emphasis is on human development for creating well-rounded human beings that have the ability to think critically and conceptually so that they can identify assumptions and values underlying different policy discourses. This is the starting point for an education that supports freedom not fundamentalist economics. The role of education capability, according to this view, is expanding people's thinking and learning capabilities in order to increase their opportunity to live a good life. The Human Development View to education is addressed in this study in Nussbaum's (2011) ten central capabilities. Nussbaum's approach to human capabilities provides a systemic approach to achieve this potential. Nussbaum (2011) acknowledges reasoning, sense, imagination, and thought as part of the ten central capabilities (pp. 33-4). This includes achieving learning goals that give students the ability to be creative and critical. In the same time Nussbaum's approach provides a holistic approach upon which to support essential capabilities for human development. This includes policy perspectives that appreciate education for social and environmental citizenship. It also has to include students being able to voice their learning and human needs, being healthy, safe, and being able to create positive emotions toward their learning. Further discussion about Nussbaum's approach is in the next section.

2.3.2 Nussbaum's Approach for Human Development: Creating Capabilities for Young People

Amartya Sen (1999) focuses on human capability as a general term for development. Much of his previous work was on economy and poverty reduction (see for example, Sen, 1981; Drèze & Sen, 1989; Sen & Anand, 1997). Sen sets out his ideas to remain general to development and does not support the idea of having a complete list for which capabilities we need most for human development. His main concern is such a list might not be applicable in different contexts and prioritising capabilities, suggesting the most important needs should to be left to be decided by the people (Sen, 2005, p. 157). In contrast, Nussbaum, a humanities philosopher, is more normative in her approach and concentrates on the basic principle of human capabilities. Nussbaum, who worked with Sen previously on investigating capabilities for human development (Nussbaum & Sen, 1993), developed a list of ten central human capabilities (see Nussbaum, 2000a, pp. 77-80; 2003, pp. 41-42; 2011, pp. 33-34). She developed her approach when investigating women and development in India. Nussbaum's approach insists on human dignity to be achieved through creating a basic number of capabilities. Nussbaum defines central capabilities as follows:

Taking a stand for political purposes on a working list of functions that would appear to be of central importance in human life, we ask: Is the person capable of this, or not? We ask not only about the person's satisfaction with what she does, but about what she does, and what she is in a position to do (what her opportunities and liberties are). And we ask not just about the resources that are sitting around, but about how those do or do not go to work, enabling [people] to function in a fully human way (2000a, p. 71).

The ten central human functional capabilities cover wide aspects of life that are essential for all human beings and at the same time are also relevant to other sentient beings (Nussbaum, 2011, pp. 33-34). The government, through appropriate policies, has a role to protect these capabilities and to make sure that people are living beyond its threshold (2011, p. 79). These ten central capabilities are (1. Life; 2. Bodily health; 3. Bodily integrity; 4. Senses, imagination and thought; 5. Emotions; 6. Practical reason; 7. Affiliation; 8. Other species; 9. Play; 10. Control over one's environment). Below is a detailed discussion of these capabilities and its application within the frame of this study:

Life. This is the first capability on the list. In this capability, Nussbaum (2011) defines life in term of being free from factors that cause immature death, or not being able live until a late age. As Nussbaum puts it, life capability is:

Being able to live to the end of a human life of normal length; not dying prematurely, or before one's life is so reduced as to be not worth living (2011, p 33).

Life capability was among the three basic capabilities that Human Development Index has measured since it was put in practice in 1990 (UNDP, 1990, p. 1). In Saudi Arabia, morbidity and mortality were high at the time of the unification of the country in 1932. The country was able to improve life capability over time. The average of life expectancy increased from 53.9 in 1970 to 72.7 for women and 70.3 for men (Ministry of Economy and Planning & UNDP, 2003, p. 47).

In education, life capability is relevant to all people. It is central to human development and needs protection in any setting, including schools. In this respect, students need to be free from factors that cause early death. It also means students are able to go to school in a safe

neighbourhood. Facing the risk of death in front of their schools as a result of the lack of road safety is an issue. Students' life capability is addressed in Chapter Six/ Section 6.6.

Bodily health. Being healthy according to Nussbaum (2011; 2000a) includes the ability to have good nutrition, good living standards, and being able to maintain one's health:

Being able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter (Nussbaum, 2011, p. 33).

The previous definition of what it means to be healthy is constant with the World Health Organization's (WHO, 1946) definition of health which is 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'. Health capability has been recognised and measured internationally by the Human Development Index (HDI) since 1990. Health indicators are also among the United Nation's Millennium Development Goals (MDGs) which are to reduce child mortality, to improve maternal health, and to combat HIV/AIDS, malaria, and other diseases. In education, health is central to education for human development. It includes the ability for students to be healthy, well-nurtured, and physically fit. Health also has an instrumental role in achieving a good education. Good nutrition plays an important role in building students' abilities to understand and communicate during their learning in schools. Students' capability for health is discussed in chapter six. The purpose is to investigate challenges students face in nutrition and physical activities.

Bodily integrity. Nussbaum defines bodily integrity in terms of:

being able to move freely from place to place; to be secure against violent assault, including sexual assault and domestic violence; having opportunities for sexual satisfaction and for choice in matters of reproduction (Nussbaum, 2011, p. 33).

This capability highlights the important of being safe, to move from one place to another, and being able to protect one's body from physical and sexual assault. Being safe at schools has intrinsic value. Bodily integrity of students should be protected against risk, bullying, and violence. It also means students being able go to and from school without having fear for their life and fear for their safety. Safety also has its instrumental importance. For education, it affects students' capability for having a good education. We cannot imagine successful learning in an environment where students are bullied or their life is at risk. Building on this important for education, and to protect bodily integrity, schools need to be free from sources of harm. In Chapter Six (Section 6.6), I present the challenges boys and girls face for safety and mobility inside and outside schools.

Sense, imagination, and thought. Nussbaum (2011) defines this capability in terms of the ability for using the mind in creative activities like imagination and thought. She points out that this capability is about:

Being able to use the senses, to imagine, think, and reason—and to do these things in a "truly human" way, a way informed and cultivated by an adequate education, including, but by no means limited to, literacy and basic mathematical and scientific training. Being able to use imagination and thought in connection with experiencing and producing works and events of one's own choice, religious, literary, musical, and so forth. Being able to use one's mind in ways protected by guarantees of freedom of expression with

respect to both political and artistic speech, and freedom of religious exercise. Being able to have pleasurable experiences and to avoid non-beneficial pain (Nussbaum, 2011, p. 33).

Nussbaum stresses the importance of education systems in cultivating this capability. Therefore, education should play its role in building creativity and innovation among students. This demands teaching and learning that goes beyond passing knowledge in passive way. Imagination capability could be achieved by getting students to think differently in order to position themselves for a better future. That is, to be able to communicate their ideas in a critical way, to reflect on their learning and to pose problems that have relevance to their lives (Freire, 1970).

To cultivate sense, imagination and thought, education also needs to place emphasis on lifelong learning and well-rounded human beings instead of narrowly defining success in terms of grades success and learning for the sake of passing tests and exams. In this respect, students need extracurricular activities to enhance learning for the sake of learning such as sport, involvement in cultural activities, and school visits to places of cultural, historical or natural interest. This will help students to connect with people in communities that are increasingly diverse and in connecting with the natural environment. This is the opposite of focusing learning on achieving narrowly defined learning outcomes, in which the task oriented approach of teachers is to get students to comply with limited performance requirements.

The policy aspect of supporting appropriate educational curricula should support the purpose of education and overall human development, to ensure that students are learning to be capable citizens in the future for the good of the country. Building education that enhances creativity and innovation is also good for the economy in the long run. In Saudi Arabia, the Page | 60

economy is dependent on natural resources especially oil, which is not sustainable and also creates many environmental issues. The education system should play a central role in building an agile, innovative, and sustainable economy.

The challenge for the Saudi education system is to equip students with sense, imagination, and thought capabilities. This is addressed in Chapter Four in terms of encouraging students to view education as a capability not merely as a certificate and a means to achieve employment, despite these being important goals as well. Chapter Five addresses to what extent students are able to achieve their learning capabilities in terms of learning evaluation, curriculum, and pedagogy. These are the challenges boys and girls face to be well-informed students who will be capable of lifelong learning. This will enhance their preparedness for being participants in development. In this respect, education can build on the efforts to address some of the challenges put forward by Stiglitz et al., (2010) about the needs for promoting the wellbeing of future generations.

Emotions. Nussbaum defines emotions as follows:

Being able to have attachments to things and people outside ourselves; to love those who love and care for us, to grieve at their absence; in general, to love, to grieve, to experience longing, gratitude, and justified anger. Not having one's emotional development blighted by fear and anxiety. (Supporting this capability means supporting forms of human association that can be shown to be crucial in their development) (Nussbaum, 2011, p. 33).

In education students need to develop a sense of attachment to their school. One way to help students create positive emotions towards schools and learning is through empowerment.

Empowerment increases the level of positive emotions and engagement among individuals (Hyden Page | 61

et al., 2004, p. 19; Woodall et al., 2010, p. 27). For this to occur, students need to be part of decisions made in their school. They also need some control over their learning, and to be able to choose among different subjects. It is also important that they can follow up many learning and research opportunities. Achieving this capability is far from being achieved in the top-down approach of learning with little opportunity for informal learning. All these concerns that limit students' opportunity to be able to create positive emotions in schools are discussed in more detail in this thesis in Chapter Six.

Practical reasoning. To be critical according to Nussbaum is:

Being able to form a conception of the good and to engage in critical reflection about the planning of one's life. (This entails protection for the liberty of conscience and religious observance.) (Nussbaum, 2011, p. 34).

As practical reasoning is important to human development, it is also central in education. To achieve this capability in education students needs to be able to test out ideas in a critical way, and to build good perceptions that inform their actions and decisions. As part of human development for students, students also need to function effectively as critical thinkers in a globalising world where they need to navigate across different ways of knowing across many disciplines and cultures. Young people also need to be able to make sense of data as basic information that needs to be interpreted through critical analysis. Sen (1999) makes a similar point when he puts emphasis on the role of education as not simply a means to give students the ability to read and write but also positively influences their ability for decision making and informed choices (Sen, 1999, p. 294). Achieving this capability in education includes students accessing a wide range of readings and texts that help them to advance their critical reading and understanding.

Also, knowledge should be taught in a way to help students to think critically. Hence, learners should play an active role in transforming knowledge through dialogue, communication, and problem posing (Freire, 1970; Giroux, 2011). The challenges students face to develop critical thinking is highlighted in terms of the limited opportunities to express personal ideas, to read widely and to apply their conceptual and analytical skills to examples. These limitations on practical reasoning are addressed in Chapter Five.

Affiliation. The ability for people to create a sense of belonging to others and to institutions is central to Nussbaum's list of central capabilities. She defines affiliation in terms of:

Being able to live with and toward others, to recognize and show concern for other humans, to engage in various forms of social interaction; to be able to imagine the situation of another. (Protecting this capability means protecting institutions that constitute and nourish such forms of affiliation, and also protecting the freedom of assembly and political speech.) (B) Having the social bases of self-respect and non-humiliation; being able to be treated as a dignified being whose worth is equal to that of others. This entails provisions of non-discrimination on the basis of race, sex, sexual orientation, ethnicity, caste, religion, national origin (2011, p. 34).

The growing number of social clubs and social institutions combined with advances in technology give people in Saudi Arabia more opportunity to be part of the increasingly connected world. To define affiliation in education, it is important to notice that many educators including Freire (1970) and Giroux (2011) emphasise the importance of students being able to relate to their culture through culture relevance teaching. The central learning that the Ministry of Education follows raises concerns about students' capabilities to be linked to their local culture, community,

and their environment. Chapter Five investigates curriculum relevance among students and educators. Another way in enabling affiliation in schools is through empowering and increasing students' participation in decision making at schools. Chapter Six investigates in more detail the issue of students' empowerment and participation in schools.

Other species. Nussbaum defines this capability as follows: 'Being able to live with concern for and in relation to animals, plants, and the world of nature' (2011, p. 34). In this capability Nussbaum extends rights to other sentient beings and not only human beings. She also stresses that human capabilities are fostered by having an environment that is ecologically sound and protected.

This capability gives the list an environmental concern and at the same time recognises the right of non-human creations. Climate change and an increased level of pollution around the world has put more pressure on education systems to adapt to changes and be part of the solution, not the problem. Saudi Arabia is not exceptional here as there are a number of environmental issues that impact on the quality of life of people along with plant and animal habitats. Waste management, water scarcity, desertification and sand encroachment are examples of some key pressing environmental issues in Saudi Arabia (Ministry of Economy and Planning & UNDP, 2014, pp. 88-92). Its higher dependency on oil and natural resources also raises the need to think about the future in a new post carbon future. The education system in Saudi Arabia needs to be central in the efforts to mitigate increased levels of environmental risks. When we think about education, we think about equipping young people and the positioning education system to address the ways to enhance the overall sustainability of Saudi Arabia. In this respect, schools need to teach students how to connect with the natural environment. In particular, to understand the systemic importance of

protecting and re-generating the environmental conditions that enable food and water security to be maintained. This is an important lifelong learning skill and vital for human sustainability. The fundamental shift in education also needs to be in valuing people and the environment as ends in themselves and not as a means to an end. Thus the intrinsic values need to be appreciated, rather than emphasising its instrumental benefits that are not sustainable.

Whether or not education is successful depends on whether education is improving in the short, medium and long term. This is an important lifelong learning skill, but it is also vital for human sustainability. The wider understanding of education extends its role to deal with global issues such as sustainability and environmental problems that affect our capability to live a better life. It is education that supports thinking and that builds emotional capacities which are helpful to tackle global issues of the wellbeing of the planet (McIntyre-Mills, a; b; c, 2014). Education that promotes thinking is important to tackle increased levels of climate change. Thinking also plays a vital role in moving our society towards more sustainable living. People are trapped in limited thinking as the result of their activities and do not think about how their social, economic and environmental choices make an impact on protecting or undermining the environment of which they are a part (McIntyre-Mills, 2013). This has implications for the way in which we see ourselves as citizens versus ecological stewards beyond the limits of the nation state (McIntyre-Mills, 2010a). Part of students' education capabilities is to have the necessary understanding of what is required to protect wellbeing stocks for future generations and to equip them so they can think socially and environmentally about the issues that they face. Curricula need to enable students to think about ways to protect the environment and the global common through drawing thinking about the UN Sustainable development goals and through re-thinking our rights and responsibilities within and beyond the boundaries of the nation state (McIntyre-Mills, 2010a; b).

Play. Nussbaum (2011) recognised pleasure and recreational activities as a basic human capability. Play capability is defined in term of 'being able to laugh, to play, to enjoy recreational activities' (Nussbaum, 2011, p. 34). Nussbaum (2011) argues for play to be part of her list because of the value and contribution it has for living life (p. 36). The same importance of leisure time to play and recreate has also been highlighted by the Commission on the Measurement of Economic Performance and Social Progress (See the Report by the Commission on the Measurement of Economic Performance and Social Progress, 2009, p. 131).

Being able to play and having time for leisure activities is important especially in increased urbanised and congested cities in Saudi Arabia. To protect this capability in education, students need time and space to play and socialise. However, the short time school day and focus on academic achievement in a narrow way raises concerns about to what extent learning in schools recognise the importance of leisure activities. This capability is addressed in Chapter four in terms of whether learning in schools is broadly defined in term of developing well-rounded human beings. In this view, education should give students more opportunities for extra-mural or extra curricula activities. Extra-mural activities can increase learning opportunities and provide recreational benefits to students. It may include sport, involvement in cultural activities, drama, art classes and visits to places of cultural, historical or natural interest. This broad and capability based view is the opposite of education that is narrowly defined only in terms of focus on achieving narrowly defined learning outcomes. Play capability is addressed again in Chapter Six. The purpose is to highlight challenges facing students to achieve this capability in terms of school infrastructure and time to play and socialise with other students outside a formal classroom setting.

Control over one's environment. This is the last capability in the list. Nussbaum places importance on empowerment in this capability by emphasising the necessity of participation to give people the capability of being able to take part in decisions related to their lives. She recognises that each human being should have the right to work on ways that enhance their quality of life and living. Nussbaum recognises control over one's environment in two ways as follows:

(A) Political. Being able to participate effectively in political choices that govern one's life; having the right of political participation, protections of free speech and association. (B) Material. Being able to hold property (both land and movable goods), and having property rights on an equal basis with others; having the right to seek employment on an equal basis with others; having the freedom from unwarranted search and seizure. In work, being able to work as a human, exercising practical reason and entering into meaningful relationships of mutual recognition with other workers (2011, p. 34).

Being able to take part in decisions related to people's lives is a central capability. Sen (1999) highlights the importance of involvement and participation of people affected by development decisions. He states:

If a traditional way of life has to be sacrificed to escape grinding poverty or minuscule longevity, then it is the people directly involved who must have the opportunity to participate in deciding what should be chosen (p. 31).

The efforts to develop a list of basic-or central-capabilities in education also recognise the capability of students to voice their needs as part of their basic human development (see for example Biggeri 2007; Terzi, 2007; Walker, 2007). Education plays a vital role in empowerment

and participation. Firstly, by preparing students for active participation in community development, as the aim of education is to prepare students for the future, engaging in discussion about learning and choices is important to build their future capability for reasoning in public debate (McIntyre-Mills & De Vries, 2013, p. 450). Also, students learn participation by practicing participation. Schools are expected to assist children to build participation capabilities for students to play a positive role in development in the future. Schools need to give students the opportunity to experience participation and how they can together work for change. It is also important to learn team work and communication. Moreover, to learn how change can be made through discussion and cooperation, not through force or violence. Thus, it is important to apply processes that enhance and empower the voices of students when engaged in learning. This research explores the extent to which the school empowers students through giving them some level of control and giving them the opportunity to be involved in the school system in Chapter Six.

Empowerment also can be addressed by giving staff, teachers, and students the opportunity to voice their concerns and be part of change. Participation provides the opportunity for people to give their opinion about various issues related to their lives. Through active participation, students can achieve better educational outcomes. In this respect, participation help to shape better policy design and implantation by narrowing the gap between service providers and service users. For human development to be achieved, staff, teachers, and students need to speak out strategically. This is based on the principle of subsidiarity which requires decision making at the local level and it is informed by Ashby's Rule of Requisite variety which requires that the complexity of a decision is matched by the complexity of the decision makers and that a suitable e variety of participants are included in the process (Ashby's Rule, 1956). People who are to be affected by Page 1 68

decisions ought to have a say in a decision making process (McIntyre-Mills, 2010a, p. 23). This capability is addressed in chapter seven as part of Critical System Heuristic (CSH) 12 questions (Ulrich, 1983). The analysis investigates to what extent the Ministry of Education involves stakeholders in decision making process including students, teacher, and staff.

The previous discussion of the 10 central capabilities shows the interrelated relationships among the capabilities. For example, empowerment capability can have a positive impact on people's emotions. Building students' capabilities for thinking and reasoning can enhance the way they think about their health and their environment. The interrelated relationships between human capabilities require systemic intervention that appreciates the interconnection of our needs (Midgley, 2000; McIntyre-Mills, 2006).

2.4.2 Human Development Framework: Applying Nussbaum's Capabilities Approach in Education

As previously discussed, Nussbaum's Capabilities Approach provides a holistic theory upon which to support policies for human development. By arguing for central capabilities as being a system of universal accountability for human development (Nussbaum, 2000, pp. 34- 110), Nussbaum's Capabilities approach can provide a basic understanding of human development in education. The list is quite general, and this gives it more flexibility to be applied in different contexts. The approach thus provides a framework through which policy makers and administrators could expand the role of education and at the same time provide a good life for students; to achieve an education that supports the development of well-rounded human beings who have the capacity to benefit themselves and the community (Alkire, 2013, p.14).

The way the 10 central capabilities are applicable in education can have two important applications. The first is the potential the list has to the process of teaching and learning. Nussbaum (2000a; 2011) raises in her list the way education can be a process for human development through emphasis on thinking in achieving a meaningful education. That is, learning in a way that emancipates the mind and gives people the ability to question their choices. In particular, the intrinsic value of education can be linked to two central capabilities from the list: 'Senses, Imagination, and Thought' and 'Practical Reasoning'. For the purpose of this study I call it 'Learning Capabilities'. That is the ability of people to be educated in a way that has meaning to their lives. From this perspective, students need to build the ability to be creative, to reason, to imagine, and to be critical.

In creating the so-called learning capabilities, students can understand ideas in a critical way and be able to transform their life through meaningful learning. In this respect, it helps us to ask questions like whether students have the opportunity to develop the intrinsic aspect of education: are students able to create creative and critical thinking abilities? Are students able to access a body of knowledge that gives the opportunity for meaningful education? Walker (2009) argues that when applying human development to education, it is important learning is aligned with the fundamental ideas of being critical as a way to humanise learning (p. 334). The work of Nussbaum on higher education in the United States and for public education in India emphasises this intrinsic value of education and the wider understanding of the role of education in human development (Nussbaum, 1997; 2006).

The remaining capabilities build the theoretical base for protecting human dignity in the general view of the notion of basic human capabilities. In this wider implication, I call it 'Life

Capabilities'. The general view is when the Capability Approach is used to investigate the quality of life and other important capabilities that are essential for all human beings in an education setting, for example, health, safety, and empowerment. This view is related to human capabilities in a general perspective 'by the virtue of their humanity' (Nussbaum, 2011, p. 62). Life capabilities are still relevant to students and worth protection in any education setting. Nussbaum (2011, p. 36) argues that all people should be entitled to all the ten capabilities, and people should be placed higher than its thresholds. Thus the role of public policy in promoting health and providing a decent life for students is a fundamental requirement. Life capabilities can be used to address such concerns.

The following figure (2.1) presents the conceptual application of Nussbaum's ten Central Capabilities in education:

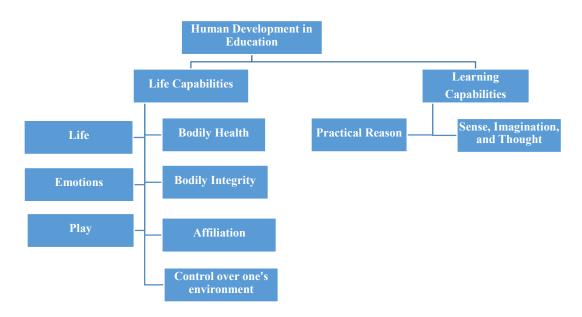


Figure 2.1: Conceptual framework of Nussbaum's Capabilities Approach to education

The conceptual framework of Nussbaum's Capabilities in figure (2.1) is an attempt to provide an understanding of human development in education. 'Learning Capabilities' present the potential intrinsic education can provide in creating capabilities for critical thinking, reasoning, and imagination. The second aspect of human development in education is 'life capabilities'. 'Life Capabilities' address human development needs from a wider view, for instance, being safe, being healthy, and people being able to voice their needs. 'Learning Capabilities' and 'Life Capabilities' together can support the efforts of students to become fully rounded, educated citizens who understand their rights and responsibilities to others and the environment on which they depend.

2.5 Critical Pedagogy: How Education Helps Students Become Well-informed Citizens

Critical pedagogy is an approach that investigates education processes and practices to address the question: to what extent does education empower people to become well informed citizens? The first contribution comes from Paulo Freire and his seminal work *Pedagogy of the Oppressed* (1970). Freire discusses how education could be used as a process of development and freedom. Education for freedom develops a critical consciousness enabling students to consider their views, the nature of ethics, and how problems are framed (Freire, 1970, p. 37). In this way, Critical Pedagogy is not only concerned with teaching methods used traditionally in the classroom but also provides an alternative approach to think about education (Wink, 2011, p. 1; Giroux, 2011, p. 155).

One way to apply the critical view about education is to ask about how education could empower people to be critical and become active participants in the development process. In this way, the intrinsic role of education in human development goes beyond acquiring literacy skills but also the ability to reflect critically on learning. According to Freire (1998):

If learning to read and write is to constitute an act of knowing, the learners must assume from the beginning the role of creative subjects. It is not a matter of memorizing and repeating given syllables, words, and phrases, but rather of reflecting critically on the process of reading and writing itself, and on the profound significance of language (p. 485).

From the previous quotation, the idea of critical pedagogy thus is for education that creates and builds critical consciousness. In this way, people can obtain the critical ability to diagnose their problems and challenge implicit assumptions (Kincheloe, 2000, p. 24). It fosters thinking in the classroom so students can think socially, economically, and environmentally. It is the opposite of learning practices where students are passively listening and where curriculums do not address their human development needs.

In shaping education as an empowerment process, Critical Pedagogy asks questions that challenge the norms and beliefs of education systems models around the world (Burbules & Berk, 1999). For example, critical pedagogy asks questions about who has control over knowledge and what normative ideas frame an education system (Giroux, 2011, pp. 169- 172). It also asks about mainstream ideas in education and if it represents student diversity and needs (Wink, 2011, p. 69). In this way, we can investigate whether learning in the classroom has any relevance to a student's identity, culture, and needs, or whether it does not.

Critical Pedagogy stresses the importance of building the consciousness of learners. In doing so, it refutes a learning practice that does not motivate the use of critical abilities such as

memorisation and passive learning. Freire (1970) use the concept *banking education* to describe teaching that does not stimulate critical abilities for learners. He calls it banking education because it is like a deposit process when the teacher deposits information in students' minds (Freire, 1970, pp. 52-54). In this case, students save and repeat information without thinking or reflecting about what they learn. According to McKay and Romm (1992), 'banking education' or 'jug and mug' teaching happens when educators assume that students' minds are empty and need to be filled with information. Based on this premise, the teacher is the only knowledgeable person in the classroom. A student's role is limited to perceive this knowledge passively without critical understanding (p. 30).

Education for human development, however, needs a teaching approach to help students to develop critical and thinking skills. In this regard, the dehumanisation and limited results of banking education made Freire (1970) suggest an alternative approach. Learning in the alternative approach is based on what he calls *problem posing education*. Problem posing education stands for the opposite of banking education. The difference between banking education and problem posing are in the way in which the latter provides more opportunity for students to raise their critical consciousness than the former. With problem posing practice, students learn not to hide their reality. In doing so, problem posing education recognises the importance of linking people to their ontological world or getting students to think about the process. Also, problem posing helps students to become critical thinkers through getting them to think about the problem and then to communicate their understanding in dialogue with their peers and their teacher (Freire, 1970, pp. 64-5).

Dialogue is central to problem posing education. Freire (1970) insists on dialogue to build active communication between teachers and learners (p. 60). Through communication, education becomes a participatory relationship in which a teacher and learner exchange their roles; the student can become a teacher and the opposite can happen (p. 61). Dialogue also needs to be practiced in a critical way. Without critical thinking, the dialogue has no meaning according to Freire (1970, p. 73). For example, Bode (in Freire, 1970) uses Freire's method of problem posing in teaching peasants communities in Chile. What he found is that peasants give full attention to learning that discusses themes from their environment. On the other hand, peasants lack interest and motivation in learning when the topic has no meaning to them and their needs (p. 97).

To bring forward ideas of problem solving and dialogue from mere theoretical concepts to a reality, Freire gives a practical method of how educators can apply problem posing in the classroom. He calls it 'generative themes'. Generative themes exist from real world situations, through which an educator attempts to understand the world of learners and bring real examples from their struggles (pp. 77-8). Freire gives more examples on generative themes in his book Education for Critical Consciousness (1974). He provides illustrated pictures of real life situations as examples of how educators can use problem posing practice in the classroom. For example, in one situation, the illustration shows a man working in the field with one hand holding a shovel and the other holding a book surrounded by his family (Freire, 1974, p. 59). This situation is captured from the real lives of peasant communities. In this way, it provides more opportunity for the teacher to links peasants to their environment and provides two ways for communication and dialogue. In Saudi Arabia, the country has diverse cultures with people around the country living in different environments. The challenge for learning in the classroom is to address those diversities. In this way, teachers can link students to their learning and foster thinking and dialogue in the classroom.

To give more opportunity for dialogue and generative themes, Critical Pedagogy argues for less control over knowledge. For example, Kincheloe (2008) criticises control over knowledge from a dominant power. Giroux (2011) also refutes control over information in a way that limits teachers' and students' abilities to bring knowledge, ideas, and problems from their real world (pp. 5-6). Freire (1970) also supports this view. He argues that knowledge can be achieved through human life experience by creating and recreating ideas and information and through communicating with the world (p. 5). According to Giroux, (2011, p. 7) control over information in the classroom results in students consuming knowledge instead of making meaning from it in a transformational way. Thus, pedagogy practice needs to appreciate students' knowledge. The knowledge that students bring to the classroom is important and teachers have the responsibility to link pedagogy to the wider context of students' lives and social problems (Giroux, 2011, p. 6; 2004, p. 500). By emphasising linking education practice to students' lives, the goal is to raise their awareness of themselves and their situations. Relevant education can also be used to link students to their environment for a better way of tackling increased environmental pollution (Romm, 2016).

The Critical Pedagogy point of view to education supports human development, and has influenced education practice around the world: in particular, in the way it empowers poor and marginalised people. Freire himself used it to emancipate peasant communities in Brazil. The following quotation explains how education empowers peasants to realise their own situations, which is beyond merely improving their literacy:

How can I teach peasants in Brazil without helping them understand the reasons why thirty-three million of them are dying of hunger? ... I think teaching peasants how to read the word hunger and to look it up in the dictionary is not sufficient. They also need to know the reasons behind their experience of hunger (Freire & Macedo, 1995, p. 390).

Drawing on Freire's experience in the previous quotation, we can ask similar questions related to any specific context. In Saudi Arabia, we can ask how can we teach geography or history in Saudi Arabia without discussing carbon emissions or the role of women in social transformation? These critical questions bring more benefit than traditional education and leads to development. The traditional view of education rarely appreciates importance of these critical questions.

Approaching people's education critically influences human development in other contexts. For example, Critical Pedagogy helped in empowering people in South Africa during the apartheid era. By drawing on Freire's concepts of problem posing, teachers fought against racism and used education for the freedom to build a critical consciousness that refused discrimination and oppression (Nekhwevha, 2002, p. 137). In fact, the National Education Crisis Committee (NECC) in South Africa put an emphasis on its first resolution on the idea of education that addresses oppression in the community:

Enables the oppressed to understand the evils of the apartheid system and prepares them for participation in a non-racial and democratic system (cited in McKay & Romm, 1992, p. 20).

Another example is presented by Kabeer (1994). From a gender perspective, she found that using Freire's approach empowers women by improving their critical understanding. This is the Page | 77

opposite of limited results from traditional learning that focused only on literacy in a way that did not address development needs from a wider perspective (p. 250).

2.5.1 Critical Pedagogy and the Capabilities Approach

Critical Pedagogy and the Capabilities Approach both have a common concern about the role of education in development. A key common understanding between the Capabilities Approach and Critical Pedagogy is in the way they regard education as a process of empowerment and expanding people's potential (Walker, 2010, p. 899). For this reason, both approaches criticise education that only focuses on education for economic benefits. According to Giroux, (2011, p. 134) education for the market devalues aspects of education other than economic benefits. Sen (1997) raises a similar concern. He argues for education for human development that appreciates many aspects of people lives including preparation for employment (p. 1960).

Not far from having a common understanding of human development, the Capabilities Approach and Critical Pedagogy share a similar concern about global issues such as justice and environmental problems. In *Cultivating Humanity*, Nussbaum (1997, p. 10) argues for a world citizenship that includes the common concerns of global issues and insists on the obligation for education to address such concerns. Giroux (2006) points out that education pedagogy needs to have an extensive reach to responsibilities beyond national borders to tackle environmental and social issues. Thus, both approaches count on education to tackle development issues beyond what traditional approaches to development do. Both approaches can underpin a perspective toward education for human development. This view is far more promising than utilising education only for economic growth and equipping people with work skills.

The Capabilities Approach, however, has wider implications than Critical Pedagogy. The Capabilities Approach was first used by Amartya Sen (1981) to examine poverty cycles before it was used at the international level to develop the first Human Development Report. On the other hand, Critical Pedagogy, as the name suggests, is more specific to education. Both approaches have the potential to be used to investigate the role of education in human development. The idea of 'being and doing' (Sen, 1999) that is central to the Capabilities Approach has the same application with Critical Pedagogy. It can help to evaluate a student's ability for being critical in their learning and their ability to bring ideas to the classroom.

2.6 Gender and Human Development in Education

Understanding gender needs is an important part of human development. According to McGillivray and Clarke (2006), gender consideration is fundamental for successful understanding and measurement of human development (p. 5). In education, it has particular importance to investigate whether education policies mainstream equal opportunities for boys and girls to achieve their learning and life goals. In this regard, the Social Relations Approach (Kabeer, 1994) provide a theoretical approach for investigating how capabilities in education are distributed equally between boys and girls.

The Social Relations Approach started as a training course about 'Women, Men, and Development' from the Institute of Development Studies (IDS), in the University of Sussex, UK (March, Smyth, & Mukhopadhyay, 1999, p. 102). Later Naila Kabeer with some contribution from others, developed this course to become the basis for a new approach to gender in development (Kabeer, 1993, p. 80). Kabeer (1994) defines the Social Relations Approach as about

'social relations which create and reproduce systemic differences in the positioning of women and men in relation to institutional process and outcomes' (p. 280). From the previous definition, the approach acknowledges social relations as part of gender analysis to address issues of inequality. According to (Moser, 1993, pp 2-3; Kabeer, 1994, p. xii) taking analysis to the level of gender relations provide a more systemic way to include relations between both genders. It means instead of narrowing the analysis of gender needs at the household level, social relations can more widely facilitate the analysis to include contexts that shape gender norms and assumptions.

The Social Relations Approach highlights four key institutions that play an important role in social relations for both genders. Those key institutions are the state, the market, the community, and the household (Kabeer, 1994, p. 308). Figure 2.2 shows these key institutions for institutional analysis and the dimensions of social relationships.

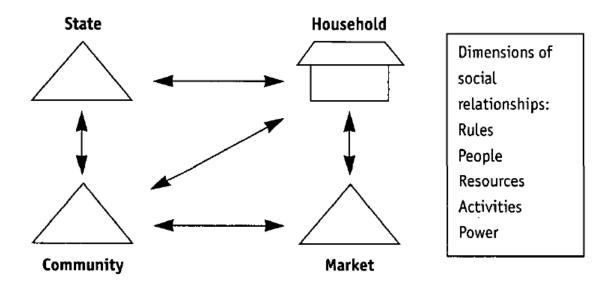


Figure 2.2: key institutions in Social Relations Approach. Source: (March, Smyth, and Mukhopadhyay, 1999, p.108).

The previous figure (2.2) shows the wider view of gender in development based on the Social Relation Approach. It shows how Kabeer (1994) is interested in getting gender

mainstreaming to be effective through enabling people to take part not only in the household context but also at the market and state level. In this way, the Social Relations Approach challenges the limited thinking about women's roles in development.

The figure also considers institutional analysis for gender development issues and the idea of interaction between institutions (March et al., 1999, p. 105). For example, the systemic interactions between gender roles in the community could shape learning opportunity for girls in schools. It could be around limiting their choices from addressing specific subjects such as sport or physical activities. Limitations girls may face in schools can be best understood from the way other key institutions shape gender opportunities for learning. Improving girls' opportunities may require intervention beyond schools. It may require more community awareness for the importance of mainstreaming learning opportunities across genders. It may require government intervention in the market to make sure future employment is equal among men and women. Equal opportunities in other institutions that schools work within its context means more success for mainstreaming learning opportunities in schools.

The Social Relations Approach also focuses on the successful application of strategic needs related to gender mainstreaming. The notion of 'strategic gender needs' was first used by Moser (1993) to empower women not just to think in terms of basic needs such as food and shelter but also as having a voice, being able to make decisions about their lives, and the capacity to address roles in the community. Using the Social Relations Approach analysis to identify strategic gender needs helps women to achieve their life goals, not just in the household context, but also at the state level. In education, successful application of strategic needs involves thinking beyond schools in a way that enables female staff and students to have a greater say and more connection with the

community. Figure 2.3 illustrates the wider view of gender in human development this study considers in public education in Saudi Arabia.

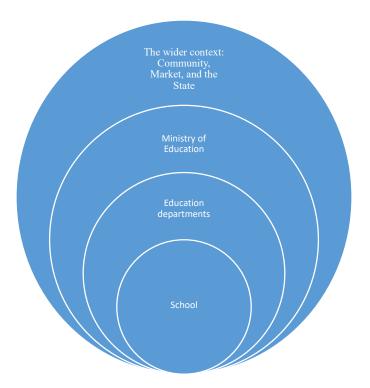


Figure 2.3: Conceptualisation of Social Relations Approach to education

The previous figure (2.3) shows that gender mainstreaming needs to be achieved through the hierarchy of the Ministry of Education and the wider community. Successful gender mainstreaming according to Kabeer (1994) requires thinking of gender development beyond schools.

In regards to human development in education, the Capabilities Approach and the Social Relations Approach share similar concerns. Both approaches emphasise on development in terms of human well-being rather in terms of production or economic well-being (March, Smyth, and Mukhopadhyay, 1999, p. 103; Sen, 1999, p. 36). Also, gender concerns are common in both

approaches. Sen's (1992) work in his article 'Missing Woman' and Nussbaum's (2000a) work on 'Woman and Human Development' present an application of the Capabilities Approach in gender development. Using the Capabilities Approach and Social Relation Approach enable equal opportunities for males and females to achieve their human capabilities goals in education.

2.7. Stiglitz's Report to Guide a Governance Framework to Achieve Human Development Policies

The fundamental shift that the Capabilities Approach has to education which has been discussed in more details previously (see Section 2.4 of this Chapter) is in understanding the role of education terms of in human development not only for the economy. The wider view of education provided by the Capabilities Approach helps in asking questions such as whether students have the opportunity to develop learning capabilities and to what extent schools prepare students well for participation in development activities. Critical Pedagogy also provides a way of questioning norms about education and how education processes need to be more centred on learners' needs rather than people in power. The Capabilities Approach and Critical Pedagogy can be used to inform the policy goals of public education. In particular, developing education policies that have more potential to people and human development.

Nevertheless, each one of these approaches, the Capabilities Approach and Critical Pedagogy, has its limitations. The Capabilities Approach has been criticised for focusing more on opportunities rather than achievement (Fleurbaey, 2002; Crocker, 2008). For instance, creating conditions or removing the opportunity for people to discuss pursuing their goals for being healthy, to learn new skills, and to be free of harm. Sen (1985, pp. 204-5; 1987, p. 23; 1999, p. 74) argues that we should look to people's capabilities and their ability to achieve in their lives. Nussbaum

(2011) acknowledges this criticism for focusing on capability in term of opportunity and freedom rather than achievement. From her point of view, people's choices are highly important and cannot be compromised by forcing people to adapt to specific achievements (p. 26). However, there is an inconsistency with this argument in education. Sen and Nussbaum take different positions when capabilities are related to children. Sen (cited in Saito, 2003) argues that children's future capabilities need to be considered and their current freedom maybe comprised for the sake of preparing them well for the future:

If the child does not want to be inoculated, and you nevertheless think it is a good idea for him/her to be inoculated, then the argument may be connected with the freedom that this person will have in the future by having the measles shot now. The child when it grows up must have more freedom. So when you are considering a child, you have to consider not only the child's freedom now, but also the child's freedom in the future (p. 25).

Sen also puts emphasis on the importance of measuring students' achievement in his work with Drèze (2013). They argue that 'if a large proportion of children learn virtually nothing for years on end in a particular school, it is important to know it, well before they are sent for slaughter in the Board Examination' (p. 138). Nussbaum (2011) also takes a similar position for capability freedom when it comes to children. She points out the importance of paternalistic policies to promote children's functioning such as basic education (p. 26). Therefore, it is important to promote and at the same time measure students' functioning, especially children in basic education.

There also has been criticism around Critical Pedagogy. Some educators who are concerned about education as a way to achieve social justice are concerned that it could, in fact,

be used to provide lower quality education. From my study here in Australia, I have discovered that Freire's work has been criticised by those who are concerned about raising educational standards for Aboriginal Australians. The work of Noel Pearson (2011) with the Cape York people has led him to develop a critique of Freire's work on the *Pedagogy of the Oppressed*. Pearson (2011) points that while empowering people through drawing on lived experience is important, it is also important to set standards that are met by students and teachers (p. 112). Having norms and values that support pride in identity is important, but it is insufficient for empowering oppressed people who need to achieve goals and to be guided by evidence based policy.

From the previous discussion, giving students the freedom to 'be' and to achieve their sense of gendered, cultural identity is important for human development. At the same time, we need to measure our progress to achieve this goal to address the limitations of the Capabilities Approach and Critical Pedagogy. Both the values that underpin education policies and the measurement of performance are equally important to achieve a balance between giving students freedom and making sure students are achieving specific standards for performance.

To improve the system, we need to work on both the values that underpin policy choices and governance measures to achieve it. The Capabilities Approach and Critical Pedagogy along with the key policy documents discussed in Chapter One are considered the normative framework for the study. Governance is the process of addressing such goals. Hyden et, al. (2004) has defined governance as:

The formation and stewardship of the formal and informal rules that regulate the public realm, the arena in which state as well as economic and societal actor interact to make decisions (p. 16).

In other words, education policy needs to address priori norms for good governance to guide performance and posteriori measures that guide assessment (McIntyre-Mills, 2014b, p. 87). As McIntyre-Mills (2014b) points out, governance needs to look to prior norms and then it has to look at ways to ensure that the process is properly implemented in term of outcomes and outputs. In Saudi public education, performance measures need to be much wider than just narrow academic scores. It needs to include indicators of other human capabilities. In other words, it needs to include how students are doing in their learning and their ability to be well-rounded human beings. In this view, performance measures also need to be much wider than just narrow curricula and narrow measures of academic performance and much broader participation in the framing of education policy and education outcomes.

The governance framework for this study is inspired by the work of Stiglitz et al. (2009) which emphasises on improving governance for wellbeing. The Commission on the Measurement of Economic Performance and Social Progress Commission (Stiglitz et al., 2009) reframes our approach to development to focus on more integrated ways of measuring progress in terms of wellbeing based on re-generation, re-connection and a sense of belonging to society and the earth on which we depend. In education, we need a more integrated approach to measure human development. In this way, information needs to address people's progress to acquire their valuable capabilities. In learning, measurements need to be wider than measurements learnt only from textbooks. It needs to measure and reward formal and informal learning inside and outside schools, and to develop opportunities for students to understand their roles as future leaders and good members of society who care about social and environmental wellbeing. For life capabilities, measurements also need to include indicators based on many of the capabilities suggested by

Nussbaum (2011). It is important to take into account a set of standards to evaluate education and at the same time consider the freedom for each individual to flourish (Sypnowich, 2005, p. 64).

The challenge for education in Saudi Arabia is to address the idealism of the Capabilities Approach and Critical Pedagogy to shape policy norms. Moreover, at the same time to address performance measures so that the consequences of teaching and learning choices can be assessed. This is undertaken by using a form of expanded pragmatism drawing on McIntyre-Mills (2014), and Stiglitz et al, 2010) to enable better performance measures of how well society is progressing. The focus includes achieving a more rounded approach to education so that students develop an awareness of their rights and responsibilities as ecological citizens (McIntyre-Mills, 2016, p. 6).

2. 8. Chapter Summary

This chapter discusses the theoretical lenses for the study. The first lens theorises human development. It looks at development based on the Human Capability Perspective (Sen, 1999; Nussbaum, 2011). Human development in education from the Capability Perspective means students achieving their learning goals as well as maximising their human potential. The potential of education from the Capability Perspective has been discussed in term of Nussbaum's approach to human development. The literature review includes reviewing Nussbaum's list of ten central capabilities (2011) to discuss its potential application in education. The potential of Nussbaum's approach in education has been organised in two main aspects. The first aspect is 'learning capabilities' which present the potential intrinsic education can provide in creating capabilities for critical thinking, reasoning, and imagination. The second aspect of human development in education is 'life capabilities' that address students' capabilities to maximise their human potential.

To enhance the life chances of girls through gender mainstreaming, the literature review also includes Kabeer's (1994) approach. The Social Relations Approach (Kabeer, 1994) emphasis on gender mainstreaming in development across different institutions in the community ensures gender needs will be met. Therefore, the life chances for boys and girls within the school system are equal.

The system thinking lenses are reviewed to provide more opportunity for the research to understand people's perception and values. The aim is to narrow the gap between the service users and providers by addressing the perceptions of the participants, and to make policy and governance recommendations.

Critical Pedagogy highlights how the process of teaching and learning can empower students. It is education that helps students to be productive thinkers and develop their critical consciousness (Freire, 1970). It is education that informs the process for developing well-informed citizens.

The theoretical contribution of the Capabilities Approach and Critical Pedagogy is supplemented by the governance framework of the work of Stiglitz et al. (2009) which has an emphasis on measuring progress, to achieve a balance between giving students freedom and making sure students are achieving a specific standard of performance.

3.1 Introduction

In this methodology chapter, I discuss in more detail the research strategy and design. The qualitative approach explores challenges that are related to student's learning and development. The qualitative design includes semi-structured interviews, focus group discussions, a document review and auto-ethnography based on my experience with public education. The study addresses the research problem in education using a case study spanning the Ministry of Education's Head office, two education departments, and eight high schools in two provinces in Saudi Arabia.

The study participants are Students, Teachers, Heads of Schools, Policy officers, and Policy makers. Those efforts were guided by the research objectives which are to:

- Investigate policy and governance challenges that face the Ministry of Education to achieve education for human development;
- Identify if there are any disparities between provinces, the public and private sector, and between gender groups in terms of human development;
- Provide policy recommendations that promote human development in the education system;
- Enhance the role of education in human development outcomes for Saudi students.

This chapter also discusses in more detail the data collection procedures. In this respect, I give details about the recruitment strategy, the fieldwork trip, the number of participants, and challenges in data collection. Ethical considerations to protect participants' identities is given in

more detail here, to highlight the process the study follows to protect participants' identities through confidentiality and anonymity. The data analysis process is also presented in this chapter. The emphasis is to highlight the multi stages of the data analysis and the coding process to make meaning of the research data. The data analysis section also includes an overview of the study's key findings.

3.2 Research Approach

The study aims to investigate challenges students face in being capable of lifelong learning and becoming well-rounded human beings. In investigating the challenges students face, the study utilises a qualitative approach. This approach is 'a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem' (Creswell, 2009, p. 4). As Creswell (2009) points out, qualitative research helps researchers explore and understand social issues. The exploratory nature of the qualitative approach is helpful when little is known about important factors in the researcher's problem (Morse, 1991, p. 120).

The qualitative approach also can capture more details and factors that can influence our understanding of social issues. In this respect, qualitative research has the potential for systemically capturing different aspects of the research problem (Corbin & Strauss, 2015, p. 5). For the purpose of this study, it creates more potential to capture challenges that are related to students' learning and development.

Qualitative research also provides a rich understanding of social issues. According to Sarantakos (2005), qualitative research has the advantages of offering in-depth descriptions and providing a detailed analysis of human experiences (p. 45). The rich understanding comes from an

inductive strategy that is usually used in qualitative inquiries. The qualitative approach features detailed inductive analysis to develop understanding and meaning from the research data (Lichtman, 2012, p. 19; Bogdan & Biklen, 2007, pp. 6–7).

The qualitative tools used in the research include a contextual study of documents to review the different discourses, semi-structured interviews and focus group discussions to address the views of different stakeholders, and field notes. Also, to provide greater in-depth understanding and analysis, I highlight my lived experience as a student, as a researcher, and as a parent of two children attending public schools in Australia. These efforts were undertaken to contribute to answering the research questions and enriching the data analysis. Here in this chapter, I give an overview of my lived experience. I dig deeper into my own educational experience, which I believe is relevant to most of the issues I investigate in this study. My lived experience has the potential to be used again within the framework of the research while discussing the research findings.

Reflecting on own experience in a research study is called *auto-ethnography*. *Auto-ethnography* is a qualitative method that researchers usually use to place themselves in the frame of their studies. It refers to the process of self-observation and the reflexivity of one's experience within the context of the research (Maréchal, 2010, p. 43). This term merges autobiography with ethnography represented in a critical self-reflexive analysis (Spry, 2001, p. 706). Auto-ethnography has much potential in terms of informing practitioners, researchers, and policy makers (Starr, 2010, p. 1).

In education, many researchers have identified the potential of using auto-ethnography to inform their inquiries. For example, Dyson (2007) used his auto-ethnography as an educator to investigate issues within his teaching career. The work of Stinson (2009) provides another example

in an educational context. Stinson uses his professional career as a mathematics teacher to reflect on changes in teaching and instruction practices. In this study, I include my own auto-ethnography in research in order to create a greater understanding of the research problem, and to give a richer picture of students' challenges to be capable of lifelong learning and to become well-rounded human beings.

This study is also considered as Critical System Thinking (CST) research. System thinking means thinking using a variety of perspectives on the issue. It means 'creating and managing diversity and tension rather than the traditional idea of manufacturing harmonious, perfect wholes' (Flood & Romm, 1996, p. 11). The emphasis is on testing out ideas with people who have lived experiences, and to see the world through their eyes and to understand their experience (Churchman, 1968, p. 231). The testing process is an attempt to ensure that the empirical evidence is rigorous and not the result of a top-down point of view. In Critical System Thinking, the investigation utilises different perspectives and viewpoints to appreciate the views that people have about education and development. This process is called 'unfolding' and 'sweep in' (Churchman, 1979) from people who have lived experience within the education system. To employ CST, data was collected from different levels in the education system to include diverse viewpoints. Participants include officials in the Ministry and education departments, principals, teachers, and students.

3.3 Philosophical Assumptions

Qualitative research is concerned with meaning through exploring human experience. Clarifying philosophical assumptions behind the qualitative inquiry is important in order to clarify the way the qualitative research considers reality and knowledge. In other words, it is about 'what makes social science scientific' (Neuman, 2011, p. 90). In this respect, many scholars have argued about the important of clarifying philosophical assumptions that guide research inquiry (Neuman, 2011; Mertens, 2010; Creswell, 2009; Midgley, 2000). For this study, as qualitative research, the ontology perspective is based on the interpretivist points of view. It means social reality is not fixed and imposed the same as natural reality (Romm, 2002, p. 15). In this qualitative inquiry, social reality, however, is influenced by individuals' assumptions and beliefs. It is the subjective interpretation of reality that shape our views of the world (Neuman, 2011, p. 92). This ontological stance for the research is consistent with the Critical Systemic Thinking (CST) approach. In Critical Systemic Thinking, people perceive issues differently and as a result, the interpretation of reality can be different (Churchman, 1968; McIntyre, 2003). Therefore, to construct the understanding of a situation, Critical Systemic Thinking argues for dialogue and methodological pluralism (Midgley, 2000, p. 35 & p. 215). In this policy research, this includes combining the Capabilities Approach with Critical Pedagogy to understand students' capabilities to think and imagine in ways that influence their learning and their lives. The study also combines the Capabilities Approach with Kabeer's approach as applied to enhance the life chances of girls through gender mainstreaming. Dialogue, on the other hand, can be achieved through a research design that attempts to explore ideas and gives people the opportunity to discuss their viewpoints. This assists us to understand how diverse ideas and viewpoints can enrich our understanding of education for human development. It is important to try to systematically test out ideas, because the more we test ideas, the closer we get to the truth (McIntyre-Mills, 2006).

The epistemology stance is based on the qualitative nature of this research. It is an interpretivist approach to knowledge which means the nature of knowledge is affected by our subjective interpretations. According to Neuman (2011), knowledge in an interpretivist approach means:

To produce social science knowledge, we must inductively observe, interpret, and reflect on what other people are saying and doing in specific social context while we simultaneously reflect on our own experience and interpretations (p. 93).

As Neuman (2011) points out, to produce knowledge in this qualitative research, this study made an effort to represent the voices of different stakeholders' groups in the education system. Therefore, the study produces interpretations of what the key challenges are that face Saudi students in order to become capable of lifelong learning and to become well-rounded human beings. In addition, the way my personal experience informs the research is given attention in this chapter.

The axiology aspect of social research is concerned with norms and values (Lichtman, 2012, p. 25). For this study, it is about participants' personal norms and values. It is also to include my own beliefs. To present the norms and values of different stakeholders, I used dialogue to create areas of shared concern among different participant groups. Data analysis was promoted to find areas of overlap to achieve as much understanding as possible about human development challenges in Saudi public education.

In my auto-ethnography, I made an effort to declare my values and beliefs that to some extent have influenced my understanding of the research problem. I have tried to shed light on my viewpoints and my experience about different challenges I faced during my school days. My auto-ethnography is also informed by the theoretical framework of the study and my lived experience in Australia, especially my children's education.

3.4 Research Design

The design of inquiry utilises a case study approach. Case study research is usually used widely in social research including education. This case study approach addressed understanding social issues in a specific context or among a group of people (Yin, 2014, p. 4). The case study of this research is the Ministry of Education in Saudi Arabia and it is concerned with public education, which starts from kindergarten to high school. Data was collected from the Ministry of Education's head office, education departments, and schools. The reason for selecting different stakeholders in the Ministry is an attempt to achieve the Critical System Thinking goal of this study by appreciating different views that people have about education and human development. Collecting data from different groups is also an attempt to make the sample as representative as possible. In qualitative research, diverse points of view about the research problem help to maintain objectivity and reduce bias (Strauss & Corbin, 1998, pp. 43–4).

Qualitative research is a dynamic process in which different tools and strategies are used to understand the research problem and to answer a set of questions (Corbin & Strauss, 2015, p. 1; Lichtman, 2012, p. 17). In this respect, the study used different tools in a complementary way including a contextual study of documents to review the different discourses, semi-structured interviews, focus group discussions (FGDs), and field notes. The document review for the study

mainly focuses on key policy documents that shape education practice nationally and internationally. At the national level, it includes the National Education Policy in Saudi Arabia (1969) and the Ministry of Education Strategic Plan for Public Education (Ministry of Education, 2013). At the international level, it includes the Millennium Development Goals (MDGs), and the Sustainable Development Goals (SDGs).

The semi-structured interviews questions were set to be exploratory. Interview topics developed to cover different aspects of the education system. I have used open-ended questions to provide an opportunity for participants to express their opinions, attitudes and suggestions. Instead of imposing specific understanding upon participants, I have tried to work with participants to understand the research problem. Bogdan and Biklen (2007) argue that if the interview is structured in a way that limits the opportunity for participants to add their views and stories, then it does not support the nature of qualitative research (p. 104). With this qualitative study, I have a set of possible questions that were more relevant. The UNICEF (2010) Guide for Minimum Standards for Education was helpful in developing my questions about different topics in education. The semi-structured interviews included questions relating to education policy, access, learning environments, teaching and learning, teachers and other educational personnel, and relationships. Semi-structured interviews were conducted with policy makers, policy officers, school administrators and teachers.

The other primary source for data collection was focus group discussions (FGD). Morgan (1996, p. 130) defines a *focus group* as a research practice in which the researcher collects data from people's interactions in a group meeting. FGDs are usually held with people who have similar experiences or backgrounds (Hennink, 2014, p. 1). With this in mind, the research conducted

separate FGDs for teachers and other FGDs with students. Questions during the FGDs were about the learning environment, teaching and learning (see figure 3.1).



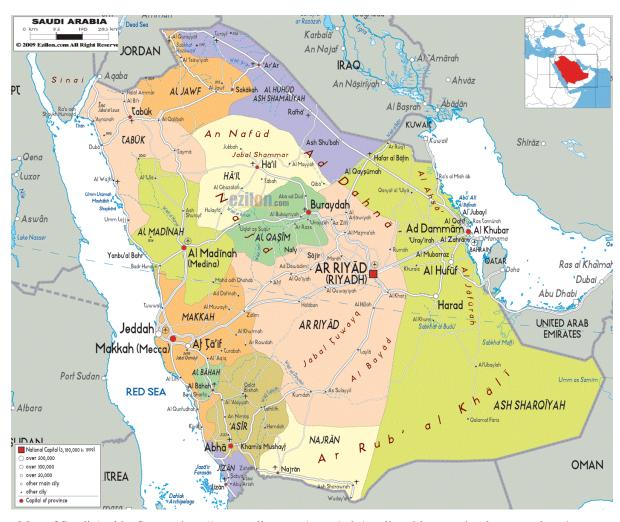
Figure 3.1: Semi-structured interviews and focus group discussion questions

Through the semi-structured interviews and FGDs questions, the study follows an inductive approach. It is based on the qualitative nature of this research. The semi-structured interviews and FGDs questions explore perceptions of the participants around issues of human development in education. The different aspects of my questions were developed to encourage people to think about multiple factors. Their answers on those aspects could help to explain what factors can together bring about good education outcomes.

Working with a female co-researcher was essential to follow the norms of Saudi culture. The female co-researcher took over my role in girls' schools and also during interviews with female policy officers in education departments.

3.5 Selecting the Study Participants

The Ministry of Education is located in the capital city (Riyadh) and has central departments for public education in each province (see the map of Saudi Arabia below). According to the Ministry's yearly report (Ministry of Education, 2011), there were 78,917 employees working in civil service, which includes policy makers, policy officers, and clerks (p. 23). For educational jobs, there were 484,758 employees working in schools which include heads of schools, teachers and student advisors (Ministry of Education, 2011, p. 23). Also, there were 5,441,480 students: 2,686,829 male students and 2,754,651 female students (Ministry of Education, 2015). The number of public schools according to the Ministry of Education (2015) is 26,606 schools: 12,665 for boys and 13,941 for girls, which consist of (85.8%) of the public education schools in the country. Also, there are 688,215 students studying in private schools, comprising of 388,767 male students and 299,448 female students who represent (12.65%) of students studying in public education (Ministry of Education, 2015).



Map of Saudi Arabia, Source: http://www.ezilon.com/maps/asia/saudi-arabia-maps.html, accessed on 4 August 2016.

The recruiting strategy for approaching the large number population of potential participants includes purposive and snowball sampling. Purposive and snowball sampling are non-probability strategies of sampling which are commonly used in qualitative research when the target of the study is a specific group in the wider population (Cohen et al., 2007, pp. 113–6). The selected participants that informed the study are policy makers, policy officers, school administration, teachers and students. Table (3.2) gives a description of each type of participant group and the recruiting strategies used in the research.

Participant Type	Description	Basis for Recruitment	Component of Research Involved In
Policy makers	Senior managers in the Ministry of Education's head office	Invitations sent by the Ministry of Education	Semi-structured interview
Policy officers	Senior managers in the education departments	Invitations sent by the Ministry of Education	Semi-structured interview
School administration	Heads of schools	Invitations sent via education departments	Semi-structured interview
Teachers	Teachers from selected schools	Invitations sent via the heads of the schools	Semi-structured interview and focus group discussion
Student representatives	Schools were asked to invite student representatives to give their perspective.	Invitations sent via the heads of the schools to students and students' families.	Focus group discussion co- facilitated by the school.

Table 3.1: Description of each type of participant group and the recruiting strategies.

The previous table shows that the research's participants were not in one location or at the same organisational level. Instead, they had different levels of responsibilities from the Ministry's

head office and two provinces in Saudi Arabia. Below are detailed description of the levels that the participants came from and the criteria for selected schools:

- 1. **The first level** is the head office of the Ministry of Education in Riyadh. Participants are policy makers in the Ministry. Policy makers in the Ministry are the senior managers who work in the central departments that are usually responsible for education policies, rules, and regulations. The semi-structured interviews were the primary tool for data collection at the Ministry of Education's head office.
- 2. The second level is the education departments. The Ministry of Education has an education department in each province in Saudi Arabia. Education departments supervise education in public and private schools. The first department is from the Central Province (Riyadh). The second department is from one of the border provinces. I have hidden the name of this province to protect participants' identities because of the limited number of private high schools. In both provinces, the researcher and the co-researcher interviewed policy officers in the education departments. The education departments also facilitated the process of selecting schools.
- 3. **The third level** is schools. This level was researched to add depth to the data collection. The sub-unit of data collection is the high school level. However, because schools in Saudi Arabia are single-sex institutions, the selected schools are from boys' and girls' schools for each province. The research design also includes public and private schools. Table 3.2 below summarises the schools included in the research design.

School Type	Public schools		Privat	e schools
Boys' Schools	Riyadh	Border	Riyadh	Border
	Province	Province	Province	Province
Girls' Schools	Riyadh	Border	Riyadh	Border
	Province	Province	Province	Province

Table 3.2: Number and type of schools included in the research design.

In boys' schools, the researcher interviewed the heads of the schools and teachers. Focus groups discussions in each school were with teachers and students; one focus groups discussion with teachers and another one with students. The female co-researcher followed the same process for data collection in the girls' schools. The following figure (3.2) summarises the research design for the research.

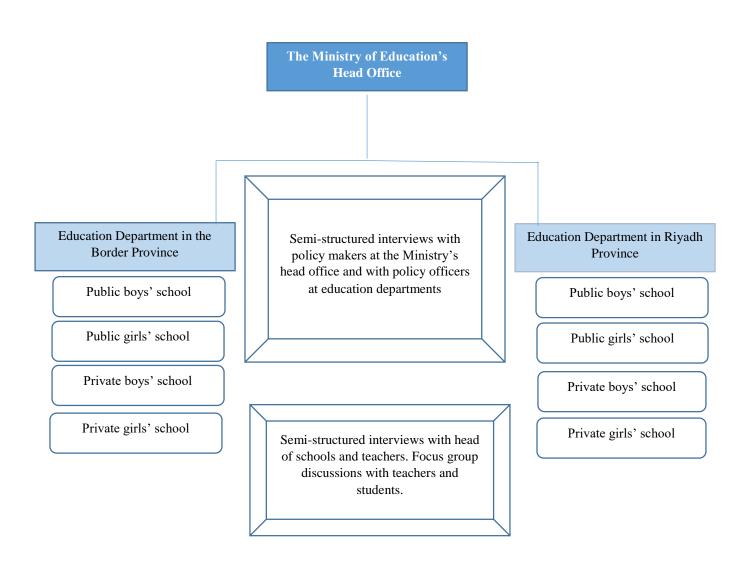


Figure 3.2: Summary of the research design

The recruitment strategy included providing participants with relevant information about the research. Letters of introduction, information sheets, and consent forms were part of the recruitment activities.

3.6 Data Collection

The data collection was guided by the structural design of the study. The purpose was to answer the research questions and to achieve the research objectives. The overall aim of the research was to identify key challenges that face Saudi students in order to be capable of lifelong learning and to become well-rounded human beings. In this respect, primary data was collected through a field trip to Saudi Arabia. The main data methods used were semi-structured interviews, focus group discussions, and field notes. Fieldwork for data collection was conducted after I had permission to undertake the research from the Social and Behavioural Research Ethics Committee of Flinders University (SBREC) project number (6169). The research was granted ethical approval on the 20th of August 2013. The research also received a permission letter from the Ministry of Education before starting the fieldwork for the data collection.

My fieldwork started in December 2013 and continued until March 2014. At the time of the beginning of the fieldwork, the first school term had already started³. The fieldwork journey started at Riyadh, the capital city of Saudi Arabia. Three levels for data collection were in Riyadh, including the Ministry of Education's head office, the Education Department in Riyadh, and four public and private schools for boys and girls. On the first week of my fieldwork, the Ministry of

³ The first semester started on 31 August 2013 until 15 January 2014. The second semester started on 25 January 2014 until 4 June 2014. The academic year in Saudi public education is divided into two semesters. This is unlike some other countries. For example, here in Australia students study four terms.

Education's head office was my first point of contact. In particular, the General Directorate of Research in the Ministry. Part of the responsibilities of this central department is facilitating academic research within the Ministry. I have provided the General Directorate of Research with the research proposal, letters of introduction, information sheets, and consent forms translated into Arabic. At the same time, I asked for letters to education departments and the central departments in the Ministry's head office. The liaison person for the research, Mr. Abdul-Aziz Askar, provided me with official letters for the central departments in the Ministry and two letters for the education departments in Riyadh and the Border Province.

Data collection started from the Ministry's head office. At the time of my fieldwork, the Ministry was only responsible for public education which includes schooling from kindergarten, primary intermediate until high school level. It was two years before the Ministry of Education became responsible for higher education in 2015.

Using the recruitment strategy for the research, potential participants were approached via their departments. Several central departments were given the official letters from the General Directorate of Research, the information sheet, and the study flyer. The volunteer participants received information packages containing the consent form and information sheet. Participants indicated their willingness to participate by signing the consent form. My first interview was with a senior manager in one central department in the Ministry' head office. This interview was encouraging. The first interview went well, and we had an open discussion. The first participant referred me to one of his colleagues who expressed interest in taking part in the research. The same strategy was applied in different central departments in the Ministry's head office.

The second level of data collection in Riyadh was the education department. Riyadh's Education Department is located a few kilometres from the Ministry' head office. To save time, I started contacting the Riyadh Education Department while I was collecting data from the Ministry's head office. The same strategy for data collection in the Ministry's head office was repeated in the Riyadh Education Department. The Riyadh Education Department also provided me with letters to schools.

The third level for data collection was schools. Visits to schools started in Riyadh. For boys' schools, it was my main responsibility to contact the head of the school to organise interviews and focus group discussions. Recruitments for interviews and focus group discussions with the head and teachers usually did not take much time. It was because they were working in the school and for them it does not require much commitment. This was not the case with the students. For focus group discussions with students it took more time and sometimes weeks to receive the consent forms signed by families. In girls' schools, working with a female coresearcher was essential. All girls' school staff and teachers are females, thus, it was culturally appropriate. The co-researcher visited girls' schools in Riyadh and followed the same process for data collection.

The other location for data collection was the Border Province. The trip to the border province was on the 25th of January 2014. The trip took place in the first month of the second semester of the academic year. In the Border Province, there were limited numbers of private schools at the time of the study – one private high school for boys and two private high schools for girls. Therefore, I decided to keep the name of this province confidential to protect the identity of the participants. In the Border Province, my first point of contact was the Central Education

Department. I provided the Education Department with the permission letter from the Ministry.

The Education Department in the Border Province provided me with letters to schools, and letters to their central departments to facilitate recruiting policy officers.

Pictures (1) and (2) show part of my discussion in one school in the Border Province. Picture (1) shows teachers during a focus group discussion. Picture (2) is for focus group discussions with students. I have disguised students' and teachers' faces to maintain their confidentiality.

This research also made an effort to be as participatory as possible. In this respect, I visited the field again in January 2016. During the visit, I shared my findings with policy makers in the Ministry of Education's head office during a focus group discussion.



Picture (1): Focus Group Discussions with teachers, boys' public school, the border province.



Picture (2): Focus Group Discussions with students, boys' public school, the border province.

Participant Type	Component of Research Involved In	Number of Participants
Policy makers	Semi-structured interview	8
Policy officers	Semi-structured interview	12
School administration	Semi-structured interview	8
Teachers	Semi-structured interview	17
	Focus group discussion	7 focus group discussions
Student representatives	Focus group discussion co- facilitated by the school.	7 focus group discussions

Table 3.4: Number of participants involved in the research.

During the fieldwork, the open-ended questions and the inductive nature of the qualitative research helped me to gather more robust data. I saw how qualitative research gives the researcher the opportunity to focus on what people think is important. It also gives people the opportunity to draw on their lived experience. Consequently, some of my questions brought me to some issues that I did not anticipate. Therefore, I followed up those issues to find out to what extent it had implications on students' human development. In instances where questions did not resonate and were considered to be less relevant, I tried to establish why the issues were unimportant by following up with other informants and in some instances I stopped expanding upon the issues and instead focused on what was more important.

3.7 Challenges in data collection

The challenges with collecting data from participants were directly related to the nature of the research. Qualitative research is not common in Saudi Arabia. People are used to surveys and questionnaires. Asking about their views in an open discussion are not considered by some people as scholarly research. There were a few incidents when participants insisted on getting a questionnaire instead of making a time for an interview. I usually addressed this concern by indicating that an interview is a common social research tool that helps for in-depth understanding and also an opportunity for participants to voice any concerns. However, some participants refused to be included in the research due to this concern.

Another challenge was voice recording. A number of interviewees agreed to participate, but without being recorded. This happened a few times with the female co-researcher while she was collecting data from female participants. She explained to female participants that their identity and all the information collected is strictly protected. However, some female participants insisted on declining the right to be recorded. The female co-researcher took notes instead. This also happened to me once in a boys' public school in Riyadh. The consent forms that came back from families agreeing for their children to participate in the study did not include an agreement for voice recording. In this case, written notes were the only option available.

3.8 Auto-ethnography of my general education experience

When I started reading about System Thinking and qualitative research, the idea of how beliefs and past experience influence our inquiry touched upon some of my experience. Based on my past research experience during my master degree, it was difficult if not impossible to set myself aside from what I was researching. This section responds to such concerns. The purpose is to highlight how my experience informs the understanding of the research problem. My autoethnography focuses on three areas that I believe have a great influence on the way I perceive the study problem. The first is my lived experience as a male student who studied in public schools for 12 years. The second one concerns my experience with the Australian public education, as a parent of two children who attend public schools in Adelaide, South Australia. The third one is about how the theoretical framework shapes the way I perceive human development in education.

My experience with formal education started in 1984. It was in a small primary school in one remote village of the Riyadh Province. The school was the only school in the village, with few numbers of students. The number of students was around 36 in the whole school. Due to the limited number of students, the school administration fellow created composite classes. Students from two different grade levels studied in one classroom. My parents played a crucial role at this stage of my education. Even though they were illiterate, they had a strong attitude towards my education. For example, I still remember my father putting his hand on my hand to write letters in my first year although he did not know what these letters meant.

I completed the next two levels of my education also in public schools. My intermediate and high school studies were in a small city located close to our village. Private schools were not common in my school days with few numbers in big cities. In this small city, as I remember, there was no private school for intermediate and high school levels.

Through my studies at different levels, I have experienced many challenges. These challenges I believe limited the potential that education could contribute to my life. The first

challenge is related to learning. Teaching, in general, was not interactive and was dominated by rote learning. The teacher usually entered the classroom and asked for homework. Then he started to expound that day's lesson. The student's role was mainly to listen and write in their notebooks. In the end, the teacher usually asked the class if anyone had a question. Students rarely asked. Questions were usually unwelcomed by most teachers. A student who asked a lot of questions was considered to reflect indecent behaviours and were perceived as time wasters. In this way, we memorised words and texts without critical understanding. Learning was for tests and to avoid failure and repeating the academic year. This approach was not helpful; not only in learning, but also in building social skills.

Learning in all the different schools was also shaped around textbooks. Textbooks were the only resource we had for learning. Our learning did not include another source of knowledge. In one example, the school library did not play the role it should have. For us, the library was usually a place where we chatted and socialised. Most students including myself found library time visits a good chance to chat as we did not have enough time for social interaction in the busy school timetable.

Even though we had no link to the school library through the formal learning system, I was lucky to build reading habits from my primary school. This was a result of a personal effort from one of my teachers. Sadly, this habit almost disappeared in intermediate and high school. The main reason was that learning in the classroom did not require or motivate us to read any wider than our textbooks.

Learning in my schools was defined in the classroom. The timetable for the school was divided evenly between teachers of different subjects. There were 45 minutes per lesson for each

teacher. There were very few opportunities for excursions and out of school learning. Furthermore, there was insufficient time for entertainment. Most of the time was for studying and listening to the teacher's instructions. Play was only conducted formally during sports class, which was only once a week.

I did not only have a passive role in my own learning; I also played a passive role in other aspects of my school. My role as a student was to listen to instructions and orders from my teachers. I had to follow many rules without any objection. There was almost nothing we could do as students to improve the system in a way that reflected our needs. Students were intimidated by the school system which did not encourage students to speak up or to make suggestions. Therefore, students usually did not feel confident to express their ideas and needs. They had been domesticated to listen and do what they have been asked to do.

The other limitation I faced during my school days was school design. In primary and high school, the building was a government building. We use this expression in Saudi Arabia to refer to schools that have been built by the government. This was not the case during my intermediate level. In intermediate level, the school was in a rented building. This building was originally designed as a residential house. As a student, the main challenge was the small spaces for classrooms, the school hall, and the sports field. The other way I believe school design limited our opportunity for learning and development was the classroom design. Classrooms were in the closed classroom format and the seating arrangement consisted of lined up rows. Classroom design prevented me and other students from socially interacting with each other and with the teacher. It also provided unequal opportunities for learning among students. Students who usually sat in the front got more attention from the teacher. They also had more opportunity for listening and

understanding than other students. Students who sat far away in the back rows got less attention from the teacher. Also, students who sat at the back usually faced the stigma of being lazy. Their location had great influence on their learning and development.

All these factors created a situation where most student grew up hating learning and school. I still remember how I counted the minutes waiting for school to finish. Indeed, I felt happy at the end of each school day, and home time was the most enjoyable moment for me. Also, I remember when I was in primary school, we ran in groups shouting 'finish' in Arabic at the end of each school day.

My view to the research problem was also influenced by my experience here in Australia. In particular, the public schooling of my children. My children's experience at their primary school here in Adelaide differs from my own experience in many aspects. School starts here in Australia late compared to Saudi schools. This gives students more time for sleep and enough time to have breakfast at home. Learning is not defined by textbooks. The concept of the school curriculum is completely different from what I have experienced. In Saudi schools, the curriculum is closely defined by textbooks. By contrast, in Australian schools, the terms of the curriculum are translated to key skills and subjects. Teachers have more independence to work with students in developing their learning in these skills and subjects. In doing so, teachers can facilitate learning using formal and informal sources of knowledge. The school timetable was also different. While the key skills of reading, writing and mathematics are taught as in Saudi schools, there are two periods of recess which give students more time to socialise and play. The school design is completely different; in Australia, school is open to the outside world and students can see the outside while learning.

Classroom seats are arranged in groups which give more opportunity for interactive learning and social communication.

Another important influence on understanding the research problem comes from the theoretical framework for this study. My work on this thesis was intended to find ways of how schooling can make a difference in students' lives. I was interested in several aspects. How can schools be a place of developing lifelong learning skills? How can education as an endeavour involve active participation and empowerment, rather than only rote knowledge achievement? How can education be a developmental process at a personal and national level? Therefore, when I started reading for a theoretical approach to this study, I found the potential of using humancentred approaches to education. Sen (1999) and Nussbaum's (2011) ideas of development as capability freedom is central to the way I see human development in education: how schools can either limit or expand students' capabilities. On one hand, my education improved my capability of being very knowledgeable in different fields, including literacy and the ability to critically analyse. On the other hand, my education experience could have been better if my school had given me more opportunity to communicate, to play, to laugh, and learn from many sources. It could also have been a better learning experience if I perceived education as a capability that exceeds the sole limitation of perceiving education only for employment.

System thinking ideas remain central in my inquiry. In particular, the idea of sweeping in ideas and unfolding upon many ways of thinking about social issues (Churchman, 1979; McIntyre-Mills, 2006). This includes testing based on unfolding values and sweeping in cultural socio-economic, and environmental ideas. It is also about Churchman's (1968) ideas of appreciating others' views and expertise. In particular, the idea of seeing the world through the eyes of students

who have big dreams for the future. This means it is central for policy makers to see the world through the eyes of students by creating many channels for students to deliver their views. It is important for schools to see learning through the eyes of people who learn through open approaches for learning, and to give students more opportunities to sweep in more ideas and understanding.

Freire's ideas (1970) about educating for critical consciousness remain central to the way I perceive learning for human development. In particular, the importance of transforming students' education through dialogue and communication instead of making them only passively memorise and repeat facts and ideas. This is education that brings about freedom and flourishes through critical understanding and relevant learning.

3.9 Ethical Considerations

Ethical approval for this study was obtained from the Social and Behavioural Research Ethics Committee of Flinders University (SBREC) project number (6169). I have considered the ethical implications and agreed to comply with the established guidelines for research involving human subjects. These guidelines consider voluntary participation, confidentiality, and anonymity. Also, permission letters to conduct the research were sought from the Ministry of Education before starting the fieldwork and data collection from participants. The recruitment approach that was used in this research, as discussed earlier in this chapter, was to seek potential participants through the hierarchy of the Ministry of Education. To make sure that participation was voluntary, participants indicated their willingness to be involved in the research by signing the consent form. Consent forms were collected by the researcher and the co-researcher before interviews and focus group discussions. Each participant retained a signed copy of the consent form for future reference.

Furthermore, the researcher made sure that the participants had read and understood the information package containing the letter of introduction, the information sheet, and interview questions before the interviews and focus group discussions. The information sheet included a description of the study, the purpose of the study, possible burdens or risks, and what questions the participants would be asked.

Confidentiality and anonymity have been maintained throughout the course of the study. Anonymity was ensured by not disclosing the participants' names on the research reports. Confidentiality requires that the information provided by the participants will not be reported in any form that can be identified publicly (Cohen et al., 2007, p. 65). In this regard, I have used pseudonyms instead of the real names of the study participants to keep their identities protected. The names of participants have been changed in the research findings to ensure confidentiality. In addition, the data has been presented in such a way that the names of schools or individuals cannot be identified. This was not a challenge for the study in Riyadh as the number of schools were very large. However, this was not the case in the Border Province. In the Border Province, there were few private schools. For example, there was only one private high school for boys. This was the reason I keep the name of the Border province disclosed.

3.10 Data Analysis

In qualitative research, the process of data analysis means struggling with the unknown to achieve knowledge and meaning. Trying to make meaning from different people's stories and perspectives was a challenge. It was a challenge in terms of having people's views form a coherent picture. The picture the study attempts to draw is about key challenges that face Saudi students to

be capable of lifelong learning and becoming well-rounded human beings. Therefore, the purpose of this section is to highlight how this study develops its findings.

Data analysis was used to find what the axial themes were and what the key issues that participants referred to most that were underpinning policy and governance concerns (see figure 3.3).

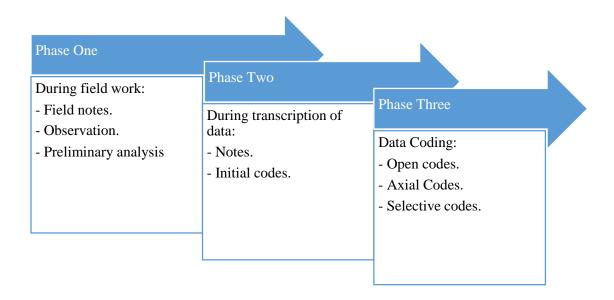


Figure 3.3: Phases of the data analysis.

As shown in figure 3.2, data analysis was undertaken mainly in three phases. The first phase of analysis was during the fieldwork for data collection, which involved collecting data, preliminary analysis, and field notes. In this phase, I kept a diary to write down my observations and issues to investigate further, in order to capture key issues and follow up some issues that were raised during interviews and focus group discussions. The female co-researcher also has written some field notes and usually we had a brief discussion after the girls' school visits.

In the preliminary phase of data analysis, I tried to build common themes across different interviews. A picture of the study findings was still not clear for me at this stage. However, my main concern was to bring in different voices from different stakeholders in the education system.

The second phase of analysis occurred while transcribing the collected data. I transcribed a few of the recorded interviews and focus group discussions during the fieldwork. Most transcriptions, however, were completed after I returned to Australia. Transcription was in the language of the participants, which is Arabic. During this process, I kept writing analytic memos for each interview and focus group discussion. These memos were about themes I started to develop across many interviews. These memos also were helpful in the next phase of analysis.

The third phase was the most comprehensive. It includes all the primary data with crosscase analysis. After the full transcription of recorded interviews and FGDs, I started assigning codes to my data. Codes in qualitative research means:

word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data (Saldaña, 2009, p. 3).

Open codes for my data was usually allocated for chunks of the script, but sometimes I worked at a lower level to code words or phrases. Also, to design an understandable coding system, I benefited from Strauss and Corbin's (1998) approach to coding, which involves open, axial, and selective coding. It was an effort to ground the analysis as deeply as possible in the qualitative data.

According to Strauss (1987), a good coding system is an important part of the success of qualitative research (p. 27). Thus, after manually coding a few interviews, I felt the need to use

qualitative analysis software. Using Computer Assisted Qualitative Data Analysis Software (CAQDAS) was crucial to manage the data and help in coding. The analysis was structured using Atlas software. The main reason I chose Atlas.ti software was that it supports right-to-left languages such as Arabic.

Analysing my data in the third stage was iterative rather than being in a linear process. Additionally, I used a complementary approach, which meant combining the qualitative data analysis with the secondary data I had access to.

The study draws on the Capabilities Approach (Nussbaum, 2011) in data analysis. The theoretical framework for the study was helpful in thinking of the key challenges that face Saudi students to be capable of lifelong learning and become well-rounded human beings. Nussbaum's (2011) Capabilities Approach to human development was applied to address the complex needs of students pertaining to the ten basic capabilities. The challenges that students have been organised in two aspects (see figure 3.2).

The first aspect represents challenges in term of achieving learning capabilities. The comparative case studies highlight four key challenges that students face while learning in schools. The first challenge is the limited scope of learning evaluation. Measuring learning progress in school focuses only on measuring learning from standard textbooks. This challenge is more significant in private schools where learning measurement usually focuses on summaries of the textbooks. Pedagogical challenges represent the second challenge. Participants in schools have expressed concerns about passive forms of education and the relevance of the curriculum in a centralised learning system. One important implication of passive learning is that students are not taught the skills of reasoning and critical thinking. The third challenge is related to the lack of

standardised assessment. The absence of standard tests was reflected in many students achieving an advanced level of their education despite poor academic results. The fourth challenge is the influence of employment conditions on the integrity of learning evaluation. Employment conditions in private schools jeopardises learning evaluation where the teacher is employed by the school and faces pressure to give high grades. These findings are discussed in more details in Chapter Five.

The Second Aspect is About Challenges Students Face to Achieve Their Life Goals.

The challenges that students face are to enjoy a healthy life, to play and create, to be safe, to control their life and their learning environment, and to have opportunities to create positive emotions and a sense of hopefulness towards their learning. In this regard, the study found four key challenges that students face to achieve their life goals. These challenges are time constraints, limited student empowerment, school design, and safety and mobility. Challenges related to the second aspect are discussed in detail in Chapter Six.

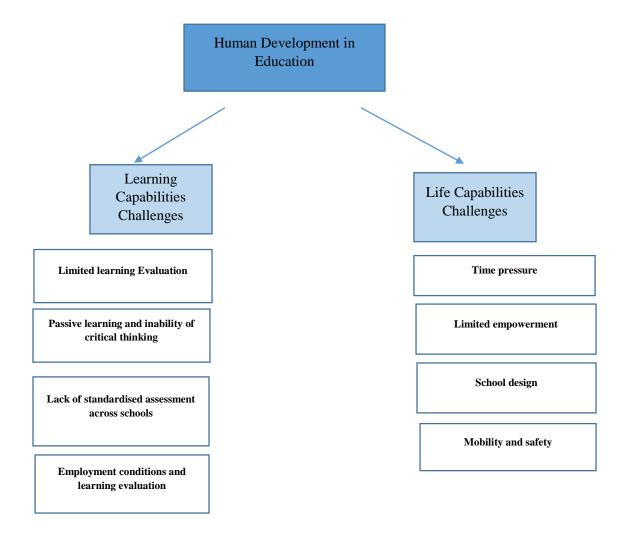


Figure 3.4: Research findings organised according to the human development framework

I have tried to present the research findings in a narrative way using the first person voice when possible. According to Bogdan and Biklen (2007, p. 201), using the first person in qualitative research has increased over the last two decades. Lichtman (2012, p. 273) argue for the presence of the researcher's voice because it recognises self-effort, and helps the researcher to communicate better with the reader.

3.11 Chapter Summary

This chapter highlighted the research approach and design. I have detailed the research methodology and its philosophical assumptions. The purpose was to clarify how qualitative research views social reality and informs our practice. The philosophical assumption builds on the qualitative nature of this research which perceives social reality as subjective based on people's perceptions and beliefs. Part of this chapter was also intended to give details about the research methods which include a document review, semi-structured interviews, focus group discussions, and field notes. In addition, this chapter highlighted my recruitment strategy, population pool, and the number of people involved in the research. Part of this chapter included details about my data collection and the challenges I have faced in doing fieldwork. Furthermore, I have placed myself within the frame of the research by giving an auto-ethnography account about my lived experience. The purpose was to highlight how my experience informs the understanding of the research problem. The last section of this chapter was about data analysis. In the data analysis section, I have given details about the process of coding and the development of the research findings.

Human capital tends to concentrate on the agency of human beings in augmenting production possibilities. The perspective of human capability focuses, on the other hand, on the ability- the substantive freedom- of people to lead the lives they have reason to value and to enhance the real choices they have.'

— Amartya Sen, Development as Freedom (1999, p. 293).

4.1 Introduction

This case study of both public and private schools in Saudi Arabia is designed to contribute to the understanding of human development in education. The research defines human development in education in terms of students' abilities to achieve their learning goals as well as to maximise their human potential. This chapter pays special attention to the perception of education. It draws on the 'Capabilities Approach' (Sen, 1999; Nussbaum, 2011). This chapter looks at the assumptions that shape education policies and its implication on schools. The focus is to address the first research question 'to what extent is the education system directed to developing well-rounded human beings?' Thus, this chapter provides an overview of the issue of perception and how education is perceived among officials and in schools. Is education perceived as a human capability (Sen, 1999) that addresses the need for the development of well-rounded students who engage in lifelong learning? Is this perception consistent with key policy documents? Are students striving for meaningful education? This chapter attempts to address all these concerns.

For the purpose of this chapter, the study found that the current focus is on improving the role of education in economic development. Less attention has been given to education in social and environmental terms. The current focus emphasises students' development in terms of academic achievement to meet narrowly defined economic goals. From this economic view, students are not encouraged to develop life-long learning skills. In particular, it shapes the life chances of girls and boys. It is of particular relevance in terms of extra mural activities. Sport, involvement in cultural activities such as art classes, and school visits to places of cultural, historical or natural interest are limited by focus on achieving narrowly defined learning outcomes.

4.2 How Education is Perceived by Policy Makers in the Ministry

Every school day more than five million students in Saudi Arabia go to schools. They ought to be striving for a good future and looking for meaningful learning. According to policy documents, they ought to be learning to 'achieve their highest potential' (Ministry of Education, 2013, p. 16). In practice, the study finds that the future of students is narrowly defined in achieving economic goals. There are some limitations facing education to be perceived as a process of personal development as well as serving the greater good of Saudi Arabia in social, economic, and environmental terms. It is important to have education that considers the key aspects of development to make sure we are striving to achieve 'what we care about' (Stiglitz, 2010, p. 15). For the purpose of this study, human development fostered through appropriate educational policies is necessary to address the need for the development of well-rounded students. In this regard, the study found that the Saudi Arabian Education System's concern is largely focused more on education for the benefit of the economy. Khalid, a policy maker, suggests that the focus of the system should be to develop 'knowledge workers'. He continues to describe such a goal as follows:

For education in Saudi Arabia, my ambition is that students after finishing their schools become knowledge workers. So they can work in many sectors such as information technology (Khalid, policy maker at the Ministry of Education's head office, interview, 21 January 2014).

The economic concern highlighted by in the previous quotation is common among other policy makers. The following quotations are more examples of this concern:

Our outcomes need to be in consistent with the labour market. The most important thing we must define what we want from our students in the future, what are crafts, careers and positions in the labour market. We must program education and modify the system and even reduce it to meet the needs of the labour market. 70% of the current academic and training in public education and universities does not work for development in which it is non-useful disciplines for the labour market. We need to restructure education so that it focuses on the graduation of students and provides requirements necessary to join the labour market (Hossam, policy maker at the Ministry of Education's head office, interview, 12 December 2013).

Another policy maker added the following:

Knowledge now becomes part of the economy market. There are countries where knowledge is responsible for a large part of their national income comparable to petroleum exports income in oil countries. Take for example India, the software industries, in particular, represents a large part of their income now. So, in the Ministry we are aware of such importance and some of our projects are directed for such goals (Thamer, policy maker at the Ministry of Education's head office, interview, 15 December 2013).

The previous quotations from officials in different central departments in the Ministry's head office reveal concern about the potential of education for economic development. Their concern about education for economic growth takes different forms: for instance, concerns about unemployment, students' labour skills, and knowledge for the benefit of the market. The view of policy makers highlighted above is important as education policies are made in a centralised system that plans key decisions from the top down with very limited opportunities for wider involvement (see Chapter Seven).

The concern at policy level toward education for the economy could be justified, as the result of the lower contribution of citizens in economic development. The unemployment levels in Saudi Arabia are high at 12.02%, and the percentage of Saudis in the workforce is only 48.6% compared to 51.4% from expatriate workers (Ministry of Labour and Social Development, 2009, pp. 24-8). The education system is usually blamed when citizens do not have the necessary skills for the job market (Ministry of Economy and Planning, 2013a, pp 24-25; Baqadir, 2013, p. 228; Maroun et al., 2008, p. 2). The pressure on education to adapt a more economic outlook has increased recently. The current national debate on Saudi education is to move towards a knowledge-based economy. In this regard, Saudi Arabia in 2011 established a national committee to prepare a national strategic plan for a knowledge based economy. The plan put education at the centre to achieve this goal (Ministry of Economy and Planning, 2013a, p 7). The plan also pointed out the weak level of contribution of public education output that led to a decline in the productivity of the workforce and rising unemployment rates among citizens (pp. 24-5). Thamer, a policy maker, described the Ministry of Education's role in achieving knowledge based economy for the country:

The Kingdom, in general, has the target toward a knowledge-based economy. As a result, the Ministry of Education is working toward this goal. There is a large awareness at the decision-making level to strengthen this trend (Thamer, policy maker at the Ministry of Education's head office, interview, 15 December 2013).

The relationship between education and economic progress as highlighted in the previous quotation is important. In doing so, the study does not argue against the importance of education in improving the welfare of citizens. In fact, the human development approach does not deny such importance (Sen, 1999, p. 294). From a human development perspective, the criticism is for the economy being the single focus of the education system (Sen, 1999, p. 81; Nussbaum, 2011, p. 13). Therefore, the process of preparing good citizens requires expanding students' development opportunities in many aspects. This is because education for the economy has an instrumental role in preparing students for the market that rarely promotes other dimensions of development (Giroux, 2011, pp. 5-6). In the human capital view, policy makers are rarely encouraged to think beyond achieving economic goals (Walker, 2005, p. 104). Thus, the economy concern has the potential of limiting the 'sweep in' process for more ideas (Churchman, 1979, McIntyre-Mills, 2006) that has far more benefit for education's role in human development. This limitation gives education policy a narrow agenda that is not able to appreciate the wider benefits of education in development suggested by (Nussbaum, 2011; Sen, 1997; 1999; Drèze and Sen, 2013).

What policy makers assert to be the purpose of education is also different to the wider view of education put forward by the National Education Policy (1969) and the Ministry Strategic Plan (2013), as highlighted before in Chapter one. The view to education in policy documents at the national level emphasises on preparing students to be good citizens in the future (National

Education Policy, 1969, p. 5; the Ministry of Education Strategic Plan, 2013, p. 16). It also does not help in opening wider opportunities for students to understand their role as future citizens and leaders who will support the Millennium Development Goals, and the UN Sustainable Development Goals (SDGs). Therefore, if the education system is to contribute to human development, we need more than the economic view. As Sen (1999) points out:

What people can positively achieve is influenced by economic opportunities, political liberties, social powers, and the enabling conditions of good health, basic education, and the encouragement and cultivation of initiatives. The institutional arrangements for these opportunities are also influenced by the exercise of people's freedoms, through the liberty to participate in social choice and in the making of public decisions that impel the progress of these opportunities (Sen, 1999, p. 5).

As Sen (1999) points out in the previous quotation, human development is concerned with many aspects; the economy is only one aspect. Indeed, there are other aspects of education that seem neglected and need to be addressed to achieve more potential for educational development in Saudi Arabia. Other aspects include social and environmental challenges. Among the social challenges is the rise of terrorism and extreme ideas in the Middle East as part of political and social movement. Education needs to address such concerns in a way help students to be critical against ideas of violence and hate. Al-Issa (2009) raised this concern in his book about Saudi public education and how schools fail to prevent students from being radicalised (p. 41). Nussbaum (1997) also makes similar comments when she emphasises the role of education to equip American citizens with critical abilities to identify 'hasty and sloppy reasoning' (p. 10). One policy maker I

interviewed recognises the limitation of having an education that fails to address the wider role of students' human development. He said:

Education lacks the practice of giving students critical and innovative thinking skills, cognitive skills, higher-order thinking, analysis, synthesis, problem solving, and how students can express their opinions. They do not know. Communication skills are weak. This deficiency does not belong to all students, but I believe it reaches 90% percent of students. We need an education that graduates moderate Muslims that are not prone to extremist ideas. The real question we need to ask is where is the education to address those concerns? (Khalid, policy maker at the Ministry of Education's head office, interview, 21 January 2014).

The previous quotation highlights many challenges that students face to achieve a meaningful education. These challenges are addressed in this study in terms of learning and life capabilities (see Chapters Five and Six of this study). For the purpose of this chapter, this limited view fails to address many important aspects. For instance, there is less attention upon human capabilities such as critical thinking and reasoning (see Chapter Five/ Section 5.4). The economic view also seems to overlook other life capabilities of students. For example, time constraints in schools affected the process of building well-rounded students with limited time for play, social activities, and nutrition (see Chapter Six/ Section 6.3). This real life challenge seems to be an oversight as it not been mentioned from policy makers.

The previous examples of learning and life limitations on students' education raise concerns about students' capabilities for being a good citizens in the future (National Education Policy, 1969). The education system is a vital part of the process of development, and it needs to be clearly stated how it will be directed to the greater good of the country. Education is necessary

for short, medium, and long terms goals. It is necessary in order to think about the wellbeing of current and future generations (Stiglitz et al. 2010; McIntyre-Mills, 2014b). These ideas could improve students' personal development as well as the greater good for the country when policy makers think beyond the limits of economic opportunities.

Another issue with the economic view the study found is that it fails to take the environment into account. The role of education in sustainable development seems neglected as none of the policy makers address such a concern. This finding is consistent with the argument made by many scholars that education aimed at the economy leaves significant questions unaddressed about how education can bring to change in sustainable development (Giroux, 2011; McIntyre-Mills, 2013). Education for sustainable development should develop students' capabilities to understand what is required to protect the so-called 'wellbeing stocks' (Stiglitz et al. 2010; McIntyre-Mills, 2014b) As noted in Chapter One, 'wellbeing stocks' a concept adapted from Stiglitz et al (2010, p. 15) to refer to a multidimensional measure of wellbeing. The aim of the concept is to enable people to re-evaluate economics and to become more aware of the way in which we neglect social and environmental aspects of life. The pursuit of profit at the expense of people and the environment is a central problem for democracy and governance and it will pose practical human security challenges for food and water security for future generations. Education that equips students to think environmentally about the issues that they face is necessary. However, this missing aspect from the officials' perspectives raises concern about the interpretation of education's view to development and how far the role of education is understood.

The perspective of education's role in sustainable development has not only been missing among key officials in the Ministry. It also obviously missing in the Ministry's strategic plan for

public education until 2022 (Ministry of Education, 2013). The lack of a mention of education for sustainable development remains despite the fact that the role of education in pushing forward sustainable development is now highly recognised in the United Nations agenda for sustainable development. 'Quality Education' is the fourth goal to achieve the Seventeen Sustainable Development Goals (SDGs) 2030 (United Nations, 2016). This is also despite many indicators that people in Saudi Arabia are living beyond their means. For instance, in per capita water use, the country is ranked third internationally after the United States and Canada even though the country possesses very few water resources (Saudi Press Agency, 9 April 2016). To address such environmental challenges, our values should change through education that considers the way we should live. The way education can address sustainable development is by contributing to the process of developing a society in a way it does not use everything up, but sustains it. It sustains social capital, networks, and a wider economy instead of developing an economy that emphasises profit at the expense of the environment and the fabric of society. The focus includes achieving a more rounded approach to education so that students develop an awareness of their rights and responsibilities as ecological citizens (McIntyre-Mills, 2016, p. 6).

The limited perception of social and environmental aspects of education justify Sen (1999) and Giroux's (2011) arguments about how the economic perspective cannot fully capture other roles of education. Giroux (2011) argues that 'market pedagogy' devalues aspects of education other than economic benefits. The emphasis on education for profit and short term goals maybe further understood in the light of what Sen (1999) describes to be an instrumental view of human capability. The instrumental view of human capability usually fails to capture intrinsic aspects of people's lives (p. 81). Therefore, to achieve more than instrumental views, it is important to view human capability beyond being a means to other ends. It is from a capability perspective to Page | 133

education (Sen, 1999; Nussbaum, 2011). From a capability perspective, policy makers need to think of how education relates to the community, how it is related to civic society, and how it is related to developing well-rounded human beings; not only how it relates to the market.

From a gender perspective, gender in development needs more than the economic view of education. Indeed, market views to gender role in development sometimes deepens gender inequalities (Kabeer, 1994, pp. 97-8). For example, it may limit employment opportunities for a specific gender. In this case, market education (Giroux, 2011) undermines the life chances of girls and boys. To overcome such unequal opportunities, boys and girls need an education that empowers them to think strategically about their needs (Moser, 1993). This builds the capacity of students to think strategically to achieve their learning and life capabilities.

4.3 How Education is Perceived by Teachers

When I visited schools, I asked: is learning in schools directed to develop well-rounded students? Following Flood and Romm, (1996, p. 6) I asked about whether we are doing the right thing or not? In particular, What I found was that the policy emphasis was on the instrumental view of education. 'Doing the wrong thing right' (to cite Ackoff and Pourdehnad,2001) does not exist only at the Ministry level, it also occurs at the school level. In fact, it has a clear manifestation in schools. Schools are impacted by the current education goal, which has been shaped around achieving specific results. As discussed previously, the instrumental view to education emphasises students' development in terms of academic achievement to meet narrowly defined economic goals. Giroux (2011) provide great insight when he points out that if education is only directed for the benefit of the market, learning in schools tends to focus on teaching specific material, and not

to appreciate more formal and informal learning opportunities (p. 9). This limitation of the misdirected system (Ackoff & Pourdehnad, 2001) is best to be described by one teacher:

Nasser: Teachers have to finish the textbooks and students are required to achieve specific grades. Students just want information that can help them to pass exams. Thus, the learning process does not support critical thinking except on a few occasions. See how our goals are small! (Focus group discussion with teachers at public boys' school in the Border Province, 29 January 2014).

As highlighted in the previous quotation, success in schools is defined using a very narrow view of education. Students go to schools only to learn from a specific number of textbooks, and teachers have no further role other than teaching these pre-decided materials. This task oriented approach of schools to get students to comply with performance requirements is the opposite of a school system that is supposed to develop lifelong learning and well-rounded capabilities. Thus, young people have fewer opportunities to increase their capabilities because they have been channelled into this very narrow functional approach to education. They are not encouraged to become critical thinkers and well-rounded citizens (National Education policy, 1969; Nussbaum, 2011).

In the light of the economic view, this study found serious implications on students' view of education. The single focus on the economic role of education and the way schools interpret it gives the wrong message to students. Students' thinking has been dominated by the idea of studying well to get a better job. Maha, a head of a private girls' school in Riyadh, describes how the Ministry's current approach makes students focus on certificates and grades. She said:

The Ministry makes students just looking for certificates. The only thing girls are looking for are full marks. How? It does not matter. The important thing is to get full marks (Interview, 2 January 2014).

I had perceived similar notions of education, as Maha has highlighted above, when I met students:

Grades become our ambition more than learning itself. We are focusing more on it and studying for it (Rakan, a student at a private boys' school in Riyadh, focus group discussion, 23 December 2013).

After they pass exams and get certificates, knowledge and learning has no meaning to them:

Here we memorise knowledge, after the test we throw it in the closest trash bin. (Fawaz, a student at a public boys' school in the Border Province, focus group discussion, 2 February 2014).

Teachers also perceive that students are concerned with education for instrumental reasons.

This is education that enables them to get certificates, into a better college, and as a result a good job. In this part of my focus group with teachers, I describe students' view of education:

Waleed: Students or let's say most of the students do not see the benefits of education in emancipating the mind and being knowledgeable. They think education is for getting a job or getting to the university.

Saleeh: There is something important, and we did not achieve it yet. It is to have students that come to school to learn. Many students do not come to school to learn. They come for something else.

Waleed: Families have big roles in cultivating the importance of education in students' minds. What has been cultivated now is you have to study so you can get to the university then get employed. No. The goal is for education is that it increases the intellectual of students. Education for eliminating ignorance. Our religion supports such understanding. The first verse in Quran is 'Read'. (Focus group discussion with teachers at boys' public school in Riyadh, 29 December 2013).

In one interview, Waleed, a teacher at a public boys' school, made the following comments on students' views to education:

Students should know the goal of education. They should know why they learn. When I was a student, I did not see the benefits of education until I had reached a higher level of education. Students should know the purpose of education from an early age. They should know why they study and why they learn (Interview, 30 December 2013).

The issue of students' views of education seems to be cutting across public, and private schools as the Ministry follows central policies for private and public schools (National Education Policy, 1969, p. 20; Private Education Act, 1975, p. 3). Amjed, a teacher at one boys' private school, made similar comments to Waleed:

Most students, do not care about education. They want certificate only to graduate. That is only goal they want (Interview, 27 January 2014).

Nevertheless, the economic role of education failed to motivate all students. As explained in Chapter One, the gross national income (GNI) in Saudi Arabia is high and the country is classified among high income countries (The World Bank, 2016). Due to a good standard of living Page | 137

and high incomes, the instrument role limits the opportunity for all students to build hope and positive emotions towards their learning (Nussbaum, 2011). Focus only on the economy has the potential to prevent some students from appreciating the potential of education. I found this limitation clearer in private schools where students usually come from middle and high income families. Here two teachers from two different private schools describe the limited impact of education that is motivated by economic reasons:

Students learn to improve their status of living. I study to get a certificate and job that I can make a living and be independent. Here, honestly, Saudi students lack this motivation because everything is available to them. (Mustafa, a teacher at a boys' private school in Riyadh, interview, 1st of January 2014).

In another private school, one teacher gives another example of the limitation of education for the economy:

Amjed: Some students do not have the motivation to study.

The researcher: In your opinion why do you think students lack the motivation to learn?

Amjed: Because they are in good living conditions. So they rarely care about the future. Their parents provide everything, so they do not have the motivation to study to get a better job and improve their income. (Amjed, a teacher at a private boys' school in the Border Province, interview, 27 January 2014).

The role of education, however, is far more than creating financial success and is not – and should not be – the only way for students to think about and judge their success. Schools need to

draw a rich picture of what education is about. The economic view is incomplete. The picture is missing other important aspects which together can create a more dynamic future for students and their country. The role of education then is to make a significant contribution to peoples' lives and to enable them to think about the fact that they are part of living systems and not as human beings who are placed above other living systems which they exploit. It is also to ensure that students are learning to be capable citizens in the future for the good of the country (National Education Policy, 1969). The nation depends on fostering the capabilities of current and future generations and their awareness of the need to protect the environment. For example, Nussbaum (1997) points out that education should cultivate three fundamental capacities: a critical examination of one reality and life, world citizenship that includes a common concern of global issues, and narrative imagination of others' perspectives (pp. 10-1). The focus on education's instrumental role means students' considerations are given to one aspect of the education role in human development. Another potential that education has which could transform our world for the better gets less attention:

Hamza: What we learn in schools is grades are the most important than knowledge.

Akram: Grades are considered to be the most important thing. If you do not achieve the grades, you could not get to the college you want. That why grades are important than knowledge.

Omar: What are the benefits of knowledge without grades? Knowledge has no meaning without grades (Focus group discussion with students at boys' private school in Riyadh, 23 December 2013).

The previous quotation from students about the way they perceive the purpose of education justifies Sen's (1999) argument for the importance of the human capability view rather than instrument goals to achieve specific results. In this regard, to achieve meaningful learning, the Page | 139

current view needs to move beyond instrumental benefits of education. The alternative is to think of education as a human capability (Sen, 1999). This is the opposite of the policy makers' focus on people as a means to achieve other ends.

4.4 How Education is Perceived: Implications for Schools

In schools, the instrumental role of education affects students' learning and creates less opportunities for them to achieve many of the capabilities that are associated with education for human development such as critical and creative thinking (Nussbaum, 2011). One implication is the lack of extra-mural activities and learning for the sake of learning. The instrumental role of education is reflected in the way there are few limited times for students to develop learning and personal skills other than learning for tests which are based on the standard curriculum. It is of particular relevance in terms of limited time for extra activities. Sport, involvement in cultural activities such as art classes and school visits to places of cultural, historical or natural interest are limited by the focus on achieving narrowly defined learning outcomes. The narrow focus of teaching at school undermines these extra-mural activities and prevents teachers and students exploring new areas of interest. Students' words best describe this issue:

All of our studies are in the classroom. There is nothing outside the classroom for entertainment or learning. There is very little time for activities outside the school' (Akram, focus group discussion with students at boys' private school in Riyadh, 23 December 2013).

We did not get the chance to go out of school to practice what we learn' (Fawaz, focus group discussion with students at boys' public school the Border Province, 2 February 2014).

Teachers also confirmed the limited time for extra activities out of school:

Ala'a: I wish if we could have field visits. Even once a year. I teach Geology, and I need visits that can link science with the real life. With rocks for example.

Adel: The entertainment aspect is very weak in Saudi schools. Before, I have asked the school administration about if we could go for an excursion. Actually, students insisted that I go out of the school. They [the school administration] told me there are many security concerns, and you may get in trouble. There should be awareness among school administration and parents that we should go out, and we should have excursions. Also, in one meeting I suggested for our school to have a sports day. They [the school administration] said we might have a visit from the Education Department, and we will be brought into question that there is no learning in the school. (Focus group discussion with teachers at boys' private school in the Border Province, 28 January 2014).

From students and teachers' quotations, the instrumental role of education focuses on achieving narrowly defined learning outcomes. '[We] will be brought into question that there is no learning in the school' is how Adel, a teacher, described in the last quotation the school administration response when he asked for a sports day for the school. This emphasis on achieving a limited form of education shapes the life chances of young people and girls in particular. Based on the limitation on women's mobility discussed in detail in Chapter Six (Section 6.6), girls even have fewer learning chances out of school. Equal distribution of opportunities among gender groups mirror gender roles for women in the wider community (Kabeer 1994). In learning, it means less opportunities for girls to increase their capacities to think strategically about their gender needs (Moser, 1993).

Another limitation is in terms of less contribution to sustainable development. Taking learning outside the classroom can help in connecting students to their environment in a way that enhances sustainable development. In particular, learning outside the classroom can helps students to connect to local knowledge which important for a more sustainable way of living (Romm, 2016). Therefore, it is important to find ways to protect the environment and appreciate different ways of knowing about plants and animals and how to survive in the very dry climate in Saudi Arabia. It is necessary to know about the management of seed diversity and the management of water that is relevant for making life in an arid environment. Education could be used to address such concerns, and to link students to their learning and the environment in a way that enhances learning and at the same time builds on the efforts for a more sustainable future.

When students learn out of the classroom, they can learn more about many environmental issues that Saudi Arabia faces. If they are studying in the Western Provinces, they need to see how more than 150 Kilometres of the Red Sea shore is polluted and has become not suitable for marine life (Weche, 2014). If they are studying in the middle where the majority of land is the desert, they need to see how the lack of water and increased level of urbanisation has affected animal and plant vegetation⁴. If they study in the south, where mountains are a large part of the Southern Provinces' terrain, they need to see how mountains have increasingly lost their vegetation. There are many ways to connect with the environment; education for the economy fails to appreciate this. The old notion of learning being limited by the wall of the school limits education's potential of tackling more urgent environmental issues.

⁴ One of my neighbours in Adelaide once told me that she likes oases in Arab countries. It is sad these unique desert areas almost do not exist in many places in Saudi Arabia as a result of desertification and water scarcity.

4.5 Education Perception: Limitations on Motivation and Aspiration

The Instrumental role of education and lack of learning for the sake of learning affects students' motivation to learn more. Thus, students rarely go the extra mile to read extra books beside the school textbook (see Chapter Five/ Section 5.3.1). They are less interested in formal and informal opportunities to improve their learning skills. My observation in schools has been recognised by the Ministry of Education Strategic Plan (2013) as creating a limited culture for learning in schools and limited performance outcomes (p. 107). Students' relationships with learning end on the doorstep of their schools. Moreover, some students even throw their books in front of the school immediately after final exams. I noticed similar phenomena in the Border Province because I visited schools after they finished the first semester final exams. Hassan, a policy maker at the Ministry of Education' head office, recognises the issue of how students deal with books after each final exam:

Students disrespect their learning by throwing their books in streets after each final term exam. This issue exists, and it causes outrage among the community (Interview, 11 December 2013).



Picture (3): Number of books thrown by students in front of one school after school's final exam. Source: Alshammari, H. (2013), Okaz newspaper 09 June.

The previous picture shows the instrumental education in action. It shows how books become meaningless after it does what students believe what education is about. In the instrumental approach, students see books as an obstacle to achieve their dreams. One student's words best describe this instrumental situation:

I deal with my textbook officially, no fun no pleasure nor to benefit from it. My relationship is just formal and just for the test. Moreover, they are the only books I read (Fawaz, a student at a public boys' school in the Border province, focus group discussion, 2 February 2014).

Picture (3) also shows the limitations schools have to develop lifelong learning. If students are encouraged to perceive their education as more important than their certificates, then students will keep their books instead of throwing them in front of their schools, and they will seize more formal and informal opportunities to learn more. Nevertheless, the current approach to education

makes some students even hate learning. Learning in schools becomes associated with pain instead of associated with hope and motivation:

After we finish our final exam, we close books and throw it like someone who has been freed from the prison (Fawaz, a student at a public boys' school in the Border province, focus group discussion, 2 February 2014).

I wish if students could love their schools. However, from what I have seen most students come to school because their families push them to go, or they fear absence will cost them their grades (Amjed, a teacher at a private boys' school in the Border Province, 27 January 2014).

Preventing students from appreciating the wider role of education raises concerns that education could become a process of oppression and dehumanisation (Freire, 1970). This is the opposite of education that creates hope and inspiration among students. Having positive emotions towards crucial aspect of our lives such education should be cultivated and protected (Nussbaum, 2011, p. 31 & p. 33).

The instrumental impact among students also affects the way private education works. As I will discuss in more detail in Chapter Five (Section 5.6), some students perceive private education as an opportunity to achieve higher grades to allow them into universities:

Ibrahim: what students view to private schools is to get grades. They are not looking for education. In this way, the number of private schools is growing, and it is a huge problem because the number students is also growing (Focus group discussion with teachers at private boys' school in Riyadh, 1 January 2014).

From the previous quotation, I believe we cannot only blame private schools or students who chose to follow their dreams in this way. This is because the wider context influences people's choices according to Sen (1999, p. 133). Education is shaped around profits. Students and their families can justify their choices as this is how they want their children to be educated. This is what they think education is about. Nevertheless, to give people the opportunity to see further than an instrumental purpose, they need to appreciate its intrinsic value. Through using the same idea, Sen (1981) fought poverty. The idea is to value people as the end goals of development (Sen, 2003). Therefore, their education should be valued as a human capability, and a basis for human dignity that helps people to achieve more than decent jobs (Nussbaum, 2011, p. 32). In essence, this is education that supports the Millennium Development Goals (MDGs) and the UN 2030 development agenda for sustainable development (SDGs).

Relying only on the economic view limits the role of education in development and the positive influence education can play. In this regard, the Ministry needs to set priori norms (McIntyre, 2014b, p. 87) to guide education that incorporate gender mainstreaming and awareness of the UN Millennium Goals and Sustainability Agenda across public and private schools. Education policies and governance need to be reframed through expanding people's capabilities. Changing the perspective towards education as a capability that is not only a means for economic growth is important; it is valuable to have an education system that benefits human development at the national and personal level. Therefore, the Ministry of Education needs to consider a wider view of education based on students' needs and the future of Saudi Arabia. Also, to create education capability, education policy needs to include indicators based on the capabilities suggested by Nussbaum (2011). More consideration needs to be given to the complexity of

education capabilities in terms of the development of well-rounded human beings who engage in lifelong learning.

The success of the previous normative idea - education as a human capability (Sen, 1999) - is also based on setting a governance system that makes sure we are achieving 'what we care about' (Stiglitz, 2010, p. 15). In particular, the wider perspective of education needs to be supported by a variety of integrated measurements that appreciate the instrumental and intrinsic role of education in students' current and future lives (Stiglitz et al., 2010).

Drawing a new future for Saudi public education requires more of a system approach to education's role in development. The system point of view refuses one single view to social issues (Churchman, 1979; McIntyre, 2003). The process needs to be based on an inclusive approach to shape and implement policies to make sure all stakeholders can contribute to the process. Figure (4.1) provides one suggested a way of thinking about the purpose of education in human development. The example is taken from McIntyre-Mills (2000) which provides a suggested way of thinking about policies for human rights.

This study discusses Critical System Thinking (CST) role in human development in more details in Chapter Seven. The system-oriented approach to education addresses education for human development in terms of Ulrich's (1983) 12 questions in thinking about what ought to be done in terms of public policy.

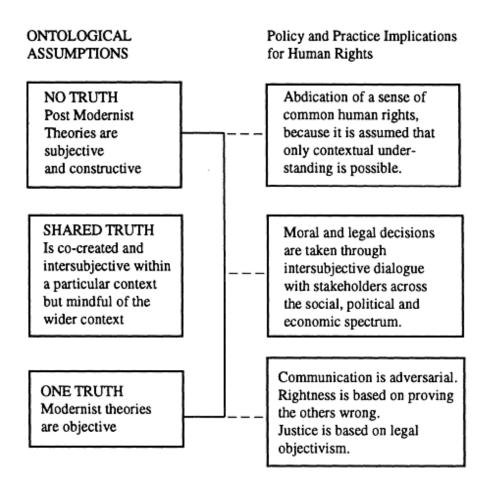


Figure 4.1: Drawing together strands for a new shared sense of meaning, Source: McIntyre-Mills((2000,p 22)

4.6 Chapter Summary

This chapter provides an overall picture. The purpose of this chapter is to investigate whether we are striving for the right goals (Stiglitz, 2010, p. 15). It discusses findings related to how education is perceived by stakeholders and its implications for schools. Research findings suggest that in Saudi Arabia education tends to focus on its economic benefits. Little consideration is given to education's role in social and environmental aspects. The current state of the system is pushing out many roles of the system that need to be included (Churchman, 1979; McIntyre-Mills,

2006). Emphasis has been given to the instrumental role of education in terms of in promoting economic growth, making an investment in so-called human capital to have a return on the market and personal income. Limited attention has been given to the complex process of education in developing well-rounded human beings. Little consideration also has been given to social and environment dimensions. Thus, it may limit the opportunity for students to fully appreciate their environment and how to sustain its resources (Stiglitz et al., 2010). The implications of the economic view on schools show the limitations of perceiving education only based on instrumental benefits. Students of both genders have little opportunity to achieve their gender strategic and practical needs (Moser 1993; Kabeer, 1994).

This chapter makes the case that an education system that benefits human development at the national and personal level needs to be based on a human capability approach (Sen, 1999; Nussbaum, 2011). The Ministry of Education needs to consider a wider view of education based on students' needs and the future of Saudi Arabia. Relying only on economic view limits the role of education in development and the positive influence education can play.

CHAPTER FIVE: Achieving Learning Capabilities in Education: Policy and Governance Challenges

Education is not just about the passive assimilation of facts and cultural traditions, but about challenging the mind to become active, competent, and thoughtfully critical in a complex world. This model of education supplanted an older one in which children sat still at desks all day and simply absorbed, and then regurgitated, the material that was brought their way.

- Martha Nussbaum, *Not for Profit: Why Democracy Needs The Humanities*, (2012, p. 18).
- Outhred et al (2010, p. 60) point out that the role of learner and teacher support material in optimal teaching and learning is often cited as critical, and textbooks are frequently used as a way of bridging systemic learning deficits. They refer to the importance of well-designed instructional materials, specifically when curriculum changes are introduced or when teachers lack the necessary teaching skills. Outhred et al (2010) cite Sampa (2008), who stresses the need for well-designed instructional materials to strengthen learners' and teachers' interaction with the curriculum, and who argues that when teaching needs strengthening, such materials offer an opportunity to reinforce and supplement teaching and learning (Mckay in McIntyre-Mills, 2016, p. 85).

5.1 Introduction

The previous chapter gave an overall picture. The purpose was to investigate findings on how the education system is perceived and its implications on schools. The ability to build creative and critical thinking abilities is the identified policy challenge for the administrators, teachers and learner education systems within the Saudi Education system. This chapter investigates the challenges students face in acquiring meaningful learning. As part of human development for students, the study is concerned with enabling young people to function effectively as critical thinkers by enabling them to navigate different ways of knowing. This requires inter-disciplinary and cross cultural thinking. Thus, it is important for the process of teaching and learning to support education for human development. This role cannot only be achieved by placing students in schools but also by mindful and engaging learning opportunities within them (UNESCO, 2009, p. 171) and beyond the school walls. Therefore, this chapter aims to:

- Address the current situation in schools and to make suggestions as to how to go about achieving such a goal.
- Investigate challenges students face to achieve learning capabilities. The purpose is to address the second research question 'to what extent are students able to achieve their learning capabilities?' To answer this question, the study compares and contrasts case studies from schools in Riyadh and the Border Province. The emphasis is to address challenges around learning evaluation and pedagogical approaches. In learning evaluations, the emphasis is to investigate the current approach for measuring learning progress in schools. In particular, I explore to what extent is measuring students' learning helping for developing lifelong learning. The second aspect in this chapter is to investigate the current pedagogical approaches. The emphasis is to explore whether teaching practice advances thinking in the classroom or not.

The case studies from schools found four key challenges that face the process of building learning capabilities. **The first pedagogical challenge** is the limited scope of text book design. Participants in schools have expressed concerns about passive forms of education and the relevance of the curriculum in a centralised learning system. One important implication of passive learning is the challenge of reasoning and critical thinking. The design needs to include a workbook to engage girls and boys in learning a parallel curriculum that enables a) critical thinking, b) an awareness of social and environmental challenges along with their rights and responsibilities, and c) respect for diversity.

The second challenge is the limited scope measuring critical thinking skills linked with workbook evaluation. This challenge is more significant in private schools where the learning measurement usually focuses on summaries of the textbooks which do not foster critical thinking skills and which do not engage the students in thinking through problems or in reading more widely in order to find answers to challenging questions.

The third challenge is related to the lack of standardised assessment. The absence of standard tests has been reflected in many students achieving an advanced level of their education despite poor academic results. The fourth challenge is the influence of employment conditions on the integrity of learning evaluations. Employment conditions in private schools jeopardise learning evaluations where the teacher is employed by the school and where the school faces pressure to give higher grades.

The study does not find a real difference between provinces or gender groups in terms of challenges for learning capabilities. The difference was evident between public and private schools

associated with the conditions of employment of teachers, which impacted the interpretation of the curriculum.

Challenges for learning capabilities are discussed in this chapter first by a comparison across public and private schools. Then each challenge will be discussed in turn.

5.2. Learning Capabilities: Case Studies in Schools

Human development from a capability perspective puts an emphasis on people's abilities to achieve valuable outcomes. That is, the real opportunities people enjoy to achieve their goals (Sen, 1999; Nussbaum, 2011). In education, human development involves being able to build lifelong learning capabilities and have a critical understanding of one's reality (Nussbaum, 2011, pp 33-4). Based on this view, in this section, I compare and contrast case studies from public and private schools for boys and girls in Riyadh and the Border Province. The comparison between schools is in terms of the key challenges facing the creation of learning capabilities in schools. Those challenges are the limited scope of learning evaluation, pedagogical challenges, the lack of standardised assessment, and the influence of employment conditions on the integrity of learning evaluation. See figure (5.1).

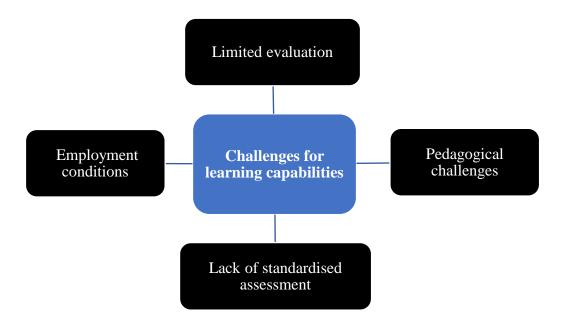


Figure 5.1: Challenges for learning capabilities

The central learning policy from the Ministry of Education plays an important role in the learning challenges highlighted in the previous figure (5.1). The central learning policy requires central development and management of learning in the country (National Education Policy, 1969, p. 27) In this regard, the Ministry has created a central curriculum department which develops textbooks for boys and girls in public and private schools for all different subjects. Public and private schools in all different provinces are subject to the same requirements from the Ministry of Education (Private Education Act, 1975, p. 3). The Ministry of Education also has a central education department in each province. Part of their responsibility is to make sure schools follow the central learning system which is important for the maintenance of standards. The similarities include similar content and similar regulations for learning evaluation and examinations. This centralised structure limits the differences across provinces. Therefore, the study did not find

significant differences between the central province (Riyadh) and the Border Province in terms of challenges students face to achieve their learning goals. Boys and girls face similar challenges of learning in schools which do not build in the so-called 'parallel curriculum' to foster critical thinking and respect for many ways of knowing and respect for diversity. The inbuilt curriculum needs to foster gender sensitivity and the potential for boys and girls to achieve their goals.

There is limited research on textbooks as a basis for fostering engagement with learners. This is the case in Saudi Arabia. The best practical example of this can be found in South Africa where textbooks have become a hybrid between a workbook and a standard text, and these efforts by Veronica McKay has received many UNESCO awards, most recently in 2016. According to McKay (2016) it fosters improving both curriculum content and the process of engaging students:

Notwithstanding the dearth of research on the impact of 'workbooks' in school classrooms, much research has been conducted on the importance of textbooks in supporting the curriculum. Elmore (2009) states that for any real improvement in learning to be achieved, the instructional core – which comprises teachers' knowledge and skills as well as their content knowledge, and the role of the learner in the instructional process – needs to be improved. He thus stresses the important relationship between the teacher, the learner and the content, learner and teacher support material - textbooks and workbooks - being fundamental to the instructional core 'composed of the teacher and the student in the presence of content... He explains that 'the instructional task is the actual work that students are asked to do ...' (Elmore, 2009, pp. 22-23). 'Following Elmore's thesis, the workbook development team explored the role workbooks (and textbooks) might play in improving the instructional core. Accordingly, the workbooks were conceptualised with a view to supporting teachers regarding what they should ask learners to do. The workbooks were therefore designed to fulfil the roles of both textbooks and workbooks or structured collections of worksheets. While they include some instruction, explanation and extensive reading text, they also guide the learner-teacher engagement with regard to the content, encouraging discussion and "doing" (p. 86).

The problem in Saudi Arabia is that it did consider ways to engage students and to measure knowledge and skills in thinking about the content in textbooks (rather than have students merely regurgitating them) and also the lack of transparent examinations. The greatest difference the study found was between public and private schools. Although the policy on learning is uniformly applicable across public and private schools, it is implemented and interpreted differently across these schools. In private schools, the content of the curriculum is more likely to be summarised and rehearsed into achieving goals in a narrow way. This has the implication of students being evaluated on some parts of the curriculum only. The difference in private schools is associated with the conditions of employment for teachers. Private school teachers are employed by the schools. The pressure they face from students and school administrations play a significant role in the different implementation from public schools. Private school teachers have an extra role in that they have to teach according to a very carefully rehearsed examination. This happens to some extent in public schools. However, there is less leverage for the students and school administrations to pressure teachers who are employed by the public sector.

Table 5.1 below summarises the differences between public and private schools in terms of the key challenges facing learning in schools. Then the key challenges that face learning in schools are discussed in more detail in the following sections.

Challenges for learning capabilities	Public schools	Private schools	The difference between public and private schools
Limited learning evaluation in schools. Tests and exams are limited to textbooks. Learning measurement does not reward other formal and informal learning such as reading and the achievement of many skills such as communication and critical thinking.	Central grading system applied in public schools is limited to textbooks.	Central grading system applied in private schools is limited to textbooks.	Although the Ministry of Education restricts the evaluation to textbooks, learning measurement in private schools usually focuses on summaries of textbooks.
Learning in schools is constrained only to the national standard textbook. Students learn only from pre-decided materials. The top down approach creates issues of relevance and limits creative teaching and learning for teachers and students. One implication is the heavy reliance on passive forms of education.	Central learning through the supervisory system required public schools to teach the standard textbooks.	Central learning through the supervisory system requires private schools to teach the standard textbooks.	The content of the curriculum is more likely to be summarised and rehearsed in private schools to achieve goals in a narrow way. This has a significant implication of lessening a private school student's chances to create critical thinking capabilities.
Lack of standardised assessment across schools.	No standard for learning assessment. Teachers set the tests to evaluate students learning from textbooks.	No standard for learning assessment. Teachers set the tests to evaluate students learning from textbooks.	Employment conditions for private school teachers makes evaluation easier to manipulate. Teachers in private schools are employed by the school and face pressure to give higher grades
Teacher's employment conditions	Teachers in public schools are employed centrally by the Ministry of Civil Service.	Teacher in private schools are employed by the school.	Different employment conditions for teachers across public and private school affects the transparency of learning evaluation.

Table number 5.1: Challenges for learning capabilities: Comparison between public and private schools.

5.3 Lack of Integrated Measurement for Learning in Schools

The Ministry of Education's current approach to measure learning in schools is in terms of academic achievement. The information that the Ministry relies on in this regard is educational attainment in the form of grades and tests that create the basis for measuring learning capabilities. Achieving a specific number of grades is essential for students to move from one academic year to another. At the high school level, grades have more importance. It shapes students' futures as it plays a significant role in further education and creates the basis for employment after high school.

The Ministry's approach to measure learning broadly is consistent with the argument that has been made in the literature review (see Chapter 2/ Section 2.7). The argument is that schools need a governance framework that addresses more integrated ways of measuring progress (Stiglitz et al., 2010). This is to make sure that students are achieving their learning and life goals (Sen cited in Saito 2003, p. 25; Nussbaum, 2011, p. 26). Thus, in learning, evaluation needs consider the wider aspects of students' education: for instance, a wider body of knowledge and basic skills. The skills necessary include critical thinking, communication, and problem solving (Freire, 1970; Nussbaum, 2011). To build lifelong learning, the grading system also needs to reward creativity, innovation, and learning that goes beyond the absolute essentials required in the standard curriculum.

Given the importance of measuring students learning, the question now is what has been measured? Do schools measure formal and informal learning? Does the grading system reward learning beyond the limits of standard textbooks? This kind of question is important to maximise student potential, and to build their capacity to think critically and build lifelong learning capabilities. In this respect, the study found that the challenge that Saudi students face is related to

the nature of testing and the kind of narrowly defined tests that cover limited aspects of students' learning and evaluation.

The study found that learning measurement in schools is limited and that the national textbooks do not build in ongoing evaluation using workbooks that foster 'going beyond' and diving deeper', to use the current pedagogical terminology for teaching that inspires lifelong learning that can make a difference. Grading systems do not address the wider understanding of education's role in development through more formal and informal learning opportunities (Freire, 1970; Terzi, 2007). The following quotations from students give examples of how they think they have been restricted by learning evaluations which do not reflect their learning needs:

Other school outside Saudi Arabia their school report do not have only academic subjects. You fail or not like what we have here. No. Their certificates include many skills. Even the way the students deal with other students. We do not have such a thing. They told us since we are still young to success only on the subjects we have (Asma, focus group discussion with students at girls' private school in Riyadh, 20 February 2014).

It supposes our tests have field research. Field research in that we go and collect data from the field not from Google. We want to live such experience (Youssef, focus group discussion with students at boys' private school in Riyadh, 23 December 2013).

The previous quotations from students highlight how learning assessment limits their opportunity of 'being and doing' (Sen, 1999; Nussbaum, 2011). Their potential has been restricted by school reports that are narrowly directed to the standard curriculum that is not shaped by a parallel curriculum to support social and environmental justice, and is without adequate evaluation

of critical abilities. The parallel curriculum needs to take a leaf out of the current approach used in South Africa, for example, where McKay(2016, pp. 84-85) suggests that the:

Millennium Development Goals (MDG) and the recent Sustainable Development Goals (SDG). SDG Goal 4.7 (which forms the essential precursor to all 16 other SDGs) sets the target of ensuring that by 2030, all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, sustainable production and consumption, sustainable lifestyles, human rights, gender equality, a culture of peace and non-violence, global citizenship and an appreciation of cultural diversity. Clearly, if education was to respond to these goals, it was necessary to ensure that education inculcates positive values that transcend content knowledge and promote: human rights, gender equality, a culture of peace and non-violence ,global citizenship, an appreciation of cultural diversity ,peaceful societies, inclusive societies, justice for all, sustainable lifestyles, environmental and eco-stewardship.

In other words, schools are only rewarding students for doing successful tests based on limited materials. This limitation on measuring in schools has been recognised by the Strategic Plan for Public Education (Ministry of Education, 2013). The plan points out that the current tests and examinations focus on specific topics and do not measure creativity, innovation, and the ability of students to analyse different ideas (p. 108).

Learning evaluation in schools is narrow despite the need to advance students' learning across different subjects and skills, and thus to enable students to achieve their learning capabilities. Thus, instead of measuring learning only from standard textbooks, students need

measurement that includes progress and achievement in many skills such as critical thinking and reasoning (Nussbaum, 2011). As part of human development for students, young people also need to be able to navigate different ways of knowing across many disciplines and cultures. This will enable them to function effectively as critical thinkers in a globalising world. It will also allow them to achieve their own sense of gendered, cultural identity which is important for human development (Freire, 1970; Kabeer, 1994). By learning skills to 'unfold values' and to 'sweep in' social, cultural, political, economic and environmental dimensions of an area of concern (see McIntyre, 2003; McIntyre-Mills & De Vries, 2011; McIntyre-Mills, 2014b). In this way, students could be better equipped to face global challenges and have better capabilities to address differences which rest on an ability to think critically and analytically (see McIntyre-Mills, 2006; 2014b; & Borradori, 2004). This is increasingly important in order to avoid narrow economic or religious fundamentalism. In Saudi schools, the grading system needs to respond to more learning needs. The centralised grading system should reward creative teaching and learning that goes beyond the limits of the curriculum, rewarding critical engagement that fosters lifelong learning capabilities. This is a grading system that measures both quantitative outputs and qualitative outcomes, in order to foster the wellbeing of students and future generations. A raft of indicators to address academic achievement is needed to provide s a means to develop the social and environmental rights and responsibilities of well-rounded students.

The lack of recognition of many learning capabilities in learning evaluations is broadly consistent with other studies. The work of Bigger and Santi (2012) found that creativity and critical thinking are usually neglected in academic focused education systems. Lozano et al. (2012) analysed European higher education and found limitations in the focus on achieving only a few number of competencies. They suggest complementary measurement using the Capabilities Page | 161

Approach as it provides a wider understanding of and the implication of education's role in development.

The limitation of measurement students face broadly applies to public and private schools for both genders. This is due to the central learning policy that requires tests to be made from the standard curriculum. Despite this similarity, the study found differences between public and private schools in terms of what has been tested. To help students achieve success in terms of grades in private schools, teachers usually give summaries to students. Questions are made in ways that cover only teachers' summaries, not the whole textbook. The following quotations from teachers and students in private schools illustrate this issue:

Talal: The whole book is summarised in 20 pages. Our knowledge will be affected.

Hamza: At the end of the year he gives us [the teacher] only 20 pages extracted from only 10 lessons. What about other lessons! In the end, I was being tested only in 2 lessons (Focus group discussion with students at boys' private school in Riyadh, 23 December 2013).

The student comes to private school, and she assured that at the end of the term she will be tested on few pages (Dallal, teacher at a girls' private school in Riyadh, focus group discussion, 30 December 2014).

This is usually the opposite in public schools:

We have a lot of monthly tests. For each chapter of our books. Test after test. When we just finish one chapter directly, we get a test (Ayman, a student at a public boys' school in the Border Province, focus group discussion, 2 February 2014).

The previous quotation suggests students in public schools seem to work harder than their peers in private schools. Mustafa, a teacher, confirms students in public schools work hard to succeed. Mustafa worked for many years in public schools before becoming a private school teacher. He points out that many students come to private schools looking for higher results with less effort:

As I have worked before in public schools and now in a private school, public schools have better equipment than private schools. The government provides generous support to public schools. However, public schools are strict. Therefore, students do hard work. On the other hand, private schools pamper their students. This is a process of marketing because it is kind of an investment project (Mustafa, teacher at a private boys' school in Riyadh, interview, 1 January 2014).

The previous quotations highlight how education privatisation creates more challenges for building learning capabilities. Limiting examinations to a few pages in the textbook is motivated by students asking for higher grades and private schools teachers being pressured to ease the process for students. Teachers on temporary contracts in private schools also impact the integrity of learning evaluation. This impact of employment conditions on evaluation are discussed in more detail in this chapter (Section 5.6).

5.3.1 Lack of Integrated Measurement for Learning in Schools: Implication on Students' Learning Capabilities

The limited focus of learning measurement limits the focus of students. Instead of students being encouraged to broadly perceive their learning from different sources, they only focus on what has been measured. They have been taught to build skills and knowledge from limited content. The way students are concerned about education that been measured is best described by one teacher:

I was naive about the impact of grades when I started my career. When girls asked the question whether any lesson was part of their test or not, I would simply answer 'yes' or 'no'. If I said no, it will not be included in your final exam they directly ignored my expounding and engaged in side conversations. Now I am fully aware of this matter. (Lubna, a teacher at a girls' private school in Riyadh, interview, 30 December 2013).

Students' concerns towards what been measured is in consistent with the work of Stiglitz et al. (2010). They argue that metrics shape people's perspectives. In this regard they point out that 'what we measure shapes what we collectively strive to pursue' (p. 6). Therefore, the omission of some aspects from students' learning that is without measurement gives them the wrong message. Students are encouraged to strive for achievement in terms of limited materials. In the narrow measurement view, students are not encouraged to develop life-long learning skills. The powerful impact of this evaluation ignores many formal and informal learning opportunities without measurement. However, for more meaningful learning, students need to be given the message that learning out of textbooks matters. For this to occur, the grading system needs to reward more formal and informal opportunities. This especially important in the digital era, where shaping learning in the classroom limits the contribution of education to students' development. Students need to seize upon the availability of computers, the Internet, and smartphones to become more

educated and to be more creative; to go the extra mile to learn and relearn new concepts and ideas. I have raised this concern in one focus group with students. I have asked students whether they use the internet for learning. Not one student mentioned that they use the Internet to expand their knowledge, and one student added the following comments:

No. There is no desire. We just finish our school and go home. (Eyad, a student at a private boys' school in Border province, focus group discussion, 4 February 2014).

My observations in schools about the lack of interest to learn more new knowledge has been recognised by the Ministry. The Ministry of Education Strategic Plan (2013) points out that schools have as a very low culture for learning (p. 107). One teacher comments on the Ministry approach for learning in schools:

They think that knowledge is limited to school. Nowadays you cannot limit knowledge to schools. Students can learn from the internet and from books in libraries more than what they could learn from me (Mansour, a teacher at boys' public school in the Border Province interview, 3 February 2014).

One important implication of the narrow grading systems is the lack of wider reading among students. Students are not encouraged to access a wide range of readings and texts that could help them to promote their critical capabilities and stimulate imagination and thoughts (Nussbaum, 2006; 2011). Therefore, students rarely access a wide range of readings and texts that

help them to advance their critical thinking and understanding. Students usually read textbooks which are formally measured by their teacher. They usually do not read extra material:

Books are collecting dust in the library. No student goes to the school library to read. Students' mentality focuses only on preparing and passing their tests. So there is no reasons to read extra material. They wondered whether they should bother to read anything beyond the textbooks' (Fawaz, a student at a public boys' school in the Border province, focus group discussion, 2 February 2014).

The lack of appropriate workbooks to make students read beyond the core curriculum to help them to understand it better is highlighted in the previous quotation. Students have been distanced from books and informal reading. Their justification is because it not been reflected in their school report. This shows how the limited scope of measurement is not enough to advance thinking in the classroom. Building lifelong learning skills for students is a real challenge as these students grow up almost without reading widely. A reading survey across all 13 provinces in Saud Arabia found similar results. The survey found teachers do not help students build reading habits because they do not ask them to read books beside the textbooks (Saudi Aramco, 2014). Based on my personal experience as student, the lack of wider reading among students was a common issue. It is common to find some students in the last year of high school who have not read any other single book than their textbooks. My personal experience drove me to raise this concern in one focus group discussion with students. I was shocked to hear that only one student out of six mentioned that he had read extra books on his iPad. Others did not report any further reading:

Sami: I hate reading. In all our studies we did not borrow any books

from the school library. If you try to take a book, you will find a

spider web. The school library is for chatting not for reading.

The researcher: Why do you not borrow any books?

Sami: Why should I?

The researcher: Why not read a book in history for example?

Sami: No one read history.

Researcher: Have you seen any student setting reading any book?

Sami: No.

Bander: No ... (Laughing).

Hamdan: Reading is almost non-existent. (Focus group discussion with students at a public boys' school in the Border Province, 2

February 2014).

The previous discussion shows how schools deprive students from reading and building reading habits from an early age. As this is important for their learning, it is also important for creating critical capabilities (Nussbaum, 2011). Lack of reading affects the process of building critical thinking reasoning and imagination among students (Nussbaum, 2006). The lack of reading among students highlights the importance of a grading system that is responsive to a range of capabilities. Following Stiglitz et al. (2010), there are many strategies for schools to encourage and reward students for reading more books. Based on my experience with my children here in Australia, these strategies include essential reading levels, the South Australian Premier's Reading Challenge, and Scholastic Australia where students report their daily reading online. These different strategies to measure and motivate learning beyond textbooks makes the weekly visit of the public library part of my children's learning. In Saudi Arabia, schools can advance students' learning by adopting similar strategies. Thus, students can develop learning habits and become well-informed citizens. This could supplement the current traditional grading system and could be

used to encourage students to address wider areas of concern such as building an awareness of social and environmental rights and responsibilities.

Lack of reading among Saudi students is broadly consistent with the work of Nussbaum (2006) on Indian public education. In her field study on Indian schools, she found that much of the curriculum is concerned with science and technology, with less attention to humanities and further reading in history. She wrote about the importance of reading beyond a school's subjects:

There is no doubt that scientific and technological education is important, and there is also no doubt that good textbooks are important. It is indeed important that young people read a complex and nuanced version of Indian history, one that stresses the agency and interaction of many different groups and presents an accurate picture of these interactions.... In the light of the whole huge question of how to develop the minds of young children who are going to grow up to be democratic citizens, however, the twin emphasis on technology and textbooks seems extremely narrow (pp. 387-8).

As Nussbaum highlights in the previous quotation, students need to access a wide range of reading to stimulate their critical capabilities. In this way, education has more potential for developing good citizens (National Education Policy, 1969). However, the lack of reading among students suggests schools' fail to build lifelong learners. Therefore, it would be a challenge to advance human development where many students graduate lacking reading habits. This issue raises big concerns about the ability of the education system to play its important role in development to tackle social and environmental issues. This because a literate society needs to read and build awareness of many important issues, and to develop an understanding of what is

required to protect 'wellbeing stocks' for future generations (Stiglitz et al., 2010; McIntyre-Mills, 2014b). For instance, in sustainable development, lifelong learning strengthens the movement toward a more sustainable way of living (Noguchi et al., 2015).

Lack of reading seems worse in private schools. As highlighted earlier, a private school teacher has an extra job to summarise the textbooks and to make it easier for students to digest them (Section 5.3). It means students do not even bother to read the whole textbook:

Ali / We did not open the textbooks in the whole year. We only write in our notebooks teacher's notes and explanations. We never open the book.

Iyad / rarely the teacher asks us to read. We rely on his explanations on the blackboard and our notebook. Sometimes the teacher gives us a summary. (Focus group discussion with students at a private school in the Border Province, 4 February 2014).

The previous quotation provides more evidence on how learning challenges are more serious among private school students. In terms of reading, it suggests private school students will have more challenges in developing more knowledge across different subjects. It also suggests a higher potential for inabilities for critical thinking and reasoning (critical thinking challenges are discussed in more details in Section 5.4.2).

5.4 Pedagogical Challenges

The Ministry of Education develops and disseminate textbooks to all public and private schools. These textbooks become official documents which are given to students at the beginning

of the year and students need to study them to graduate to the next level. If the delivery of textbooks at the beginning of the term is delayed, then learning at schools can be jeopardised or in some instances can stop completely. I can draw on the following example from personal experience. In 2011 when my eldest daughter started her first school, I registered her in a private school because it was the nearest school to our house. A few days later, my daughter told me that she did not learn anything. When I contacted the school, they told me that this was not their mistake, but it was the education department's mistake, who did not give them the new textbooks. Reports from local newspapers sometimes highlight similar issues in different provinces. For example, in 2015, delayed textbooks affected learning in schools in Jeddah⁵ which raised complaints among students and their families (Ettalhi, 2015).

The study found that control over learning highlighted in the previous paragraph creates an environment for passive learning. As will be discussed in detail in this section, passive forms of education and relevance of the curriculum affect teaching styles; particularly when students learn only from specific materials that are developed centrally and teachers' roles are only to pass on information from textbooks (Al-Issa, 2009, p. 21). In this central approach to learning, most teachers follow the passive teaching approach where they provide information and facts without giving students the opportunity to be active (Alabdulkareem & Alshehri, 2014, p. 48).

The central learning policy also limits students' opportunity to learn out of school, where connections can be made with the wider community. This approach to knowledge is not helpful to develop lifelong learning and well-rounded capabilities (Kincheloe, 2008; Giroux, 2011). It also does not support education for human development that requires learning practice that stimulates

⁵ The second largest city in Saudi Arabia which located on the coast of the Red Sea.

critical and creative thinking (Nussbaum, 2011). In particular, it shapes learning chances for boys and girls into a very narrow form of knowing. One implication in development is to limit an education system that achieves wellbeing outcomes for the country (Stiglitz et al., 2010; McIntyre-Mills, 2014b). The education system should contribute in the process, transforming the Saudi economy beyond its traditional role. This is important to promote a new economy that appreciates current and future wellbeing socially, economically, and environmentally in a changing context where in fact some of the old economies are no longer relevant. Learning only from textbooks without encouraging creativity will not enable students to think critically and to develop a new economy that values both social and environmental justice. As Giroux (2011) argues:

I believe it is crucial for education not only to connect classroom knowledg to the experiences, histories, and resources that students bring to the classroom but also to link such knowledge to the goal of furthering their capacities to be critical agent who are responsive to moral and political problems of their time (p. 7).

As Giroux (2011) points out, the more open approach to knowledge can help in achieving more potential to education that exceeds the traditional role of schooling. It has specific importance to gender needs. If we want to empower boys and girls, we cannot simply just make them literate. The traditional approach to learning and basic literacy skills are not enough to achieve gender needs (Kabeer, 1994, p. 250). Students need to think of the world through the word (Freire & Macedo, 1987). They also need the capacity to address roles in the community and to think of how they can achieve their basic and strategic needs (Moser, 1993). The capacity to get students to think strategically seems far from the reach of an education system that makes students passive

consumers of knowledge. Instead, they need a relevant education that empowers them for more potential as future citizens.

Hassan, a policy maker at the Ministry, recognises how the central development of textbooks isolate students from their culture and does not respond to Saudi cultural diversity and local economic needs. He said:

Instead of central management for education in Riyadh, I argue for each education department to have more independence in terms of curriculum development and management. For example, the Eastern Province is a petroleum region and the curriculum is supposed to focus on the oil industry and the advancement of scientific and engineering aspects. For agricultural areas, the curriculum should be focusing on the advancement of the agriculture and transform into agricultural industry. We need innovation and a move away from the traditional education system (Interview, 11 December 2013).

Unlike Hassan, Khalid, a policy maker, goes further to argue that the Ministry should get rid of textbooks and give teachers and students more independence over their learning. Khalid said:

Developed countries have moved from centralisation to the decentralisation. They do not impose the same textbooks for all schools. They have a curriculum, but not textbooks nor CDs. Curriculum has (vision, policy, goals, and competences). Schools can choose textbooks that help students to achieve the competencies of the curriculum (Khalid, a policy maker at the Ministry of Education's head office, interview, 21 January 2014).

As stressed at the outset this study, I am not arguing against the use of textbooks, but I am following McKay (2016) in stressing the importance of including the engagement of both teachers and learners with content and that norms for social and environmental justice need to be built into the curriculum. In fact, some textbooks can foster critical thinking to some extent and set action learning tasks (Nussbaum, 2006, p. 387). For example, the books developed in South Africa by Veronica McKay have empowered many women and children to overcome illiteracy and reach more sustainable development (UNESCO, 2016). The challenge, however, is the practice of the top down approach for learning. The central learning policy limits learning only from textbooks that are developed centrally or translated from international textbooks. In this way, it limits students from being and doing in a way could enhance their human development (Sen, 1999; Nussbaum 2011). In particular, it makes students and teachers passive. Learning tends to be 'banking education' as described by Freire (1970). The teacher's role becomes one of a 'bankclerk educator' and a students' role is only to receive (Freire, 1970, p. 57). Central learning policy also creates issues of relevance which is important for education that raises critical consensus, communication, and active learning (Freire, 1970; Giroux, 2011; Wink, 2011).

The less active approach is best described by students' words. Below are two examples from boys' and girls' schools:

Rote learning is when the teacher expounds, and we write without any other learning approaches. With this style, we lose focus and the proper understanding of the information (Omar, a student at boys' private school in Riyadh, focus group discussion, 23 December 2013).

Our curriculum needs to be linked to our lives. The school also needs to prepare us for the future. Teachers sometimes make us memorise textbooks not to understand it, and this is a problem. (Munirah, a student at a girls' public school in Riyadh, focus group discussion, 23 February 2014).

The previous quotations from students are a good example of 'jug and mug' education (McKay and Romm, 1992, p. 30) which has serious limitations on students' critical consciousness abilities (Freire, 1970). The following discussion in this section discusses in detail how passive learning occurs. The investigation is mainly through the eyes of the most affected (teachers and students) (Churchman, 1968; McIntyre-Mills, 2006). This section will conclude the discussion by highlighting the implications and the challenges students face for critical thinking.

5.4.1 Pedagogical Challenge: Passive Learning in Schools

To understand the issue of passive learning, Critical System Thinking (CST) suggests seeing the issue through the eyes of those who are affected (Churchman, 1968; McIntyre-Mills, 2006). In learning, it suggests seeing the process through the eyes of teachers and students.

Through the eyes of teachers, it can be seen that they are bound by the limits of the curriculum. They have to teach according to the standard textbooks. The central standard curriculum has become carefully and closely designed and monitored to be the only source of knowledge in schools. One teacher describes the limitation of being restricted to textbooks. He said:

What I have as a teacher is just the textbook' (Khaleel, a teacher in boy's public school in Riyadh, interview, 4 March 2014).

The Ministry also plans the way teachers can deliver the material. In one example, Adel, a teacher at a private boys' school in the Border Province, gave an example of how the centralised supervisory even plan the timetable of the delivery of the textbooks:

The education system is extremely bureaucratic. For example, at the beginning of the academic year, I felt that the students' levels are lower than the textbook. So I give them two weeks preparation. When the supervisor from the supervision office came, he asked me which lessons I am now teaching. When I told him that we have not started yet and that I am still preparing my students for the new textbook, he described me as a lazy teacher. Am I a lazy teacher because I am giving students extra help! There is no freedom in teaching (Adel, focus group discussion with teachers at a boys' private school in the Border Province, 28 January 2014).

The central supervisory system goes further to include the ways teachers teach and what kind of questions to use:

Each textbook has another printed book that explains to teachers the teaching method that they ought to follow' (Salah, a teacher at a public boys' school in Riyadh, focus group discussion, 29 December 2013).

If I use essay questions in my tests, the supervisor asks me why I have not used objective questions. If I use objective questions, the supervisor wonders why I did not use essay questions or my

questions are easy, why it is not more difficult (Suleiman, a teacher at a public boys' school in Riyadh, interview, 30 December 2013).

The previous quotations from teachers illustrate how central learning limited their ability to be creative. Therefore, teachers seem powerless to be more active. When teachers find that textbooks are irrelevant to students, they have no choice other than to teach it, as that is what their learning evaluation comes from. However, in learning, one type of teaching and material cannot fit the needs of all students (Kameenui & Carnine, 1998). One English teacher describes how she cannot respond to the variety of learners' needs in her class:

Teachers are restricted by textbooks. For example, now I am teaching English conservation for beginners' level. Even girls who have an advance level in English need to study these lessons. One day when I was teaching, I heard one girl laughing at the back of the classroom. I asked: Why are you laughing? She said 'I taught this lesson yesterday to my brother who studies in year 2 in the primary school'. I feel frustrated. Then I told girls that this is your curriculum, and we do not have any other choices. I cannot do anything (Lubna, a teacher at a girls' private school in Riyadh, interview, 30 December 2013).

The previous example by Lubna, a teacher, and the response she gets from her students show how textbooks limit a teacher's ability to be creative. Lubna cannot respond to different needs in her classroom even though she is aware of the problem because she is constrained to specific material. Therefore, she tends to be passive. Doing what is required in the class material is irrespective of learners' needs. The challenge Lubna faces is to be creative, and this is the case for many other teachers, which has not been recognised at the Ministry level:

The Ministry has contracted teachers to deliver textbooks to students. They want textbooks to be in students' memories in specific time. Students need to empty this knowledge in exam papers to get their grades. What we are doing is charging then empting students' memories. There is no practice that develops students' skills and perceptions (Khalid, a policy maker at the Ministry of Education's head office, interview, 21 January 2014).

The previous quotation recognises the task-oriented approach for teachers. The top down approach for learning shapes learning to be teacher-centred approach. Their role is limited to enable students to comply with the central curriculum requirements. Nevertheless, to achieve the potential of students' education, teachers needs to play a more active role. They need to be creative and to encourage students to think beyond some dimensions of the curriculum. They also need to enable students to think socially, economically, and environmentally about the issues they face. In addition, teachers need to show leadership to enable students to contribute to new knowledge that helps to re-generate and re-connect people to one another and to the land on which they all depend. This requires an open approach to co-creating knowledge and giving teachers more power over what been taught. This would be a better contribution to the process of preparing good citizens (National Education Policy, 1969).

Seeing learning through the eyes of students brings more understanding to how passive learning occurs. Through the eyes of students' passive learning happens as a result of students not being linked to some of the material they learn. Textbooks that have been developed centrally have little relation to students' lives. Students report that the issue of relevance made them passive and

that they tend to memorise some concepts and information without even understanding what it realy means or to what it refers. Here students from different schools describe this issue:

Bander: the problem with our textbooks is it not been linked to our lives. The biggest examples are from chemistry and physics. For example, I memories a physics law for the test but I do not even know how it relates to my life. In chemistry, I do not even know what my food composed of. Learning needs to be based on experiment and observation not based on memorisation. Now, I memories what I have learned and I write it down in exams.

Tariq: Textbooks are isolated. It is isolated from our environment. There is no relationship between what we study and our environment here in our province. (Focus group discussion with students at a public boys' school in the Border Province, 2 February 2014).

Students in another school add:

Ahmad: How can I understand something without seeing it? We just fill our notebooks with writing without understanding what we learn. Akram: We need to be linked to examples from our lives. (Focus group discussion with students at a private boys' school in Riyadh, 23 December 2013).

As students have mentioned above, through their eyes, passive learning occurs as they have little connection to what has been taught. They only receive information with limited opportunity for them to reflect on what they learn. Therefore, students approach the material they have through memorisation. They memorise it even if they do not understand what have been taught:

Fawaz: We memorize ... memorize ... memorize for the test. If you ask me about any idea or information later after the test, rarely I

could remember (Focus group discussion with students at a public boys' school in the Border Province, Focus group discussion, 2 February 2014).

Nawaf: Our system here is we study ... study ...study. After test everything deleted. This wrong. We need learning help us keep knowledge (Focus group discussion with students at a private boys' school in Riyadh, 23 December 2013).

The previous quotations from students show passive learning in action. Lack of relevant education affects the way they construct knowledge and understanding. Their current approach tends to be temporary and does not last much time. Therefore, this education has limited impact on students' critical consciousness (Freire, 1970). By contrast, relevant education opens many opportunities for dialogue and communication that helps students to go through what has been taught (Freire, 1970; Giroux, 2011; Wink, 2011). It means students are able to pose problems and concerns from their life experience and the surrounding environment. If this aspect is missing they lose proper understanding:

Instead of rote learning which always just talking, we need discussion. Girls will understand more when they involve in the discussion. In this way, the student will find ideas by herself, not through the teacher. This is better education (Munirah, a student at a girls' public school in Riyadh, focus group discussion, 23 February 2014).

Munirah, a student, raises her concern about dialogue and discussion in their learning.

Nevertheless, in the previous examples I have given through meeting students, it is evident they have limited opportunities for discussion and dialogue. Critical learning rarely occurs when

students cannot relate to what been taught (Freire, 1970; Giroux, 2011; Wink, 2011). Therefore, how can dialogue exist if the topic does not interest students or they cannot contribute to what they have learned? Such critical learning students that demand cannot be fully captured when they have no option other than memorisation. Students need to be able to relate to what they learn because students learn better when they have a sense of belonging to what they have to learn. The more students can relate to what has been taught the more they can engage in dialogue and communication (Freire, 1970). Thus, relevant education could give students more opportunities to stimulate their imagination and their critical understanding (Nussbaum, 2011) to prepare them for in-depth understanding of many issues they face.

The few opportunities students have to connect to their environment also raise concerns about education's potential to address many social and environmental challenges (Giroux, 2011). To foster a sense of ecological citizenship (Dobson & Eckersley, 2006) students' need learning material that opens their eyes about many environmental challenges. In other words, they need action learning and more connections with the community.

The gap between students' perceptions and the material they study increases when textbooks are brought to them from the standard Western curriculum. According to the Ministry of Education (2011, p. 71), many of the textbooks are developed by international textbooks companies such as Pearson Longman, McGraw-Hill, Oxford University Press, and Macmillan. 'Our new textbooks such as chemistry and physics are translated from American textbooks' said Nawaf (a student at a private boys' school in Riyadh, focus group discussion, 23 December 2013). Therefore, students study some information and ideas that they have never seen in a way that affects the development of their critical consciousness (Freire 1970). Concepts sometimes are mere

abstract ideas that students cannot easily understand or relate to. This issue of translated textbooks was recognised by teachers as they could not link students to many examples in the translated books:

Now I am teaching my students translated textbooks. The problem that most of the experiments cannot be found in our environment. For example, the book has exercise to take my students to the closest lake or river. All Saudi Arabia has no lakes nor river not only here in Riyadh. (Aliyah, a teacher at a girls' public school in Riyadh, Focus group Discussion, 17 February 2014).

Textbooks are cut and paste from European textbooks. We need the content to be linked to our environment (Amjed, a teacher at a boys' private school in the Border Province, 27 January 2014).

Learning that is restricted to textbooks creates challenges for critical and collaborative learning. The top down approach plays against other interactive learning approaches such as when students play the role of the teacher to make students transform knowledge and make meaning of what they learn (Ferrier, 1970, p. 61). One student describes the lack of opportunity to play the teacher role to help them overcome passive forms of learning:

There is no way for a student to stand up and expound. Teacher only who expound and our role are to answer (Akram, a student at a private boys' school in Riyadh, focus group discussion, 23 December 2013).

The issue of passive learning in Saudi schools has been recognised by many other studies (see for example Al-Issa, 2009; Kampman, 2011; Alabdulkareem & Alshehri, 2014; Alzahrani,

2016). It also has been recognised by the Ministry itself. The current Minister of the Ministry of Education wrote a newspaper article about public education in Saudi Arabia. In the article, he recognised the issue of less active learning in schools. He wrote:

Teaching methods are still sinking into rote learning. The lecture style, in general, is predominance by the teacher talking most of the time, while the role of the students is listening. Then the student saves and writes down in the textbooks for the test. As a result, many students lacking personal skills based on communication and self-confidence and the ability to express and adapt to the changes and difficulties they will face in their lives (Ahmed Al-Issa, Minister of the Ministry of Education, Alhayat Newspaper, 20 March 2016).

This recognition from the Minister about passive learning and its impact on students is consistent with what the study found. Also, this recognition from top management can be regarded as a positive indicator for change, and a positive step from the Ministry to move forward on overcoming the impact of less active approaches to learning. However, through many responses I have received from officials in the Ministry, the focus is more about teaching methods. The official view seems to overlook many factors that have been discussed earlier through the eyes of teachers and the eyes of students; in particular, the powerless teacher and the isolated student. The following quotations from two policy officers give examples of the way the Ministry approaches passive learning in schools as a teaching style:

In the last two years, the Ministry adopt active learning strategies as international experience to improver learning (Hanan, a policy officer at Riyadh Education Department, interview, 16 December 2013).

Previously, learning was based on behavioural theory and interested in specific results. However, now in the era of openness of knowledge, we must be transmitted learning strategies to methods that give the learner self-education skills. Knowledge multiplies and the behavioural theory gives us only limited results in the way that students memories information and do not have the skills to apply it in any new life experience or problem. Learning inspired by constructivist theory help students to adapt to the era of knowledge explosion and dealing with various life skills (Hashim, a policy officer at the education department in the Border Province, interview, 27 January 2014).

One teacher challenges the way the Ministry deals with passive learning simply by asking teachers to use more interactive approaches:

The co-researcher: Why not you change the classical learning approach?

Lubna: We are starting using active learning strategies. However, textbooks restricted us and did not help. The textbooks do not help us to be creative. Even if we tried to use different teaching styles, all what have to teach need to be based on the textbook (Lubna, a teacher at a girls' private school in Riyadh, interview, 30 December 2013).

The previous quotation shows that active learning cannot be fully captured in the current central learning system that forces one-way communication. From the Critical System Thinking (CST) point of view, the Ministry needs to think of the context and the structure not only the learning process (McIntyre-Mills, 2006). In other words, the Ministry needs to 'sweep in' more important factors to enrich the understanding of learning issues in schools (Churchman, 1979;

McIntyre-Mills, 2006). These factors are to include a more open approach to knowledge and relevant education. Then, teachers and students will have more opportunity to be active and creative. As Giroux (2011) argues, learning only from specific subjects 'celebrates rote learning, [and] memorization' (p. 9). System thinking to combat passive forms of education also includes classroom design. As will be discussed in the next Chapter (Section 6.5.2), classroom design and the lay out of chairs in fixed rows tends to support one way communication and can work against dialogue and interactive communication between teachers and learners and amongst learners.

5.4.2 Passive Learning and the Challenges for Critical Thinking

Human development depends on citizens who are able to make informed decisions by themselves. That is, people who logically can investigate and analyse many ideas and arguments. Education plays a vital role in this process. It is education that cultivates thinking, it is not about 'the passive assimilation of facts and cultural traditions' (Nussbaum, 2012, p. 18). Indeed, the previous discussion in the last section shows how learning functions in a way that makes students passive instead of learning that is based on dialogue and two way communication. The last section discusses the implication of the central learning policy on pedagogical approach in schools. Through the eyes of teachers and students, central learning policy limits their opportunity for an active form of education. This sub-section will shed more light on the serious impact of passive learning on students' capabilities for being critical and productive thinkers.

Education plays more opportunity in developing students when they can discuss ideas in two way communication. Depriving them from dialogue or posing problems means that students become domesticated to passive learning (Freire, 1970). Students rely on the teacher to give them

the information and they write it down to memorise it, while active learning strategies are based on inductive and critical thinking:

The problem I have with students is they think learning is just memorising information, while if the students understand the idea, they will keep it more than if they just memorise it (Waleed, a teacher at a public boys' school in Riyadh. Interview, 30 December 2013).

The previous quotation highlights one implication on students' capabilities for critical learning. In the current approach for learning, students become domesticated to passive learning, until they reach the point that their brain becomes like a memory device. They absorb facts and information without critical understanding:

Aysha: Students just memories answers without realizing what questions are about. I gave my students homework then we answer it in the class. In the exam, I have repeated the same exercise but after changing the order of questions. Students answer it wrong. They give answers according to the order in their homework.

Lina: One day I gave my students two exercises about 'force and acceleration law'. In the exam, I have changed the order. Students give the answer according to the order in their notebook. They just memories (Focus group discussion with teachers at a private girls' school in Riyadh, 30 December 2013).

The previous quotation shows how the capacity to get students to think critically has been affected. Many years of passive learning have stifled their creativity and their critical abilities. Heavy reliance on passive learning harms creative thinking and imagination capabilities (Nussbaum, 2006; 2011). In other words, the process of learning to be a capable citizen in the

future for the good of the country (National Education Policy, 1969) has been highly affected. The impact of passive learning on critical awareness justifies Freire's (1970) argument about the importance of action learning and more opportunity for students to reflect on what they have learned. In particular, students needs to challenge concepts and ideas to create critical thinking abilities. They need to be able to appreciate of how an area of concern can be understood from many different points of view (Churchman, 1968; McIntyre-Mills, 2006). This kind of understanding is vital when positioning young people in the global economy and digital world, in order for them to be able to appreciate and understand different arguments.

Another fundamental impact of passive learning is students grow up believing in themselves less. Students are highly dependent on teachers for learning. They assume that they themselves are unknowledgeable, and wait for the teacher to fill their mind with information. Therefore, they believe less in themselves and accept what the teacher tells them without challenging ideas. The challenge to create independent thinkers is best illustrated by examples from the study's data and from my public education experience. I will start with my example. When I was in intermediate and high school, I used to find maths difficult to understand. My source of knowledge was my teacher. I did not believe in my ability to understand without my teacher's help. After I finished high school and entered university, maths was one of my subjects. As learning in the university was more independent, I spent many hours studying maths by myself. After a while, I discovered that maths was not as difficult as I expected. In fact, it was much easier than many of my topics in high school in which I needed to memorise hundreds of pages to pass exams. What I believe prevented me from reaching this conclusion for many years was the result of a learning practice that assumes student are unknowledgeable and cannot attain knowledge by themselves. This approach of learning also prevents many other students from reaching their

intrinsic learning capabilities which, according to Nussbaum (2011), involve imagination and critical thinking (p. 33-4). The following examples from private and public schools show how I can relate my previous story to many students as a result of the central learning system:

The researcher / Have you tried to reach the information by yourself? Bakr / There is no way.

Researcher / If you read the textbook by your own will you understand?

Bakr / impossible. (Focus group discussion with students, in a private boys' school in the Border Province, 4 February 2014).

One teacher gave another example of how students are domesticated to be dependent learners. He said:

The problem now is that student's mentality is just for receiving. I'm trying to give them research but until now, they did not get the idea of independent learning as they need to go and searcher for the information by themselves. They want the result directly. To told them that 1 + 1 equals 2 (Yasser, a teacher at a public boys' school in Riyadh, focus group discussion, 29 December 2013).

The previous quotations show challenges that face the process of developing well-informed citizens. The lack of independent learning shows how the central learning policy does not fully support learning for human development. The top down approach makes students accept the idea that they have an inability to acquire knowledge directly. Therefore, they believe it is impossible to understand ideas and concepts directly by themselves. They are dependent learners in a way that makes building critical consciousness far more difficult (Friere, 1970). Here one could imagine the challenge of achieving an education that advance students' capability to think critically. The

capacity to get students to think strategically (Moser, 1993; Kabeer, 1994) is a key area to address through workbooks that require students to do specific tasks that teach critical thinking. This skill is necessary to equip students to achieve lifelong learning and to think socially and environmentally about the issues they face. This is important for the development of well-rounded people. From a human development perspective, it means students do not have the level of freedom for doing and being to achieve such goals (Sen, 1999; Nussbaum, 2011). The current system does not encourage students to become independent learners with the capability to address social and environment challenges. Their inability to do critical thinking hinders the process of education of good citizens that is central in the National Education Policy (1969).

Students need more opportunities to be independent learners, to reach conclusions by themselves. This is achieved through learning that gives students more freedom to be and do (Sen, 1999; Nussbaum 2011). However, I would suggest this issue is more serious in private schools as a direct result of the less challenging learning environment. The widespread use of textbooks summaries (Section 5.3) and employment conditions for private school teachers (Section 5.6) means students have few opportunities even to build critical thinking capabilities:

Most students go to private schools expecting summaries and few pages. Six to five pages. If I gave them 32 pages, their brain stop from working. They cannot study 32 pages. Their parents also complaints; we have pay for them why they study this much (Lubna, a teacher at a girls' private schools in Riyadh, interview, 30 December 2013).

From the previous quotation, students in private schools do not want the kind of learning that 'challenges the mind' (Nussbaum, 2012, p. 18). They demand learning that helps them to

achieve their instrumental goals. Therefore, students want ideas and information easy to memorise in the form of points and clauses. They do not want critical reading to reach conclusions:

Information in new textbooks is overlapping unlike the old one where we can find information easily. Before it was in the form of points and clauses, but now much text and we need time to extract the idea from it (Mazen, a student at a private boys' school in the Border Province, focus group discussion, 4 February 2014).

The demand for less challenging reading, as highlighted above, comes only from private schools. I have not heard such complaints in public schools. The following quotation from Amjed, a teacher at a private school, confirms the struggle his students face to understand new long texts. He said:

New textbooks are essays. Students need to make a big effort as possible to understand. They need to be patience to draw information. However, it is a small percentage, around 5%, of students who can do this much of efforts. The majority want a quick piece of information (Amjed, a teacher at a private boys' school in the Border Province, interview, 27 January 2014).

The demand for less content at private schools highlights a narrow focus on passing tests that are narrowly defined to enable students to do the minimum to pass with high grades. As will be discussed in more detail in Section (5.6), education privatisation limits the potential of education and increases the risk of capability failure among students.

5.5. Measuring Students' Achievement: the Lack of Standardised Measurement

While the Ministry of Education controls learning through standardised textbooks and a supervision system, assessment, on the other hand, is completely up to teachers. Tests are made by teachers across public and private schools for boys and girls. Nasser, a teacher at a public boy's school in the Border Province, comments on the absence of national assessment measures:

The touchstone of the education process is in the classroom; however, no one except the teacher knows what happen. I do not like we just talk about trustworthiness, piety and, conscience. I want a system so that the Ministry knows whose teacher is doing their job or not. (Focus group discussion with teachers at a public boys' school in the Border Province, 29 January 2014).

Adel, a teacher, comments on the imperfect process of evaluation (Stiglitz et al. 2010, p. 2) and its impact on students learning. He says:

In my opinion, there is no quality of education without strong assessments. Now, we let students without evaluation until the last two years in high school. From primary level, students have been pushed forward without standard measurement. Then in high school, we told students it is a matter of life to get higher GPA. Why we leave students studying many years without evaluation. Sometimes I face students who even could not tell the real difference between liquids and solid state. Some other students have very poor grammars and made mistakes even when they write their names. The education system should have three core evaluations that cover the three level of schooling; primary, intermediate, and secondary level (Focus group discussion with teachers at a boys' private school in the Border Province, 28 January 2014).

In the absence of assessment standards as described in the previous quotations, students receive grades which usually do not reflect their academic abilities. Alzamil (2015) after evaluating the academic performance of 7256 male students and 4606 female students at King Saud University in Riyadh, found less accuracy of grade point average (GPA) in high school compared to university academic performance. In 2016, The Education Commission of the State in Saudi Consultative Assembly, the 'Shura Council', recognised that there is a continuous big gap between high scores that students achieve in schools and their real academic level (Riyadh Newspaper, 23 January 2016). Participants from schools also mentioned that the excellence of grades does not reveal the truth about students' learning:

Some students take full marks in their schools, but after they graduated from high school, they get bad results in General Aptitudes Tests (Fatmah, a teacher at a public girls' school in the Border Province, interview, 3 February 2014).

Students take full mark on exam paper, but even students themselves do not believe these results reflect their real abilities (Lina, a teacher at a private girls' school in the Riyadh, focus group discussion, 30 December 2013).

The Ministry Strategic Plan (2013) recognises the lack of standard measurement across schools to evaluate outcomes. The plan points out the lack of standard measurement which affects the comparison of outcomes to inputs (p. 107). A similar finding of how the inconsistency of measuring education affect students' capabilities is also evident by Al-Sadaawi (2010), and Alhareth and Dighrir (2014). They found that the lack of national standards in the Saudi public education results in lower achievement among students. This finding is also broadly consistent with Drèze and Sen's (2013) work in India. In assessing education capability, they found that the Page | 191

absence of standard tests translated into a large number of Indian students who reached an advance level in their basic education without adequate abilities (p. 138).

Policy makers acknowledge the gap between what they want and what has been achieved. For example, Thamer, a policy maker in the Ministry, recognises the problem of weak academic skills among students. He gives an example of literacy skills and the challenge the Ministry of Education faces:

We have a major problem in the weakness of reading and writing. This promotes the formation of committee from education departments that include teachers from all different school levels (Thamer, a policy maker at the Ministry of Education's head office, interview, 15 December 2013).

Khalid, a policy maker at the Ministry, also makes similar comments:

Our international results are not satisfactory at all. The proof is that the results of our students in The Trends in International Mathematics and Science Study (TIMSS) or other tests like (Education Olympic) were very low (Khalid, a policy maker at the Ministry of Education's head office, interview, 21 January 2014).

With the absence of a national assessment standard, teachers face pressure to give high grades regardless of students' academic abilities. The pressure is motivated by grades being important not only for students but also for teachers and their schools. If a high number of students fail their exams, this affects teachers' evaluations and schools' rankings and reputation. Reem, a teacher at a public girls' school, describes the pressure teachers face in evaluating students:

The Ministry's evaluation system is focusing on motivating students to succussed in academic years. School's evaluation is on this basis. So, the principal put pressure on us to give good grads to all students. It is impossible. There are individual differences. If a girl fails, she fails because she did not achieve a successful level. However, some teachers let all student pass whether they deserve it or not. So their job performance will not be affected. This is the most factors that negatively affecting education in this country (Interview, 3 February 2014).

Mansour, a teacher at public boys' school in the Border Province, agrees with Reem in a way, as he classifies teachers into two types in response to pressure for higher grades. According to Mansour:

Teachers in general fall in two categories. In the first category, they are the frustrated. They are lazy and do not give students homework. To hide their failure, they give all students good grades. Students who study with those teachers used to achieve higher grades regardless of their lower achievement. The second category is the sincere teachers. They give students what they deserve. However, sincere teachers face pressures from the administration, their colleagues and families. Sometimes they respond to the pressure and give students higher grades than what they deserve. The result, students, used to achieve higher than what they deserve, and excellence in grades does not reflect their academic ability (Interview, 3 February 2014).

As teachers have highlighted in the previous quotations, students' capabilities for good education is affected. Lack of standard tests not only harm critical abilities, but it also harms basic literacy and numeracy skills:

Mariam: Some students reach high school while they have poor reading and writing skills.

Aliyah: I have some texts for reading in my subject. Some girls even could not read well. Imagine in the last year in high school (Focus group discussion with teachers at a girls' public school in Riyadh, 17 February 2014).

With the dependence of evaluation on teachers, employment conditions play a significant role in the integrity of the evaluation process. The study found that there is significant difference between teachers in public schools and teachers in private schools in response to pressure for high grades for students. In public schools where the teacher is employed by the public sector, teachers cannot easily be pressured by students and school's administrations to the same degree as a private school teacher. As a result, the research has found that paradoxically the public school system achieves higher outcomes in terms of independent evaluation criteria than private schools. Therefore, students achieve better outcomes in public schools. This finding, which highlights the influence of job security on teacher's evaluations is also evident in the UNESCO Global Monitoring Report for (2009). The report highlights that temporary employment contracts affect teacher's performances and negatively impacts learning outcomes (p. 173). More about employment conditions in private schools and its implication on learning evaluation is discussed in detail in the next section.

5.6 Employment Conditions: the Implication on Learning and Evaluation

Employment policies vary between public and private schools. In public schools, the Ministry of Education follows a centralised employment policy. The Ministry of Education in collaboration with the Ministry of Civil Service recruits teachers and administrators from university graduates. Public school teachers usually enjoy the benefit of working in the public sector until retirement age. Beside job security and long term employment, a public school teacher has a higher salary compared to their peers in private schools.

On the other hand, there is a less centralised employment policy imposed by the Ministry for private schools. Private schools have more autonomy in recruiting and selecting their teachers. Employment in private schools is based on temporary recruitment in the form of yearly contracts. In this way, private schools rely on temporary contracts with teachers and the school determines salaries that do not go beneath the formal limit⁶. Also, private schools have the right to end a contract or reject renewal when the contract expires. Maha, a head of a private girls' school in Riyadh, explains how the employment policy for private schools works:

Unlike public schools, as a private school, we have more space to decide which teacher to recruit and which level she can teach. According to teacher's character, we decide she can be good at the kindergarten level or maybe at the high school level (Interview, 2 January 2014).

⁶ In 2011 the Ministry of Education set a minimum wage for teachers in private school at 5,000 SR per month. (One US dollar equals 3.75 Saudi Riyal).

Given the different employment conditions, the study found significant variation in teacher's abilities to give transparent evaluations. In public schools where the teacher is employed by the public sector, teachers face less pressure to give higher grades. It has a positive impact here on more independent evaluation. The worst scenario for public school teachers is that if he or she gives students lower grades, this results in that teacher getting a lower evaluation in their Job Performance Report:

My job performance last year was low because of the academic level of my students. Nevertheless, I do not care (Reem, a teacher at public girls' school in the Border Province, Interview, 3 February 2014).

As Reem describes in the previous quotation, public school teachers have employment conditions that make them less vulnerable to pressure to give higher grades. By contrast, teachers in private schools are bound by their employment conditions. The contractual conditions of private school teachers affect the integrity of their teacher evaluation. If students fail to get the grades they want, it might affect the teacher's career. Two teachers in different private schools describe how profits threaten teachers' careers:

Honestly, one teacher has been told that the owner of the school values money as his main concern. That is if students obtain lower grades, he could be fired. This really creates job security issue (Moussa, a teacher at a boys' private school in Riyadh, Focus group discussion, 1 January 2014).

Here, I am working in a profit organisation which means profits first then anything else follows (Ismail, a teacher in a private boys' school in the Border Province, Interview, 27 January 2014). The employment conditions highlighted previously negatively affect teachers' work at private schools. It means private school teachers set examinations and teach in a different organisational culture to their peers in public schools. Similar evidence has been highlighted in the UNESCO Global Monitoring Report for 2009. The report points out that employment conditions play a crucial role in the performance of teachers. The evidence is from different countries such as Togo, West Africa, and Cameroon, which suggest contract teachers face employment security that affects their ability to give high quality education (p. 173).

One example from my fieldwork could explain the difference between teachers in private and public schools and the impact of temporary contracts on their performance. When I entered a private boys' school for the first time, I saw a student shout loudly at his teacher. The teacher was standing in front of him without any reaction. The teacher was embarrassed when I saw him in that situation. This was the opposite in public schools. I had not noticed disrespectful behaviour from students to their teachers when I visited public schools. Teachers in public schools seem to be more powerful. Meeting teachers in private schools confirmed my observations:

Teachers in private schools are missing the similar power to what teachers in public schools have. (Marwan, focus group discussion with teachers at a private boys' school in Riyadh, 1 January 2014).

Salem: We do not have power! No powers to correct students' behaviours nor to maintain discipline in the classroom so students can respond to our teaching.

The researcher: Is this issue affects students' future?

Salem: Not all the students some of the students. The dominant phenomenon in classrooms is some student do not respond to the teacher. They do not care about him. There is no respect for the teacher. Where some students are excellent (Salem, a teacher at a

private boys' school in the Border Province, focus group discussion,

28 January 2014).

The implication of the lower power of private school teachers translated to lower control

over the outcomes. The lower control over the outcomes takes many forms. The first way is that

teachers are promoted to give less content and higher grades to satisfy students. As discussed

previously in this Chapter (Section 5.3.1), teachers and student report the widespread use of

textbook summaries in private schools. As a result of their employment, a private school teacher

is encouraged to do so. This situation of dumbing down learning in schools is best to described by

Huda, a teacher at girls' private school. She highlighted that they are forced to summarise

textbooks:

The co-researcher: Do you think that your school prepares students

well for the future?

Huda: Look, I will be honest with you. It is rare in private schools.

Some private schools look for profit; other few elite private schools

look to educate students. Schools like our school have the goal of

profit. Teachers here do their best to teach very well, and 95% have

training courses. However, at the end of the term, we give students

5 to 6 pages to study.

The co-researcher: are you forced to do this?

Huda: Yes, we are forced.

The co-researcher: But students will graduate know nothing.

Huda: It is okay for them. The most important thing they are looking

for is to get certificates.

The co-researcher: But this will create a failed generation.

Huda: Yes of course.

The co-researcher: Does the school administration knows about this?

Huda: Of course. I told you before this school is a profit organisation. (Interview, 30 December 2013).

The other way of limiting the impact of students learning in private schools is when teachers are encouraged to turn a blind eye against student cheating. This situation is reported by students and teachers in private schools. They also report that this not common in public schools:

In the final exam at the end of the school year there are some students who cheat, but the exam invigilator does nothing to them. If this happened in a public school, the observer would prevent them from continuing, and this results in failing the exam as a punishment (Ahmad, a student at a private boys' school in Riyadh, focus group discussion, 23 December 2013).

Schools are not free of risk for teachers, especially in private schools. As we can see and hear now and in the last few years, if a teacher gives a student lower grade or does not give him the chance to cheat he attacked him with a knife or a firearm. This is not appropriate for the teacher (Ashraf, a teacher at a private boys' school in Riyadh, focus group discussion, 1 January 2014).

As power and profit affects teachers' evaluations, students and their families believe paying for their education entitles them to achieve success in terms of achieving grades without spending much effort.

'Parents believe that they have pay higher fees so their children deserve getting higher grades,' says Marawan, a teacher at a private boys' school in Riyadh (Focus group discussion, 1 January 2014).

One survey among Saudi families finds that 92% believe that private schools give higher grades to students than public schools (Asharq Al-awsat Newspaper, 29 May 2011). One private school teacher confirms this finding:

If the students went to public school they would get bad grades (Ibrahim, a teacher at a private boys' school in Riyadh, focus group discussion, 1 January 2014).

Meeting students confirms what teachers report about why some of them prefer private education over free public schooling. Students were frank about their reasons for choosing private education. The first private school I visited was located near another public school. The public school had a bigger campus and free education. So my first question to students was why they were attending a private school and not the public school located nearby. Two students answered:

Hamza: Public schools are harder places to achieve higher grades. They give you what you deserve, but here in a private school, it is easier.

Ahmad adds:

There are some students who are absent many times, but their GPA at the end of the year is still high around 93%. Students who are in public school who attend all school days cannot get such higher

scores (Focus group discussion with students at a boys' private school in Riyadh, 23 December 2013).

On the other hand, students in public schools complain teachers are being restricted:

There are some teachers even I attend every school day and do all my homework; they will not give me the grades I deserve. When I asked them why? They told me, you need to work harder (Abeer, a student at a girls' public school in Riyadh, focus group, 23 February 2014).

The easy way to get grades in private schools is quite appealing to students, especially at high school. This is because academic scores are not only important for success, they are also important for further education. In Riyadh, some students mentioned in focus group discussions that they have studied intermediate school in public school and moved to a private school to complete their secondary education. In the Border Province, the head of a boys' private school told me that they have a long waiting list especially for the final year in high school. While I was waiting in his office, a number of parents and students from other public schools came to register, and he apologised to them as the school did not have places for them. In the girls' private school in the Border Province, one teacher said:

The English language lab can be used by up to 15 students. I have no problem with students from the intermediate level because their number is few, but with high school students, I have to divide them into two groups (Latifah, Interview, January 2014).

Furthermore, the official data from the Ministry of Education indicates that the number of students in high schools has more than doubled compared to the number of students in intermediate schools even though the number of private high schools is lower than schools in the intermediate level. See table number (5.2).

School level	Gender	Number of schools	Total
Intermediate	Male	506	65,312
schools	Female	430	33,753
High schools	Male	485	154,053
	Female	356	71,178

Table 5.2: Number of students in private schools at intermediate and high schools levels.

Source: Ministry of Education, 2014.

It is apparent from table (5.2) that the number of students is more than double in high school. This table also reveals how the number of female students is very low compared with male students. This percentage does not reflect the number of female students in public education which is higher than male students (see Chapter 1, Section 1.4.1). A similar note has been made by Al-Seghayer (2011, cited in Deraney & Abdelsalam, 2012) that the number of male students in private schools is almost twice the number of female students. This inequality of private education may reflect gender roles (Kabeer, 1994) in the wider community and how parents are willing to pay more money for their sons to guarantee higher opportunities for them in higher education.

When the issue of learning evaluation in private schools emerged during the fieldwork, I raised this concern with the head of the private education office in the education department in the

Border Province. He recognised the issue in high school but at the same time, he refused to accept the claim at the primary and intermediate levels. He said:

This may be true in high schools. However, in the primary and intermediate why students are looking for grades. This means it is not only for grades students go to private schools (Rashed, a policy officer at the education department in the Border Provinces, interview, 28 January 2014).

What Rashed believes, according to the previous quotation, is there are many reasons that influence parents' decisions about sending their children to private schools other than grades. However, reported quotations from teachers and students, and secondary data about the number of students in private high schools, suggest that the less transparent system of learning evaluation is the most significant factor. One teacher comments on how the less transparent system of learning evaluation in private schools attracts many students:

The biggest proof in our school is we have a very large number of students in high school compared to the intermediate level' said Huda, a teacher in a girls' private school in Riyadh.

She adds:

Why families choose private education for their children in high school? Because they want them to succeed and get higher grades (Interview, 30 December 2013).

As students in private high schools are almost guaranteed higher marks, they pay less attention to their learning and focus on something else they believe is more important:

In private schools, grades are almost guaranteed. Our big focus is on aptitude test (Youssef, focus group discussion with students at a boys' private school in Riyadh, 23 December 2013).

As Youssef, a student at a private school has highlighted, their focus is on the General Achievement Test (GAT)⁷ rather than learning in their school. The General Achievement Test (GAT) is weighted 70% for university admission; the rest is in school grades. Here private schools help students by practicing the General Achievement Test (GAT) regularly. This practice creates many benefits for private schools. It can attract more students and at the same time bring the name of the school up in the school rankings⁸. Therefore, the reputation of the school will be positively affected. Public schools are less interested in this practice as more students do not mean more income for the school. Maha, a head of a private girls' school, explains the way they help their students to achieve better results in General Achievement Test (GAT). She says:

I want my students to be successful in aptitude tests so our outcomes and our reputation enhanced.'

She also adds:

We raise our students' awareness of how to get a high score in aptitude tests. Lessons for each level. We add more lessons so they can achieve excellent results (Maha, a head of a private girls' school in Riyadh, interview, 2 January 2014).

⁷ General Achievement Test (GAT) is an aptitude test students perform after they finish high school.

⁸ The National Centre for Assessment in Higher Education updates schools' ranking according to students' results regularly in its website (http://www.qiyas.sa/Pages/default.aspx).

Students and teachers in private schools report that this practice of teaching the General Achievement Test is at the cost of learning. A student in one private school, says:

Youssef: To get the university, my results in schools is weighted for 30%. The rest is based on General Achievement Test (GAT). Now, I am studying for the Aptitudes Tests more than the school curriculum because there are books that teach you how to succeed in aptitude tests. I am less dependent on my school learning. All my focus on the aptitudes tests. If I achieved 90% or above, I can enter the Faculty of Medicine. If less, I will go to lower options, for example (Focus group discussion, 23 December 2013).

Ismail, a teacher in another private school in the Border Province, describes this negative impact on learning in private schools:

Ismail: Education hit hard when the Ministry announce that the high school exams is from schools⁹. For example, in the final year of high school, you found that student who graduates from good schools and worked hard get lower scores. By contrast, students at bad schools give their students very high scores.

He also adds:

Look, smart parents take their children to a private school so their children guarantee very high results. Here their children just focus on learning how to succeed in Achievement Tests. They just study Achievement Tests so they get higher results in National Achievement Tests and take the opportunities from other students who work hard studying school curriculum. This is how it works, and I have many examples. Students are absent for weeks to study

⁹ Few years ago, all students in the final year of high school performed national assessment test. Questions were developed and graded centrally. This was the case when I was a student. The final exam was fateful step in my studies. I recall now whole year of preparation and great amount of worry and stress. In 2007, the Ministry cancelled the national tests which created a mixed response among students, families, and educators at that time.

National Achievement Tests at the expense of their learning at schools (Interview, 27 January 2014).

The previous quotations show that information manipulation in private schools also includes aptitude tests. Information manipulation produces unequal opportunities for higher education between students in private schools and their peers in public schools. Also, the lesser amount of attention students give to learning in private schools suggest they will face more serious challenges in achieving the intrinsic role of education (Sen, 1999). Indeed, the previous discussion in this section and the previous sections in this chapter suggest students at private schools face more challenges to be critical and become productive thinkers. The next section compares the study results from private schools with other studies in Saudi Arabia and other countries.

5.6.1 The Cost of Education Privatisation

The previous discussion in the last section highlighted how the employment conditions in private schools and manipulation of results are problematic. The easy way for assessment manipulation at private schools suggest that students in private schools face more risk of learning capability failure (Sen, 1999; Nussbaum, 2011). This capability failure has a direct result to their personal futures and the common good for the country of having well-educated citizens.

The quality of education in private schools is rarely addressed in previous research. There is a lack of studies that compare public to private schools in Saudi Arabia. This lack of research also has been highlighted by Deraney and Abdelsalam (2012, p. 3). However, the limited work on public versus private schools produces similar results of what the study found. Alrashed (2004) compares achievement in science between students in public schools compared to students in

private schools in Saudi schools at the intermediate level. He found that students in public schools have higher skills in information application and inductive skills than their counterparts in private schools. A recent study by Deraney and Abdelsalam (2012) showed an overall positive impact of public schooling compared to private schools. The study compared academic performance of female high school graduate students in a private university in Saudi Arabia. They found that public school students have overall better academic performance and exceed students who have graduated from private schools.

This study and previous studies suggest that learning in private schools has become the victim of education privatisation. Boys and girls trade off the intrinsic value of education (Sen, 1999) in return for instrumental goals in term of certificates. The cost is their learning capabilities, learning that is essential for the process of the well-informed citizen. In particular, it costs them reasoning as a critical thinking capability (Nussbaum, 2011). The employment conditions and manipulation of results are problematic and do not result in well-rounded students.

Results from comparing the academic performance of public school students to private schools' students are not consistent with other studies in other countries. In Australia, the work of Cobbold (2015) reviews previous studies that compare public to private schools and found that most studies show evidence of better performance in private schools students. Jimenez, Lockheed, and Paqueo (1991) compare public and private high schools in Colombia, the Dominican Republic, the Philippines, Tanzania, and Thailand. The results showed that students from private schools outperform their peers in public schools. Another study from Indonesia by Bedi and Garg (2000) involved graduates from public and private secondary schools. They found a positive private school effect on their graduates in the labour market compared to public school graduates. In the

United States of America, Bryk, Lee, and Holland (1993) found similar results. Their 10 year study on private Catholic high school demonstrates that private schools achieve better outcomes compared to public schools.

The previous studies show that the results from comparing private schools with public schools in Saudi Arabia do not support much of the existing international evidence. It shows the limited success of the potential private education can play in advancing students capabilities similar to other countries such as Australia and the United States (Cobbold, 2015; Bryk et al., 1993). To understand this difference, Critical System Thinking (CST) suggests locating the issue in its context (McIntyre-Mills, 2006). The context of private education in Saudi Arabia emphasises grades success in exams rather than lifelong learning (see Chapter 4). Therefore, students enrol in private schools due to the pressure of achieving higher grades. The demand for better outcomes strongly limits the potential of private education. This context is also influenced by internal factors. Employment conditions in private schools jeopardise the integrity of evaluation and do not support the process of cultivating lifelong learning capabilities.

Results from private schools also raise concerns about policy and governance standards. To achieve 'accountable systems of educational governance and management' (UNESCO, 2000, p. 19), the policy and governance aspects should provide better accountability and ensure that the staffing conditions of private schools do not jeopardise the integrity of the evaluation system. The Ministry needs to set up transparent assessment across schools in the public and private system for both genders. Therefore, equitable learning outcomes could be obtained across schools.

5.7. Strengths, Weaknesses, Opportunities, and Threats: SWOT Analysis for the Central Learning Policy

The central learning policy plays a critical role in shaping students' futures. In particular, as discussed earlier, the central policy plays an important role in the four key challenges that face boys and girls in achieving their learning goals. Firstly, it shapes the way learning is measured in schools. Learning measurements lack rewarding students' progress in many aspects. Learning evaluation focuses on the standard curriculum and does not reward many other formal and informal opportunities. One important implication is the lack of reading among students. Students deprived of building reading habits as part of their learning evaluation do not appreciate wider reading and focus only on standard textbooks. The second role central learning policy plays is by creating pedagogical challenges in the classroom. The top down approach to learning creates an environment for passive learning where teachers' roles are to pass on knowledge and for students to accept it without critical understanding. The top down approach to learning also limits opportunities for students to test out ideas in a critical way that informs understanding (Churchman, 1971; Nussbaum, 2011). The other aspect is the lack of standardised assessment across schools. This limitation means employment conditions plays an important role where teachers in private schools face more pressure to teach less content and give higher grades.

In the following table (5.3), I discuss in details strengths, weaknesses, opportunities, and threats (SWOT) for the central learning policy. The analysis looks at internal factors (strengths and weaknesses). It also looks to external factors (opportunities and threats). The purpose of this analysis is to enrich our understanding about 'to what extent are students able to achieve their learning capabilities?'

Strengths, weaknesses, opportunities, and threats: SWOT analysis for Saudi public education

Strengths:

- The Ministry prints free textbooks for private and public schools. These textbooks are developed nationally and internationally according to learning standards that make sure students learn key subjects.
- Central learning policy mainstreams opportunities for boys and girls. It ensures similar subjects and regulations to make sure no region or specific school is left behind. The mainstream approach to learning is to some extent is similar to the 'No Child Left Behind Act' in the United States that supports standard learning across schools.
- The Ministry of Education as part of the central learning policy provides professional development for teachers, teaching and learning aids, and supervision. This reflects a strong commitment to advance learning in schools.
- The Central supervisory system could be used to implement new learning initiatives across schools.
- -I have perceived strong commitment for change among policy makers, policy officers, and in schools. This commitment could enhance the central learning policy role if the Ministry adopts a more inclusive approach.

Weaknesses:

- The centralised learning policy provides less opportunity for stakeholders to have input in the process, especially teachers and students. Central learning policy needs to be inclusive and participatory so that the service users (students) and providers (teachers) are included at all stages of the process.
- Limited learning evaluation does not include many skills. Evaluation needs to address more integrated ways of measuring learning progress (Stiglitz et al., 2010). It needs to include a

variety of integrated measurements that appreciates the instrumental and intrinsic role of education in students' current and future lives. The grading system needs to be more responsive to a range of capabilities. It needs to measure both quantitative outputs and qualitative outcomes, in order to foster the wellbeing of students and future generations. Also, centralised grading systems should reward creative teaching and learning that goes beyond the limits of the curriculum, and reward critical engagement that fosters lifelong learning capabilities. This could supplement the more traditional grading system and could be used to encourage students to address wider areas of concern such as building an awareness of social and environmental rights and responsibilities.

- Learning in school is constrained only to the national standard textbook. This control over knowledge limits students' opportunities for more independent learning and developing critical consciousness (Freire, 1970; Kincheloe, 2008). Learning from specific material that is developed centrally also may lead to issues of relevance and students tend to memorise concepts and ideas that do not allow them to reflect critically on what they have learned. Students need access to a wider body of knowledge that links students to their culture and creates a learning environment for dialogue and problem posing (Freire, 1970; Giroux, 2011; Wink, 2011).
- There is a tendency among officials in the Ministry to narrowly perceive passive learning as an issue around teaching styles. Policy around teaching methods could be useful if it includes more teaching and learning autonomy for teachers and students. Teaching and learning autonomy could be used to overcome the issue of relevant education and create more opportunity for discussion and dialogue in the classroom instead of the current one way communication practice from teachers.
- Lack of standard assessments across schools could lead to less objective evaluations. The potential for less transparent assessment increases in private schools. Emphasis on profit and on keeping the numbers up means that students get the advantage of higher grades at the expense of their actual achievement. The Ministry needs to work on developing more transparent standard assessment across schools, and to ensure that the staffing conditions of private schools do not jeopardise the integrity of the evaluation system.

- Teacher's employment in private schools plays a big role in the transparency of learning assessment in schools. The employment conditions and manipulation of results are problematic and do not result in well-rounded students. The Ministry needs to improve employment conditions for private school teachers to address staff wellbeing and the quality of education.

Opportunities

- Saudi Arabia has diverse cultures across different provinces. The central learning policy should appreciate diversity and should encourage diverse cultural groups to support their social and natural environment. Each specific culture has a particular understanding of the local environment and how to respond to that environment. That diversity is enriching, and education could be used to link students to their learning and the environment in a way that enhances learning and at the same time builds on efforts for a more sustainable future. Relevant education could be used to build an economy that does not exploit the natural environment and to find ways to protect the environment and appreciate different ways of knowing about plants and animals and how to survive in very dry climate. In particular, learning about the management of seed diversity and the management of water that is relevant for life in an arid environment. The Saudi Education System needs to enable more interaction and agency in the class room through workbooks that foster participation by the students and teachers.
- Advances in technology could be used in creating a learning community and connecting with communities that are increasingly diverse. Also, better use of digital information technology could enhance students' opportunities for more open learning, learning at their own pace, discovering new ideas, and linking up with students in different parts of the Saudi provinces. Education policies should appreciate the digital era by thinking about what has been taught and how it has been taught.
- Saudi Arabia has achieved good progress in the last twenty years in term of economic development. The opportunity for increased income needs to be directed to sustainable

development and developing education policies that emphasise on graduating well-rounded students.

- The international agenda places education central to the movement towards a more sustainable future. It is expected that the new sustainable development agenda (Sustainable Development Goals) by 2030 will impact positive changes in education policies to respond to increased environmental challenges.
- Strong commitment from the government to fund learning projects. Funding opportunities could enhance the probability of education policy success if it is used properly to address different needs for students through a more inclusive approach.
- Opportunities to learn from the best practice internationally. Advances in technology and communication open more channels for learning from best practices in learning and learning policies.

Threats

- Saudi Arabia in the last two years has started facing a fiscal deficit. The deficit was mainly because of the fall in oil prices. In 2015 it reached 97.9 billion US dollars, and the estimated deficit for 2016 is around 87 billion US dollars (Ministry of Finance, 2016). Government budget cuts could affect many central learning projects such as free textbooks or partnerships with international textbook developers.
- The increased number of international schools associated with many enrolments from Saudi citizens. The number of Saudi students in international schools jumped from 5% in the last few years to reach 30% in 2014 (Makkah Newspaper, 22 October 2014). Families may choose international schools looking for better learning opportunities for their children. The central learning policy needs to represent learning needs from the community and improve education quality to regain more confidence from students' families. The increased number of Saudi students in international schools also may create challenges for integrating the new generation, as the international schools do not teach Arabic language and Saudi history at the same level as private and public schools.

- Education policy works in a context where education is perceived more as an instrument for employment and economic growth (see Chapter 4). This context creates more challenges for the process of preparing students to be a good citizens in the future (National Education Policy, 1969).
- Widespread use of technology could have a negative impact on learning in schools. It could mean less impact of public education on the digital generation. This challenge puts pressure on policy makers to rethink what been taught and how it been taught. The advances in information and communication technology should be celebrated in schools. The education system needs to be agile and innovative to respond to the pressure of increased and diverse ways of knowing in the new information age.

Table 5.3: strengths, weaknesses, opportunities, and threats analysis for central learning policy

The previous analysis highlighted a number of internal weaknesses and strengths that the Ministry of Education has more control over. The Ministry could enhance the role of central learning policy by working on its strengths and overcoming its weaknesses. Overcoming weaknesses can improve students' learning capabilities and reflect positively on the outcomes. For example, instead of measuring learning only from textbooks, learning measurement needs to reward creative teaching and learning that goes beyond the limits of textbooks. Broadening the view to measuring learning in schools could also be used to advance other skills such as communication, problem solving, and other creative and critical thinking skills. Active forms of education could be achieved through relevant education and giving teachers and learners more autonomy to be creative. The standard assessment could be used to enhance the chance for more transparent assessment across schools for both genders. Also, it could enhance employment conditions for private school teachers for their wellbeing and a more quality education.

5.8 Chapter Summary

This chapter investigates 'to what extent are students able to achieve their learning capabilities?' Case studies from schools identify four key challenges. The first challenge is related to the scope of learning evaluation. The current approach for students' assessment focuses only on evaluating students' learning in the national textbooks. Students' assessment does not encourage nor reward students for learning broader knowledge and skills. Therefore, students are not encouraged towards lifelong learning beyond school. One implication is the lack of reading habits among students. Students have less opportunities for wider reading that could enhance their critical thinking and their lifelong learning capabilities.

The second challenge is the heavy reliance on passive learning in schools. In the top down approach for learning, teachers and students have less opportunities to be active and more creative. The third challenge is the absence of standard measurement for learning outcomes. The absence of standard measurement threatens the integrity of evaluation across schools. Teachers face pressure from students, students' families, and school administrations to give high grades which may not reflect student performance. The fourth challenge is related to the conditions of employment in private schools. Private school teachers are employed by the school, and the demand for high grades affects their career and the integrity of their evaluations.

CHAPTER SIX: Achieving Life Capabilities in Education: Policy and Governance Challenges

Human development is a process of enlarging people's choices—as they acquire more capabilities and enjoy more opportunities to use those capabilities.

- UNDP, Human Development Report (2015, p. 2).

6.1 Introduction

The previous chapter investigated challenges students face to achieve their learning goals. The ability of students to function effectively as critical thinkers who navigate different ways of knowing and learning. To achieve education that addresses development in social, economic, and environmental terms. Nevertheless, human development viewpoints of education are not limited only to learning. Human development in education includes students' abilities to achieve their learning goals as well as to maximise their human potential (Sen, 1999, p. 294; Nussbaum, 2011, p. 155). In order for students to be capable well-rounded human beings, the focus of this chapter is about investigating challenges that students face to achieve their life goals. Challenges that students face to enjoy a healthy life, to be able to play and create, and to be safe. Challenges that need to be overcome do not limit students' control over their life, allow them have the opportunity to feel positive emotions, and create hope towards their own learning.

This chapter attempts to investigate students' life capabilities through comparative case studies across public and private schools for boys and girls. The main purpose is to address the third research question: 'To what extent are students able to achieve their life capabilities?'

The case studies from schools found four key challenges that need to be faced in the process of building life capabilities. **The first challenge** is time. Students face time pressure to create a number of basic capabilities especially health and play. Schools start early in the morning: 6:45 am in summer and 7:15 am in winter. Such an early time for school impacts upon student's sleep and nutrition at home. Students also have less time for physical activity, play, and social activities. The study finds a gender gap between gender groups in which boys have more time and space for play and physical activities.

The second challenge is limited empowerment for students in schools. Students have lower control over subjects they study, lower level of control over their school environment, and limited opportunities to voice their needs. The third challenge is related to school design. School design provides limited space for students to run, to play, and to enjoy more social and physical activities. This situation is worse in leased buildings which usually been designed for other purposes and not necessarily for learning. The fourth challenge is related to safety and mobility. The study found widespread of bullying in schools. Boys reported a higher level of bullying than girls. Mobility out of school is higher for male students. The greater level of mobility for boys creates many issues around safety out of schools. Female students have a lower level of mobility which associated with higher level of safety.

The study does not find a real difference between life capabilities in the provinces. The difference was evident between girls and boys in terms of the time they have for leisure and the

problems with the school layout and infrastructure. Girls also face restrictions on their mobility out of schools while boys face more safety risks out of their schools.

Challenges for life capabilities are discussed in this chapter firstly by highlighting a comparison between boys' and girls' schools. Then each challenge will be discussed in turn.

6.2 Life capabilities: Case studies in schools

Education is a process of empowerment and change. It is a process of preparing people well for the future through education that develops well-rounded persons. Thus, part of the goal of this study is to investigate challenges Saudi students face in order to become well-rounded people. In other words, it is to investigate students' 'actual ability to achieve various valuable functionings' in their lives (Sen, 2007, p. 271). In this respect, the study found four key challenges which are time constraints, limited student empowerment, school design, safety and mobility.

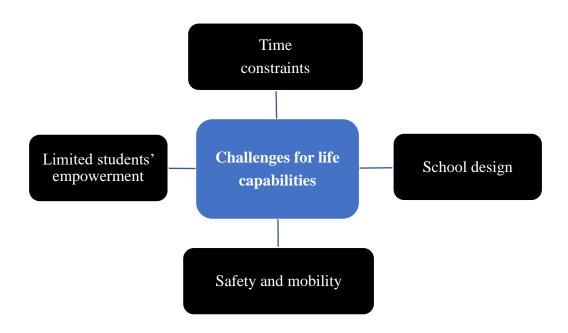


Figure 6.1: Challenges for life capabilities

Life challenges that are highlighted in the previous figure play an important role in shaping life chances for girls and boys in Saudi schools. The study finds that gender plays important role in the difference between boys and girls. The following table summarises these challenges and to what extent there are similarities and differences between the groups of the study participants. The purpose is to identify to what extent these challenges limit boys' and girls' opportunities in public and private schools. Data analysis does not find differences between the provinces; that is, the Riyadh Province and the Border Province.

Challenges for life capabilities	Boys' schools	Girls' schools	Difference between gender groups
Time constraints in schools	Time create constraints on students' achievement of a number of central life capabilities (Nussbaum, 2011) especially health and play. Schools start early in the morning which give students less time for sleep and healthy nutrition at home. Schools also provide less time for play and social activities.	Time create constraints on students' achievement of a number of central life capabilities (Nussbaum, 2011) especially health and play. Schools start early in the morning which give students less time for sleep and healthy nutrition at home. Schools also provide less time for play and social activities.	Girls students do not have time for physical education in the central curriculum.
Limited empowerment	Students face challenges to control their learning environment. This challenge is associated with lack of control over resources and limited opportunities to voice their needs	Students face challenges to control their learning environment. This challenge is associated with lack of control over resources and limited opportunities to voice their needs	Similar challenges between boys and girls in public and private schools. The difference is related more to whether a school is working with the new high school learning system (Muqararat) in which students have more freedom to make some decisions over their learning.
School design	School design provides limited space for students to run, to play, and to enjoy more social and physical activities. This situation is worse in leased buildings which usually been designed for other purposes and not necessarily for learning.	School design provides limited space for students to run, to play, and to enjoy more social and physical activities. This situation is worse in leased buildings which usually been designed for other purposes and not necessarily for learning.	The limitation on sports in girls' schools also impact girls' school's design with limited space for play and lack of sports facilities.
Safety and mobility	Bullying is common in boys' schools. Also, boys face many issues of safety out of their schools. Safety issues include road accidents, violence and fighting after school.	Girls' students report issues around bullying in their schools. Also, female students have a lower level of mobility which associated with higher level of safety.	The gender difference is evidence in bullying and out of school safety. Boys reported a higher level of bullying than girls. Also, mobility out of school is higher for male students. The greater level of mobility for boys creates many issues around safety out of schools.

Table 6.1: Challenges for life capabilities: Comparison between gender groups.

6.3 Time Pressures in Schools

Based on stories of many students in public and private schools, time plays an essential role in their human development. Time creates constraints for students to develop a number of central human capabilities suggested by Nussbaum (2011) especially health, positive emotions, and play (pp. 33-34). For example, students need time to eat, time to play and time to rest. All these examples explain how time is a central issue in schools. Time works against students' lives in many ways. Schools start early in the morning, which affects students sleep time and ability to have breakfast at home. Time also creates many issues for boys and girls in schools. Time pressure in schools includes time for recess and play, and time for physical activities. All these challenges related to time impact on students' life capabilities is discussed in more detail in this section.

6.3.1 Early Start Time of School

Schools in Saudi Arabia start early in the morning; 6:45 am in the summer and 7:15 am in winter¹⁰. In Riyadh, which is the capital city and has the largest population of Saudi Arabia, schools start even earlier at 6:30 am¹¹. It is normal to hear school bus horns in my neighbourhood where I live in Riyadh early in the morning. This is long before sunrise, while the streets are still dark, especially in the wintertime. This early time for school applies to both public and private schools. Learners leave their homes early especially in big cities where commuting is time consuming. Children need to rise around five am in order to be ready for the commute on the school bus.

¹⁰ Time zone for Saudi Arabia is UTC+03:00, three hours later than Greenwich Mean Time (GMT). The country follows fixed time zones for all cities with no daylight saving time in summer.

¹¹ The early start time for schools in Riyadh compared to other provinces is justified to help student reach the schools early and reduce number of cars in streets before people go to their jobs at 7:30 am.

The early start time of school means less time for their bodies to have enough sleep. If students do not get enough time for of sleep, it may create serious impacts on their health and wellbeing. For example, lack of sleep among children is linked to obesity, depression, less daytime functioning, and other unhealthy behaviours such as smoking (Lowry et al., 2012; McKnight-Eily et al., 2011). Beside its effects on health, lack of sleep also affects learning functioning. Research by Wolfson and Carskadon (1998) that includes 3,120 high school students shows that lack of sleep affects academic achievement and students who report less sleep during the weekend are those who have the lowest academic results. Indeed, students in Saudi Arabia face risks associated with a lack of sleep. BaHammam et al's (2006) study that includes students from boys' and girls' schools in Saudi Arabia found that students sleep less compared to those in published data from Western countries. They also report the early time for schools among the factors that cause a lack of sleep (p. 875).

The changing sleeping pattern among Saudi society increases the impact of early time of school. Two decades ago families used to go to sleep early. Shops and social activities closed early in the night. Nowadays life in Saudi society is different. People now are increasingly used to more social activities during the night. Shopping and family visits become normal until midnight. This major change has had an influence on sleep habits in Saudi students (Alsaggaf et al., 2016; BaHammam et al., 2006). Participants from schools report an issue around sleep which associated with early time for school:

We have an increased issue of lack of sleep among student. (Muhsin, a head of a private boys' school in Riyadh, interview, 31 December 2013).

It is wrong for schools to start early. 8 am maybe better than the current time (Eyad, a student at a private boys' school in the border province, focus group discussion with students 4 February 2014).

Lubna, a teacher, believes that the most important issue in education is the current starting school time. She said:

The most important issue in education is time for school. It needs to be changed to 8 am to 8 am until 3 pm especially in winter. (Interview, 30 December 2014).

Another teacher said:

The start time of schools is early, and it does not help in reducing traffic jams in the streets (Khaleel, a teacher at a boys' public school in Riyadh, 4 March 2014).

While the issue of lack sleep and early time of school reported from different participants groups in school, it seems to be oversighted in education departments and the Ministry's head office. The issue of very early times for school is reported only from schools. The striking impact of time on students' lives seems to be ignored by policy makers at the Ministry's head office and in the education departments.

Another significant impact the study found about the early time for school starts is the way it affects students' nutrition. Many students report that they usually skip breakfast to get to their schools on time:

Mahmoud: I cannot catch up in the morning. I sleep around 10 pm. I need more time for sleep so I save this time for sleep, and I delay my breakfast during school.

Eyad: Some students wake up around 5 am. There is no time for them to take their breakfast (Focus group discussion with students at a private boy's school in the Border Province, 4 February 2014).

From the previous quotation and as a result of the early start times for school, it is evident that many students come to school hungry without food. When this issue of no breakfast at home emerged during my fieldwork, I raised it with students in my last discussion. I asked them how many of them ate breakfast at home. Surprisingly, it was only two out of six students who raised their hands and said they ate breakfast at home (Focus group discussion with students at a public boys' school in Riyadh, 4 March 2014).

As students do not have time for breakfast at home, they are more dependent on school canteens for food. These following quotations and picture (4) show the high dependency on students on the school canteen:

Most of students depend on the school's canteen for breakfast (Hamza, a student at a private boys' school in Riyadh, focus group discussion, 23 December 2013).

Students used to take breakfast at schools. They do not eat at their homes (Amal, a teacher at a girls' public school in Riyadh, interview, 16 February 2014).



Picture 4: Student buying their food during recess time. Source: Alawi, I., Okaz Newspaper, 5 December 2012.

As shown in picture (4) the higher dependency from students on the school canteen causes long queues. It is common to hear noise and mass gathering in front of school canteens during recess time. Almost all the school gather there to buy their food. Nevertheless, time still limits students' nutrition at schools. The timetable that is imposed by the Ministry of Education allows only 15 minutes time for recess in public and private schools. In this limited time, students need to buy their meal and eat it in only 15 minutes. Some students, however, do not have the chance even to buy their meals:

All students gather here to buy their breakfast. Imagine all students from all the three floors of the school gather here. After a quarter of an hour, the bell rings. Some girls still not even get the chance to buy their meal (Reem, a teacher at a public girls' school in the Border Province, interview, 3 February 2014).

As highlighted in the previous quotation, some students will miss the opportunity for nutrition during the whole school day. An example is given by one student. She said:

Sarah: I could not get my breakfast. Canteen is so crowded.

The co-researcher: Do you even take your breakfast at home or you

come here hungry?

Sarah: Sometimes.

The co-researcher: You stay all the day without food!

Sarah: Yes. What can I do! (Sarah, a student at a public girls' school

in Riyadh, focus group discussion, 23 February 2014).

Part of the paradox of time crisis in schools is to find enough time to eat breakfast after they buy it. If the bell goes before they finish, they cannot eat it in their classroom. Eating during the class is an offense according to the School Code of Conduct (Ministry of Education, 2012, p 12). Therefore, students face a real challenge to achieve their life goals. In particular, enough time for them to eat their breakfast. In the same time, it raises concern about to what extent policy makers think about other aspects of students' lives when preparing them for the future. There is a need to balance the view about students' development in schools. The process of enlarging student choices in schools requires thinking of students as an end of the development process (UNDP, 1990; Sen, 2005).

6.3.2 Time Constraints on Play and Social Interaction in Schools

Recess time at school, which is only 15 minutes, is also the only opportunity for students to play and socialise out of a formal classroom setting. I remember during my school days how I

ran quickly to buy my breakfast early. I realised that if I bought my meal early, I could enjoy more time eating my meal while chatting with my friends. If a few minutes were still available in the break, I could use it to play with other students. My female co-researcher told me a similar story. In one story from her childhood during primary school, she told me that:

Sometimes I buy my breakfast to eat it during the recess, but because a recess is too short and I love playing with other girls, I leave my meal and play hide and seek with other girls (Field note, 3 February 2014).

This quotation from the co-research highlights the absence of enough time for students to play and engage in informal activities that can positively reflect on their health and wellbeing. The previous story also shows how play is valuable in children's lives. The value of play in children's lives means they sometimes value it over eating their meals. However, the current school timetable does not recognise this. In actual fact, it creates a situation of what Nussbaum (2000a; 2011) calls tragic choices. Tragic choices happen in situations such as this where a school's timetable puts students in a paradox to choose between two basic capabilities: to play, or to eat their meals. This tragic choice harms the process of creating students' central capabilities and building well-rounded human beings (Nussbaum, 2011). In particular, it harms students' ability for play and health (Nussbaum, 2011, pp. 33-4). As play and nutrition are central capabilities, they should have the same level of protection as other priorities in school (Nussbaum, 2000a). Policy makers have the responsibility to give students reasonable time to play, socialise and eat in a way that gives them the ability to achieve balanced human development.

6.3.3 Time for Sport and Physical Activities

The study considered formal time allocated for play as part of the standard curriculum for students at public and private schools. It found a substantive difference between the time allocated to boys and girls. The national curriculum allocates time for sport classes only to male students. In boys' schools, each level has a weekly sports class. In sports classes, boys perform physical education which is part of the central curriculum. Girls' schools lag behind in play and in physical activities. Play and physical activities are absent from the central curriculum. The central curriculum design that been implemented by the Ministry of Education excludes sporting activities from girls' schools.

Social relations for gender groups (Kabeer, 1994) in the community provide an explanation for why girls' lag behind in access to sporting activities. The assignment of gender roles to women in Saudi Arabia still do not fully recognise sport and the importance of physical activities for girls. Sarah, a female student, describes how gender roles limit girls' physical functioning:

One day I was racing with girls, one of my teachers' shout to us: are you boys doing such thing? (Focus group discussion with students at a girls' public school in Riyadh, 23 February 2014).

The previous quotation is a good example of how gender roles in the community shape the being and doings (Sen, 1999; Nussbaum, 2011) of girls' life chances. Institutional analysis (Kabeer, 1994) suggest that the attention should not be directed only to Ministry policies. Gender roles in the wider community should be addressed in order to improve girls' physical functioning.

Despite the absence of physical education from the standard curriculum for girls, the chance for physical activity is not the same between private and public girls' schools. In May 2013, the Ministry of Education gave private schools more flexibility to add sports classes for girls (Saudi Press Agency, 4 May 2013). Nevertheless, the gender gap still exists. Research visits to private girls' schools revealed that time for sport is more limited and shorter than boys' schools. In the Border Province, the private girls' school has only 15 minutes for physical activity each week. The following comments highlight the issues shared with the female co-researcher during an interview with the head of the private school:

The co-researcher: What kind of sports activities do you have in your

school?

Sahar: Movement. Movement games, walking, and some healthy

stuff.

The co-researcher: How long it takes?

Sahar: Quarter of an hour (Head of a private girls' school in the

Border Province, interview, 2 February 2014).

What deepens the gap between gender groups is that this limited time for sport has taken time away from other subjects. Girls play at the cost of their learning. The school want girls to play and at the same time to teach them the central curriculum required by the Ministry. To solve this paradox, they take 15 minutes from one subject. This tragic choice is reported by one teacher working in the school who explains:

Sport class is every Thursday. They take the time for sport from the first class (Latifah, a teacher at a private girls' school in the Border Province, interview, 4 February 2014).

In Riyadh, the head of the girls' private school announced that they are doing sport next term:

We are planning for physical activities in the morning. Girls need a physical education class like boys. But, boys have only one class each week. So, I am thinking it is better to have physical activities each morning. 10 minutes I believe is enough (Maha, a head of a private girls' school in Riyadh, interview, 2 January 2014).

From the previous quotations, the absence of mainstream opportunities for sports classes among gender groups means private schools have different applications:

It is just individual efforts from our principal. Education department here do not ask whether girls do sport or not (Latifah, a teacher at a private girls' school in the Border Province, interview, 4 February 2014).

This variation in sports for private girls' schools highlights the need for policy that mainstreams opportunities across genders in terms of physical education. This is necessary to ensure that all students are given time to develop aerobic fitness, and to make sure all students are placed upon the threshold of the ten central capabilities (Nussbaum, 2000a; 2011).

Public girls' schools are the most affected in terms of absence for time for sports and physical activities. This situation is the result of the absence of physical education in the girls' curriculum and public schools have no freedom to give their students sports activity:

There is no physical activity at all (Amal, a teacher at a public girls' school in Riyadh, interview, 16 February 2014).

The co-researcher: Do you have physical activities for students in your school?

Reem: No. No physical activities (Reem, a teacher at a public girls' school in the Border Province, interview, 3 February 2014).

As public girls' school lack sports activities in general, it was interesting to listen to complaints only from girls in Riyadh. Girls in the public school in the Border Province seemed familiar with this capability failure. They simply answered 'no' without any further comment. On the other hand, girls in the public school in Riyadh raised this issue early during the discussion:

Howaida: why they do not give us more options. Sport classes for example. Islam is supporting that everybody needs healthy body Jawahir: We have studied that prophet Mohamed, peace be upon him, has raced with his wife. I do not rely on my school in this matter. I do exercise in my home. I do not want to be fat. (Focus group discussion with students at a public girls' school in Riyadh, 23 February 2014).

From the previous quotation, it seems that the gender awareness needs are more prevalent in Riyadh. This may reflect the influence of the wider culture and 'culturally constructed rules'

(Kabeer, 1994, p 284). It also shows how gender roles in the wider community (Kabeer, 1994) affects female students' views about their development. Riyadh is the capital with the largest population and the most diverse culture. All these factors seem to play positive factors for a more active role for women in the community. On the other hand, women in the Border Province still have a closed cultural awareness compared to Riyadh. The impact of culture on gender awareness needs provides more evidence on how gender relations (Kabeer, 1994) may either enhance or undermine gender roles in development.

The way girls in the Border Province adapted to the gender inequality in sport could be further explained by what Nussbaum (2000) terms as 'adaptive preferences'. The lack of awareness about their gender needs for the importance of physical activities, made female students adapt to their capability failure in physical activities. This finding from girls' schools shows how it is problematic to rely on people's reported self-satisfaction. Education policy needs to mainstream physical education across schools to address basic needs even if it has been oversighted by students.

Unequal time for physical education has another serious impact on girls' schools. The study found that restrictions on play in girls' schools create unequal resource disruptions among gender groups, for example, a lack of sports facilities and inadequate space for recreational activities. Because boys' schools have sports classes in the standard curriculum, each boys' school has a sporting field, and some schools also have a school gym. Also, this field is used for other activities including play and school events. Inequality of resources between gender groups affects the chance for girls to maintain healthy lifestyles and enjoy leisure activities. The unequal resource challenges limit girls' capabilities for being and doing (Nussbaum, 2011; Sen, 1999). As a result, the study

found that at private girl's schools, girls do their activities indoors in school halls. This impacts on their access to sunlight. This is particularly important for ensuring strong bone health in later life (Bailey et al., 2005). The central policy needs to mainstream opportunities among gender groups. These opportunities to include time and resources that are essential for play and building healthy life style.

The restrictions on play in girls' school do not means boys are far better off. In boys' schools, time for physical activity is only one class in the whole week. The duration is 45 minutes. Nevertheless, boys do not even enjoy this small amount of time. Students come to school wearing national clothes which are mandatory by the Ministry of Education guidelines for public and private schools (Ministry of Education, 2012, p. 5). For the class to wear a sport uniform they need time to take off the sport uniform and change into the national uniform again. Unfortunately, all this preparation time is part of sports class. This means some time is even wasted before students get ready for the sports class. Two students from different provinces describe this time paradox:

It is only one class every week. 45 minutes for students to change their cloths and get ready this means we only have just 30 minutes each week (Akram, a student at a private boys' school in Riyadh, focus group discussion, 23 December 2013).

45 minutes for sports but we do not even get all this time to play. For a student to prepare and wear sports uniform, the rest of time is almost 30 minutes (Eyad, a student at a private boys' school in the Border Province, focus group discussion, 4 February 2014).

Ibrahim, a head of a private boys' school in the Border Province, made similar comments about sports. He said:

We are restricted by the central plan for physical education to be one class a week. This is a central policy. I know students' needs more. 45 minutes is not enough for students to exercise their bodies (Interview, 28 January 2014).

The previous discussion highlighted how the quality of students' lives been affected as a result of lack of time for play and physical activities. The lower level of functionings (Sen, 2007) of sport and play, especially among girls, limit the potential of education in students' lives. In particular, it limits the contribution of education in tackling increased levels of health issues in Saudi society. As noted in chapter one, people in Saudi Arabia face an increased level of obesity and diabetes. Unfortunately, children are not exceptions to these health risks. Different field studies found a prevalence of obesity among adolescents from both genders (Mahfouz et al., 2011; Al-Almaie, 2005). The imperial results from this study and relevant studies make the case for the Ministry to improve the life chances of girls and boys by adding more time for formal and informal physical activities. Schools should provide more opportunities for students to be healthier and make differences in students' lifestyles by increasing mainstream sport and play time in school time tables.

6.4. Student's Limited Empowerment

Part of student development in education is to increase their potential for active participation in their country. The role of education in active participation has been emphasised by

the National Education Policy (1969, p. 3). Schools play a crucial role in this process, to empower students so they do not feel they are a means to another end (Sen, 1999). Therefore, they can attach positive feelings towards schools and what they learn. Empowerment increases the level of positive emotions and engagement among individuals (Hyden et al., 2004, p. 19; Woodall et al., 2010, p. 27). This section discusses challenges to students' empowerment, in particular, the ability to have control over their learning, control over resources, and to have a say in their schools. All the issues related to students' empowerment are discussed in this section.

6.4.1 Student Control over Learning

The first challenge in students' empowerment is related to students' abilities to control their own learning. That is, to have a sense of ownership over of what they learn and to choose among different subjects. In this respect, the study found a common issue of lack of control among students. Comparing and contrasting results for schools, I found that the issue of a lack of control over learning is not an issue exclusive to private and public schools or gender. It is, however, an issue due to the school organisational system. This finding can be explained in view of the centralisation and stream rules that been implemented by the Ministry across schools. The centralised system learning system imposes core central subjects across private and public schools.

Even though the Ministry controls learning in schools, the study found positive progress. The Ministry in the last few years has adopted a new learning system for high schools. The new high school system is called 'Subjects' or 'Muqararat' in Arabic. 'Muqararat' allows students more freedom to choose subjects from the standard curriculum. Students also can graduate early in two and half years instead of three years. This new system has a target of enhancing the

outcomes of high schools through giving students more autonomy over their learning (Ministry of Education, 2011, p. 67). The Ministry of Education increases the number of schools that work with this new system each academic year. After six years in 2011, the number of schools which followed this new high school system reached 434 schools around the country, 362 which were public schools and 72 schools from the private sector (Ministry of Education, 2011, p. 67).

The study found that students are able to develop more agency through the new high school system. Two of the selected schools in the Border Province follow this new system for high school. Both were public schools: one was for boys, and the other was for girls. Students in these schools reported a higher level of satisfaction with this new approach to learning:

The co-researcher: Do you think 'Muqararat' system for your school is better than other schools?

Students in common voice: Yes. Lamia adds: Yes. We feel better here. (Focus group discussion with students at a girls' public school in the Border Province, 5 February 2014).

The positive impact of the new high school system 'Muqararat' is also evident in other studies. Alabdulkareem (2013) found that giving students more autonomy in the new high school system has a positive impact in preparing students for their future (p. 438). Alzamil (2015) found that giving students more control in the new high school system helps students achieve better learning results compared to their peers in schools with the old high school system. Giving students more empowerment in terms of more control over learning also improves other life capabilities. The new high school system helps students develop more abilities for decision making, self-

confidence, and creates positive emotions toward learning and towards schools (Alzamil, 2015, p. 104)

The empirical evidence of this study and the previous studies indicate the positive impact of learner agency. Giving students more empowerment make a difference in their current and future potential. Lerner agency has the potential for positive impact on student life and learning capabilities (Nussbaum, 2011). It gives the message that we can make a difference in young people's lives by giving them more room to decide. Such education can enlarge students' choices and maximise their potential (UNDP, 1990). In particular, it increases their level of control over their environment, their ability to feel positive emotions, and to feel an affiliation with their schools (Nussbaum, 2011, pp. 33-4).

6.4.2 Control Over Resources

Another aspect of student empowerment in schools is control over resources (Sen, 1999; Nussbaum, 2011). The study found that students face the challenge of converting resources to utilities (Sen, 1985; 1999). For school facilities such as laboratories and libraries, students cannot benefit from them without having some level of control over using these resources. School resources are controlled by the administration with some level of control from teachers. Nothing is left to students. Furthermore, students cannot come after school hours to study or to enjoy playing in the school.

Giving students some level of control over resources will increase their affiliation to their schools. This also could enhance the use of resources as students report that school resources have not been used in the way it should be in improving their learning:

Ayman: Almost All schools have libraries and laboratories, but very rare we get there. I remember visiting the laboratories one or two times.

The researcher: Do you have labs in your school or not?

Sami: Yes. There are laboratories, but I think material expired from being there without use.

Ayman: We did not use it.

Tariq: The Ministry should give us more visits to labs and the library. It is very rare we get the library. (Focus group discussion with students at a public boys' school in the Border Province, 2 February 2014).

The co-researcher: Do you think your school has enough learning resources?

Hala: This is a resources room¹². However, we do not come here and sit on the computer etc.

The co-researcher: You do not come here?

Hala: No.

The co-researcher: Then why your school has a resources room!

Hala: Antique... (laughing) (Focus group discussion with students at a public girls' school at the Border Province, 5 February 2014).

¹² The girls' meeting was in the resources room for the school.

The pervious quotations highlighted an issue around resources use in boys' and girls' schools. I was expecting major differences between students in public and private schools in terms of control over resources. However, students in private schools highlighted the same issues with their peers in public schools:

Bakr: We have school library, but we do not go there. We have a computer lab, but we do not go there. We have labs, but we do not go there.

The researcher: Why?

Bakr: I do not know! We have all these resources, but the school does not give us the chance to use it.

Iyad / Teachers do not take us there. Students want to go to labs and resources room. All the activities we want to do. In this way, we get motivated and achieve what we want. We have some teachers that do not take us to labs or resources room. Even to the computer lab, they say no. It is available. Why do we not use it? I do not know. (Focus group discussion with students at a private boys' school in the Border Province, 4 February 2014).

The co-researcher: What about labs in your school?

Asma: Good.

Khadija: Yes. However, it is rare we get there (Focus group discussion with students at a private girls' school in Riyadh, 20 February 2014).

The previous quotations show how the challenges to control resources is common across the public and private schools for both genders. It was quite interesting for me to hear similar stories from private schools. This similarity between public and private schools in having little control over school resources can be understood in the context of students being concerned more

about achieving success in narrow terms. The limited view of education hides the need to develop an overall capable person. Ambitious parents who sent their children to private schools send them to be competitive in terms of high grades so the students can go to the university they want:

Look, smart parents take their children to a private school so their children guarantee very high results. (Ismail, a teacher at a private boys' school in the Border Province, interview, 27 January 201).

Parents who registered their children in private school wants them to focus on General Achievement Test (GAT) as they guarantee the full grades from their school. If they go to public school, they cannot guarantee such results. (Ahmed, student at a private boys' school in Riyadh, focus group discussion, 23 December 2013).

The higher emphasis on academic achievement gives little considerations to graduating well-rounded human beings. Other aspects of students' development seem less important. Therefore, students in private schools use their power and agency to achieve better grades but not to lobby for other services, even if they are not happy with their level of control over their school environment. Students do not challenge those limitations. This provides more evidence about the importance of the way students and their families perceive what their learning actually is about (see Chapter Four, Section 4.3). It also justifies Sen's (1999) argument that improving people's development should start with the way human capability is perceived. In this way, education should be perceived as intrinsically important, and as a way of improving the life chances of students in broad terms to include empowerment which is important for their future potential. Not only in narrow terms to achieve higher grades and better academic results. This is not to undermine

the importance of academic achievement. However, the academic achievement should not be the only goal when parents try to help their children to achieve a better future.

The issue of lack of control over resources raises concerns about how the Ministry follows a resource based approach in schools (Nussbaum, 2011). It useless to consider materials with little consideration of the level of agency students need to convert resources to utilities (Sen, 1985). As can be seen from the previous discussion, students face the challenge for benefitting from the available resources. Their lack of empowerment makes schools' resources less useful. From a Critical System Thinking point of view, the Ministry needs to think of people when thinking about the issue of resources in schools. As Flood (1999) puts it 'No problem exists that is purely technical. People are always involved.' (p. 71). Thinking about people and their point of view can foster their central human capabilities (Nussbaum, 2011). It looks very simple. However, it demands 'a radical shift in our perceptions' (Capra, 1996, p. 4). It demands a people-centred approach. Therefore, students can acquire more freedom to achieve their capabilities.

6.4.3 Absence of Student's Voices

Another aspect of students' empowerment in schools that is important to consider is their ability to voice their needs. According to the Capabilities Approach, human development depends on being able to participate and influence decisions that affect one's life (Nussbaum, 2011, p. 34). Participation provides opportunities for students to achieve their needs and overcome many challenges. Also, students learn participation by experiencing participation. In this way, schools are expected to assist children to build participation capabilities in order for students to play a

positive role in their development in the future. However, the study findings demonstrate a lack of students' participation across public and private schools. In the following quotations, students highlight the issue of their participation:

We need improvements but the administration here if you criticize, they get upset (Youssef, a student at a private boys' school in Riyadh, focus group discussion, 23 December 2013).

Fawaz: This the first meeting for someone talking to us about our needs.

Sami; [adds laughing comments]: And it will be the last one (Focus group with students in a public boys' school in the Border Province, 2 February 2014).

The previous quotations from public and private students show how education that is supposed to advance human development cannot be achieved in a school system that demotivates and silences students. Students in private schools also complain of the lack of opportunity for them to have a real engagement in the process of learning and that they have little input in the school system. The absence of an inclusive approach to participation in schools makes students report their issues to their families. Students' parents sometimes intervene on their behalf if their children are not happy with a part of the school:

Look, this is a private school. It searches for profit. It will not be the same with public schools. If any students face any problem, she will complaints to her family and the family will complain to school administration. Families use the phrase they always use 'I have pay money for my daughter to be comfortable' this why here is better

(Huda, a teacher at a private girls' school in Riyadh, interview, 30 December 2014).

The lack of participatory approach in schools makes student voices matter only through their families. Schools need more inclusive approach for participation. Therefore, students can feel comfortable to voice their needs to school administration to achieve better outcomes.

The absence of students' voices affects their needs. In girls' schools, participation has more importance to women. This applies in particular to Saudi women as they face social and cultural pressure (Hamdan, 2005; AlMunajjed, 2009). Having a school system that enhances their voice and power could enhance their life chances. In boys' schools, lack of participation affects their needs. One example that students stressed in different boys' schools was about sports classes. Schools assume that one size fits all without responding to a variety of students' needs or enabling them to make suggestions on their perceived needs. In all boys' schools, students reported that football is the only available sport for them. The variety of students' needs have not been taken into account:

Youth hobby is not only football. For example, I am a tall and my friend also, and we like basketball. If we like to play basketball here, there is no chance (Ayman, a student at a public boys' school in the Border Province, focus group discussion, 2 February 2014).

In another school, one student, who appears overweight, challenged this rule based on his body:

There is no variety of sports in our school. We have football only. Someone likes me cannot play football. Because of my body, it is hard to play football, and there are other students are the same as well. We need other sports such as tennis or table tennis for example (Ali, a student at a private boys' school in the Border Province, focus group discussion, 4 February 2014).

The previous examples from makes the case that schools need to open more channels for dialogue with students. Students' voices can make a difference in their development.

This picture of the absence of students' participation in the school system is usually different from what heads of schools' report. Usually head of schools stress that numerous options exist for students to share their opinions. In one example from a private boys' school, the head stressed that he meets students at least twice each term:

The research: Do you meet with your students?

Muhsin: Of course. Regularly. Twice each term. One with outstanding students and another with med performance, and one with students with low performance. Each group alone. Then one meeting for all students to give them the opportunity for crossfertilization of ideas. There is must be a meeting with school students (Muhsin, head of a private boys' school in Riyadh, interview, 31 December 2013).

The picture the head draw about students' capability for participation was different from what students' report. During my focus group with students, I asked them if they discussed issues

openly with the school management. They said in common voice 'No'. One student adds the following comment:

We never have meetings with the school administration (Ahmad, a student at a private boys' school in Riyadh, focus group discussion, 23 December 2013).

In the public school I visited in Riyadh, the head indicated that students and teachers have ample opportunity to take part in decisions in their schools. He gave the following example of the 'final exam timetable' that students were able to change. During my discussion with students, they indicated that they had zero opportunity to make any decision. I raised the example the head had shared with me and they said that this was only after they had gathered in front of his office pleading with him to change.

The less accurate picture from principals about their schools' demand more inclusive and participatory policy approach. Therefore, learners are included at all stages of the process. As I discuss in more detail in Chapter Seven, the current practice of policy design highly depends on principle participation. Students report they have been left out. Building policy only based on the principal's voice gives an incomplete picture about learners needs. There is a need for education policy that takes the concept of active participation (National Education Policy, 1969, p. 5) from rhetoric to reality by giving students more opportunity for participation and a greater sense of active agency in their education.

6.5 School Design

Students go to schools to be better equipped for the future. Part of their development is to play and laugh. Children need to enjoy their childhood and create life skills. Therefore, it is crucial for schools to work in improving the potential of schooling by providing space and equipment that helps students to develop their life skills. School design plays an important role in advancing human development in schools. However, through my observation and from what participants' report, the current school design limits the potential for education for human development. School design is currently designed to support the narrow functional view of education as discussed in Chapter Four. School design in Saudi Arabia focusses more on learning in the classroom. Usually, there is limited space for students to run, to play, and to enjoy more social and physical activities (Ministry of Education, 2011, p. 26; Ministry of Education, 2013, p. 107). The following quotation from one policy maker describe the limitation schools face in term of the way it has been designed:

Our schools do not help in achieving education goals. School buildings can help students to develop psychological and social aspects of their lives. The school design needs to take into account the psychological pressure that students face. It is necessary that school buildings have a gym, a prayer room, and a theatre. Our schools have high school walls, while schools in other countries such as the United States and Australia, the school have no walls, so students have more freedom to move (Hassan, a policy maker at the Ministry of Education' head office, interview, 11 December 2013).

Pictures 5 & 6 also show the limitations of school's design described in the previous quotation.



Picture 5: Closed school design. Source: Ministry of Education, 2011, p. 110



Picture 6: Small hall for school's activities. Source: Ministry of Education, 2011, p. 23

The issue of school design also raised in my second visit to the field in January 2016. During the focus group discussion with policy makers in the Ministry of Education' head office, Abdullah recognises the issue of school design in public schools. He said:

The schools described as government buildings in actual fact have been designed in a way that does not take into account students' needs, for example, a child's right to play. Our buildings do not have enough space and equipment for play. Even though some schools have an open yard, the hot weather in our country prevents students from using its benefits. The solutions include building multi-purpose halls (Abdullah, a policy maker at the Ministry of Education' head office, focus group discussion, 5 January 2016).

Girls face more challenges in terms of school design. As discussed earlier, girls lag behind in terms of play and physical education. One implication is that their school designs lack a sports field or school gym. This means education in girls' schools is limited to the classroom with some space in the school hall. Girls almost have no place other than the school halls to play or to socialise. School design limits girls' time to develop personal agency through play and bodily health (Nussbaum, 2011). One female teacher best describes the limitations of girls' schools design:

Our building needs to have a big hall and nice view so girls enjoy and relax. However, what we have are small spaces for everything. Small prayer room. No play room. Girls come to school and should have sports to develop physical energy and health (Hayfa, a teacher at a public girls' school in The Border Province, focus group discussion, 3 February 2014).

Despite the limitation on school design in public and private schools, there are some variations. For public schools, the Ministry of Education has a central department that is responsible for building public schools for boys and girls across the country. The centralisation in terms of building public schools means one finds similar school buildings in all the different provinces. The central department for school building applies similar designs for boys' schools and other designs for girls.

Centralisation in building public schools is the opposite of private education. For private schools, one can find big, medium, and small schools. However, the number of big private schools is very few. For example, in Riyadh city, which has 33.3% of private schools in the country, most of the schools are in small and medium buildings and 70% of these schools are in leased buildings (Riyadh Chamber of Commerce, 2011, p. 11 & p. 73). It is quite interesting that most of the private schools do not exceed the limitation on the way schools are designed. Sami, a policy maker in the Ministry's head office, acknowledges that most of the private schools do not have good school buildings that can be used to help students to achieve their life goals:

Here in Riyadh, we have very limited number of private schools that have a good school building, good staff, and good learning environment. I wish public schools can be like the elite private schools. I do not want to compare public schools to the rest of private schools. If we want to improve public schools, we need to look to the best examples (Interview, 19 January 2014).

The private schools that the study includes have smaller campuses compared to standard public schools. This means that private education in Saudi Arabia faces challenges not only

regarding employment and learning evaluation as discussed previously in Chapter Five. But, also in providing adequate school buildings that can expand students' capabilities (Sen, 2003). Expanding students' capabilities requires more than standard learning in the classroom. It requires more facilities for students to develop social and personal skills beyond academic achievement. However, in the narrow view of education other aspects of students seems less important. In the narrow functional view to education, one head of a private school believes she still can achieve a good education in her school even without laboratories and playgrounds. She said:

I believe the most important thing for the success of education is the teacher and teaching style. Sometimes we hear about students who learn in a very poor school environment, and they become doctors, engineers, and geniuses. On the other hand, some students studied in high standard school environment, but the content and teaching were poor. So, I believe if laboratories and playground do not exist will not have a high impact on the learning process (Interview, 2 January 2014).

The previous quotation from the head of one private school describes how private education perceives students' schooling. The head of the girls' school believes she can achieve good education even though laboratories and playgrounds are not available. This view undermines other aspects of students' development. Nevertheless, girls and boys are not a means to an end. They are human beings who have basic needs that need to be respected and protected without justifying its instrumental benefits (Sen, 1999, p. 18; Nussbaum, 2000a, p. 71-72. As Nussbaum (2011) wrote in 'Creating Capabilities':

What play and the free expansion of the imaginative capacities contribute to a human life is not merely instrumental but partly constitutive of a worthwhile human life. That's the sort of case that needs to be made to put something in the list (p. 36).

Despite this deficiency in private schools, they attract many students every year. As mentioned in Chapter 5 (Section 5.6), there is an increased number of enrolments in private schools, and some schools have a long waiting list. The number of private schools is also increasing. It increased from 3059 in 2008 to 4032 in 2013 (Ministry of Economy and Planning, 2010, p. 390; Ministry of Education, 2015). The increased enrolment in private school despite limitations on its infrastructure could be explained in students have a common interest in passing grades and achieving outcomes. It means that school fees have not been paid to achieve well-rounded students due to the narrow definition of education to achieve success and specific outcomes.

The limitation on private schools' infrastructure, despite the increased number of enrolment, provides more evidence for the narrow functional view of the system. Therefore, if we need to improve the system, we need to change the assumptions that shape education policies and people's views to education. Parents need to get the message that school fees are about more than high scores. It needs to be based on a human capability approach (Sen, 1999; Nussbaum, 2011). As Sen (1999) argues 'the capability approach has a breadth and sensitivity that give it a very extensive reach, allowing evaluation attention to be paid to a variety of important concerns' (p. 86).

6.5.1 Leased School Buildings

The previous challenge of school design in public and private schools are more serious in leased buildings. This is because rented schools are designed for other purposes and not necessarily for learning. It usually provides small spaces and few larger shared spaces or outdoor areas for physical activity and play. In this way, it provides a real challenge for students to achieve their learning and personal human development. Those conditions limit what Sen (1999) and Nussbaum (2011) describe as providing a real opportunity for students to achieve human capabilities. Thamer, a policy maker at the Ministry's head office, recognise the challenge Saudi education face in term of rented schools:

We have very large number of rented buildings that are not suitable to be schools (Thamer, a policy maker at the Ministry of Education's head office, interview, 15 December 2013).

Mansour, a teacher, also based on his personal experience, said that a rented school provides a poor environment for learning and personal development:

Rented schools is not suitable for the education. The student will not react good interaction with the teacher. In this environment teachers are frustrated. They do not develop themselves and do not look to achieve their goals. However, good learning environment leads to interactive teachers who willing to help their students (Mansour, a teacher at a public boys' school in the Border Province, interview, 3 February 2014).

Leased buildings are a challenge that faces private and public schools. However, each one has different reasons for having education in this unpleasant situation. Leased buildings for public schools are temporary buildings that the Ministry has leased to overcome the challenge of an increased number of students in the country. The number of student increases from 536.4 thousand in 1969 to 5.4 million students in 2013 with a yearly growth rate around 5.4 % (Ministry of Economy and Planning, 2014, p. 155). Here Sultan, head of a public school, describes this challenge:

We have a population explosion. Also, rural migration to cities. Thus the number of students increased and creates pressure on schools (Sultan, head of a public boys' school in the Border Province, interview, 29 January 2014).

Abdullah, a policy maker, made the following comments during my second visit the Ministry's head office:

The Ministry has opened a large number of schools in the country to provide free education to all. Unfortunately, this was at the expense of school buildings. The Ministry have no choice but to rent temporary buildings to provide education around the country. Now the Ministry faces a huge challenge to replace those buildings with new buildings. It is a national challenge, and it is beyond our abilities. We need national policies and more funds to overcome this challenge (Abdullah, a policy maker at the Ministry of Education' head office, focus group discussion, 5 January 2016).

Table (6.2) gives an overall picture about the challenge the Ministry faces in building and providing good schools for the fast growing generation.

Province	Number of Schools		Government buildings		Leased buildings		Percentage Government buildings	
	Male	Female	Male	Female	Male	Female	Male	Female
Riyadh	1,699	1,853	1,163	1009	536	844	68%	54%
Mecca	16,47	1,744	1000	895	647	849	61%	51%
Medina	668	661	421	241	247	420	63%	36%
Qassim	658	783	428	406	230	377	65%	52%
Eastern	955	1,048	751	713	204	335	79%	68%
Asir	1,097	1,239	696	603	401	636	63%	49%
Tabuk	324	308	255	131	69	177	79%	73%
Hail	405	334	208	96	197	238	51%	29%
Northern	301	257	244	203	57	54	81%	79%
Jazan	445	455	111	107	334	348	25%	24%
Najran	136	146	107	66	29	80	79%	45%
Baha	569	368	426	190	143	178	75%	52%
Al-Jouf	281	219	161	112	120	107	57%	51%
Total	9,185	9,415	5,971	4772	3,214	6,643	65%	51%

Table 6.2: The number of Government and leased buildings in provinces by gender group Source: The Ministry of Education, Kingdom of Saudi Arabia, 2011, pp. 26-7.

The Government provides generous funds to alleviate this issue. For example, in 2014 the Government allocated 800 million US dollars to build new public schools (Ministry of Finance, 2016). As a result of this huge spending on building new schools, the Ministry has a rate of gaining four new buildings per day (Ministry of Education, 2011, p. 109). However, overcoming the challenge of leased buildings for public schools seems far from reach in the near future as a result of a huge number of rented schools highlighted in the previous table. One policy maker highlight how the issue of rented school will still exist in the near future:

Even if the Ministry made some progress, rented schools remain a big challenge for the Ministry in the next ten years. (Thamer, a policy maker at the Ministry of Education's head office, interview, 15 December 2013).

For the private sector, renting a school building is for economic reasons. Investors in private schools usually look for inexpensive choices to start their business. Secondary data suggests that the issue of leased buildings in the private sector is more serious than in public schools. In Riyadh, for example, 70% of private schools are leased buildings (Riyadh Chamber of Commerce, 2011, p. 73). The higher number of rented private schools provides more evidence on the way education is perceived. Private schools work in the culture where learning is more to be perceived in the classroom. From a human development perspective, education needs to be perceived as a process of the development of well-rounded and lifelong learners. Such understanding could influence the way private schools work including providing a good learning environment.

6.5.2 Classroom Design

With the narrow focus of learning only in the classroom, students spend almost all the school day sitting at their desks. The functional education view limits their opportunity only to learn from the central curriculum. This situation is even worse for girl students because they face more socio- cultural challenges (Hamdan, 2005; AlMunajjed, 2009). For example, limited opportunities for out of school learning and a lack of sports and physical activities.

Despite a high dependency on learning in the classroom, they have not been well prepared to facilitate education for human development. Classroom design rarely supports two-way communication and dialogue which are critically important for education that supports human

development (Freire, 1970; Giroux, 2011). The layout of chairs is in fixed rows which tend to make students silent and limits their chance for communication and discussion (Hannah, 2013; Gaurdino & Fullerton, 2010; Grubaugh & Houston, 1990).



Picture 6: The standard classroom design. Source: Ministry of Education, 2011, p. 99.

As can be seen from the previous picture, students are sitting behind each other in rows. This classroom design plays against human development in many ways. The first implication is it supports one-way communication and less active approach to learning. When students sit behind each other, they cannot engage effectively in discussion. Indeed, it serves the function of banking education (Freire, 1970) where students cannot easily communicate with each other or with their teacher. To learn how to 'sweep in' and 'unfold values' around social, cultural, economic and environmental dimensions of an area of concern (McIntyre-Mills, 2006), students need more opportunity for dialogue and communication.

I have experienced the traditional classroom design for all of my public education, and I can see its impact on dialogue and communication. In actual fact, the traditional classroom design is the best recipe to silence students and demotivate dialogue. From my learning experience, the front of the classroom is owned by the teacher. If the teacher is sitting in this area, he or she holds the attention of the classroom. It is like being on the stage in front of a big audience. For learning and interaction, it means students are separated from their teachers. One way is it creates many disruptions between teacher and students, and affects student concentration. This is the opposite to design that supports learning for human development where the design gives the teacher the opportunity to teach well and students to learn better.

One way to change the seat arrangement is by working in groups. Some teachers have tried to challenge the standard design by doing so. Their main motivation is to mitigate passive learning, and increase social interaction in the classroom. However, their efforts do not have much results:

Even if the teacher is trying to be creative in teaching, she cannot because of the classroom design. To divide students into groups, the teacher cannot divide them into more than two groups or maybe three groups, but the teacher cannot move in the classroom between students. The classroom is a big reason for teaching to be more passive (Lubna, a teacher at a private girls' school in Riyadh, interview, 30 December 2013).

The current classroom is wrong. I have tried to apply active learning strategies, but we need another classroom design where desks support more interaction. (Reem, a teacher at a public girls' school in the Border Province, interview, 3 February 2014).

The reason this strategy seems not to be working is that the original design does not support group arrangements. Khaleel, a teacher in another boys' public school, holds a similar view to Reem, that classroom design one of the main reasons teachings becomes less interactive:

Sometimes when the number of students in the classroom is high, the teacher cannot practice cooperative learning. There are many factors which limit the way we teach in the classroom. The teacher cannot do anything. Those factors are the number of students and the classroom itself. (Interview, 4 March 2014).

The other way the standard design plays against human development is that it does not provide equal learning opportunities for all students. If a student is sitting in the last row, he or she can barely see the blackboard or hear the teacher:

My chair is the back so sometimes I come to the front so I can see the blackboard. (Jawahir, a student at a public girls' school in Riyadh, focus group discussion, 23 February 2014).

The unequal situation for learning in the current classroom design also includes the way the teacher engages with students. Teachers usually engage and support students sitting in the front seats. Little attention is usually given to other students sitting in the last row. Moreover, teachers usually believe the stereotype that students sitting in the back are lazy students (Shamim, 1996, p. 138). When I was a student, learning opportunities and my image in front of my teacher was highly dependent on where I sat. If I was sitting in one of the front seats, teachers usually assumed I was

a good student who was willing to learn. If by chance I could not find a place in one of the front seats, some teachers assumed the opposite. This unequal situation for learning and building students' personalities in front of their teacher and their classmates is best described by one teacher interview. I met Mustafa, a teacher at private boys' school, in a classroom similar to the one in picture (6). During our interview, he recognised the negative impact of the traditional classroom design on equal opportunity for students:

The researcher: If I am sitting on the back of the? Will my learning

be affected?

Mustafa: Yes. Of course.

The researcher: who decide for the student to be in the front or far in

the back of the classroom?

Mustafa: It depends on the student. Students choose where they can

sit.

The researcher: If I came too late and found some student occupied all the front seats. Is this means I will be sitting in the back with some students who are not willing to learn?

Mustafa: Of course student's learning will be affected. The surrounding environment has a great impact on students learning. (Interview, 1 January 2014).

The previous discussion provides evidence for how the layout of chairs in fixed rows tends to limits students learning and development. For equal learning opportunities and to advance thinking in the classroom students, classroom design should support learning for human development where the design gives the teacher the opportunity to teach well and students to learn better.

6.6 Safety and Mobility

The study found that students' life capabilities are affected by their level of safety and mobility. In schools, students report issues of bullying that harm their learning and development. Out of school, students face issues of safety and mobility. The study found significant differences between gender groups. Bullying is more serious in boys' schools. Male students also face many risks out of school as a result of their greater level of mobility. Girls, on the other hand, have very restricted roles regarding their movement with more opportunity for safety out of school. All these challenges are discussed in detail in the next sections.

6.6.1 Bullying in schools

In schools, bullying has been reported by students to be an issue that affects students' psychology and learning. Bullying includes violence and abuse, all of which harm human development, in terms of students being safe and enjoying a life free of insult (Nussbaum, 2011). Nussbaum (2000; 2011) claims bullying negatively affects bodily integrity. Bullying also affects students' opportunities to attach positive emotions and hope toward their learning and their schools. One student describes this effect:

This [bullying] cause having fear from going to school. You will be stressed, lacking self-confidence, fear from everything (Nawaf, a student at a private boys' school in Riyadh, focus group discussion, 23 December 2013).

The previous quotation highlights the learning and psychological impact that students may

face when being the victim of bullying behaviour. Students should be able to have a school life

free from risk or insult. A safe learning environment enables students for being and doing which

is essential for human development (Sen, 1999; Nussbaum, 2011). In particular, protecting

students' bodily integrity and enabling them to create positive emotions toward schools.

Nevertheless, findings suggest that students face bullying issues that create many challenges for

them to achieve their central capabilities. Widespread bullying issues were reported from public

and private schools for boys and girls. However, findings suggest that life capabilities are more

affected by bullying at boys' schools. Boys report different types of bullying and more serious

impacts than at girls' schools. By contrast, the reported bullying from girls' schools is mostly

verbal abuse rather than physical:

Sometimes issues of bullying happen between girls but because they

girls it is not serious like boys (Huda, a teacher at a private girls'

school in Riyadh, interview, 30 December 2014).

While in boys' schools it includes verbal and physical assault:

The researcher: Do you have bullying issues in your school?

Akram: Yes.

Tala: It causes student hate the school. It causes fear.

The researcher: Does it include physical insult?

Akram: Yes. Many times. Some students threat you in the school

and when the school finish he attacks you (Focus group discussion

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with students at a private boys' school in Riyadh, 23 December 2013).

Physical fighting and violence among students happen in our schools. Almost 3 to 4 times a week (Suleiman, a teacher at a public boys' school in Riyadh, interview, 30 December 2013).

Also, the extent of effects for bullying were reported higher in boys' schools. Girls downplayed the effects of bullying in their schools as normal issue they can cope with:

Yes, there is [bullying] but the second day we went to school normal as nothing happen (Khadija, a student at a private girls' school in Riyadh, focus group discussion, 20 February 2014).

The co-researcher: Do you have bullying issue? If there is an issue it can be solved (Lamia, a student at a public girls' school in the Border Province, focus group discussion, 5 February 2014).

On the other hand, boys reported serious impacts in a way that limits their chances for learning and development:

Sometimes it preventing us from taking part in the class because if you talk he [the bully] may tease you (Akram, a student at a private boys' school in Riyadh, focus group discussion, 23 December 2013).

Some group in the class put pressure on you. It happens from class to another. They stress you and threaten you (Fawaz, a student at a

public boys' school in the Border Province, focus group discussion, 2 February 2014).

The difference between gender groups in bullying in Saudi schools is also evident in the work of Hussein (2010). In his comparative studies across gender groups in Saudi schools, he found that bullying is more serious in boy's schools (p. 57). This finding also corroborates the findings of a great deal of previous research on gender and bullying in schools (Rigby & Slee, 1991; Siann et al., 1994; Scheithauer et al., 2006; Smith et al., 2012).

6.6.2 Mobility and Safety Out of Schools

The study found that life capabilities of students are affected by their safety and mobility out of schools. The study finds that gender plays an important role for safety out of school. There is a significant difference between boys and girls. Male students have the freedom to travel from and to school by car or walking. This privilege is not available for female students. The privilege for boys and limitations for girls affects their mobility capability. As a result, safety functioning for both genders is affected in completely a different way.

Boys have greater mobility than girls do. They enjoy wider opportunities to move from and to schools. Options for male students include going by car, walking, or using the school bus. Public transportation is not common in Saudi Arabia and cars the most popular form of transport:

85% of my students use their cars to come to the school (Muhsin, a head of a private boys' school in Riyadh, interview, 31 December 2013).

Student is independent on themselves for transportation. He comes by his car. Some may come with other students or his family take him to the school (Mansour, a teacher at a public boys' school in the Border Province interview, 3 February 2014).

The higher level of mobility for male students' costs them their safety and sometimes their lives. The legal age to drive is 16 years in Saudi Arabia. This age is lower than the majority of countries, which is 18 years. With the lower age for driving, it is familiar to see teenagers parking cars in front of boys' schools during the school day. A large number of students' cars which make it difficult for me to find parking space when visiting boys' schools.

Based on my interviews in boys' schools and my observations, I found that boys' schools face very similar issues for safety out of school. This similarity rather than difference is because safety for male students out of schools is related to a wider context more than the school itself. The first challenge boys face is safety issue around their schools. With the absence of pedestrian crossing signs and pedestrian crossing line marks on the road, crossing the road is dangerous. I faced similar danger when I had no option except to cross the road at my own risk. Lack of road safety is associated with number of accidents reported in front of boys' schools:

Recently there was car accident in front of our school (Saleh, a teacher at boys' public school in Riyadh, focus group discussion, 29 December 2013).

Rakan, a student, referred to this issue during a focus group. He said:

The real risk is out of school. There is no parking. As students, we face the risk when we cross the road (Rakan, a student at a private boys' school in Riyadh, focus group discussion, 23 December 2013).

Two students died in front of Rakan's school when they were crossing the road two years before I conducted the focus group. The sad thing is they had been killed by the carelessness of one of their classmates:

Two years ago, two students died. My brother saw them and the driver who kills them was a student from our school (Akram, a student at a private boys' school in Riyadh, focus group discussion, 23 December 2013).

The previous quotation shows not only the risk that boys face but also the risk they can cause to the community and other students. Participants in schools also reported the abuse of car use from some students. The issue of car use abuse is common among teenagers in Saudi Arabia and students start to become involved in those risky activities at school age (Ramisetty-Mikler, & Almakadma, 2016). The car abuse usually occurred when students drifting their cars in front of their schools:

Hamza: There are student drifting in front of other students. He causes danger to himself.

Akram: The student drifting and he may kill you will you crossing. (Focus group discussion with students at a private boys' school in Riyadh, 23 December 2013).

The problems is not inside the school. It is outside. Drifting usually happen during students finish their school (Yasser, a teacher at a public boys' school in Riyadh, focus group discussion, 29 December 2013).

Boys' mobility causes other problems for themselves and nearby neighbourhoods. Living close to a boys' high school is a nightmare many Saudi families are willing to avoid. After school care is not common for boys especially in high school students. This means students will wait outside in a way that may threaten their safety and engage in risky behaviours like smoking or

drugs because it happens away from the eyes of their school's teachers and administration.

Participants from boys' schools report that students sometimes engage in fighting and brawls after school hours. This is one example:

There are other students who physically assault us outside of the school when we finish (Akram, a student at a private boys' school in Riyadh, Focus group discussion, 23 December 2013).

While male students face real risks out their schools, their schools deny any responsibility:

I will be honest with you. We do not control students out of the school. We may cooperate with them but our responsibility is inside the school, and we only monitor them inside the school (Bader, a head of a public boys' school in Riyadh, interview, 30 December 2013).

Another example is from a private boys' school in the Border Province. In the morning, which was around 7:30 am, I noticed some students gathering in groups outside the school. The school started almost 45 minutes before but students seemed to be enjoying being outside and laughing. I raised this issue on the same day with the teacher who volunteered to be part of the study. He denied any responsibility, and the reason according to him was:

Those students are still outside they did not enter the school (Amjed, a teacher at a private boys' school in the Border Province, interview, 27 January 2014).

Khaleel, a teacher, admits the lack of policy that protects student outside the school is a problem that needs attention:

The problem is that according to the current system, the school is not responsible for issues that happen to students out of school (Khaleel, a teacher at a public boys' school in Riyadh, interview, 4 March 2014).

As a result of the absence of policy protecting students outside the school, my data reveals that schools may try to delay bullying issues until they happen outside their walls. Then no one can blame the school. This quotation explains how schools shift issues outside of their walls until it happens in the street:

Hamza: If students fight each other here, the school said go outside the school and fight each other. We do not care, but here no fighting. Akram: They said to us fighting is outside not here (Focus group discussion with students at a private boys' school in Riyadh, 23 December 2013).

It may also encourage students to solve their conflicts with others after school in a violent way instead of asking help from their school. Here is one example:

The researcher: Do you have risky behaviours in your school? Amjed: No. Minor violence sometimes and this rare. However, it happens out of school. The student waits for his classmate until he gets out of school (Amjed, a teacher at a private boys' school in the Border Province, interview, 27 January 2014).

The lack of safety of male students out of schools requires intervention policy that takes into account students safety in and out of schools. Nussbaum (2000, p. 82) comments on the role of public policy to evaluate and take action to address the social challenges that the government can control. In the case of boys' safety out of school, social policy intervention is crucial.

Students also face other risk associated with their higher level of mobility. When students drive to and from school, they face the risk of car accidents. Amjed, a teacher at private school in the Border Province, reported one sad story:

Most students own cars. Some of them are good drivers, and some of them are not. The sad thing is - and this is a phenomenon - almost each year we lose at least one student. He died when he is driving from or to school (Amjed, a teacher at a private boys' school in the Border Province, interview, 27 January 2014).

While boys pay the cost for their freedom to move, girls pay a different cost: it is their freedom rather than their safety. Variation in mobility capabilities between gender groups creates variation in safety functioning for both genders. Women in Saudi Arabia lack the capability to move about freely in public spaces. This is a common issue facing women in Saudi Arabia. For female students, it means they are completely dependent on others for their mobility. Schools usually provide bus transportation for girls. Other options for girls include their families picking them up, or the family may hire a private driver.

Girls' safety is not only higher during the commute to school. Girls' schools do not report any issue of safety outside of school like drifting and fighting. Girls' schools also, private or public, provide free after school care for girls. One teacher usually stays in the school supervising girls after school hours until parents or care givers come to pick them up. This chance is not available to boys. Here are two examples from private and public girls' schools:

One teacher stays with girls after school (Mariam, a teacher at a public girls' school in Riyadh, focus group discussion, 17 February 2014).

Every school day we have a teacher and administrative staff for after-hours care. (Iman, a teacher at a private girls' school in the Border Province, interview, 2 February 2014).

The study found that the limitation of being able to be mobile has a positive impact on girls' safety and bodily integrity. This positive impact on female functioning is consistent with Nussbaum (2000a, p. 2) when she mentions that issues that women face sometimes have positive outcomes. However, human development is not concerned only with functioning but also if functioning is achieved in a human way that respects people's dignity (Nussbaum, 2000a, p.87). Whether restrictions on girls' movement is positive or not, people's freedom in itself is valuable according to Sen (1999, p. 18). Higher safety for female students' is at the costs of their capability. This result suggests a significant capability failure where girls trade their autonomy for something else they see as more important (March et al., 1999, p.104). In this case, it is their education in exchange for their mobility. There is a need for education policy that takes the concept of human development from rhetoric to reality by giving students more opportunity for safety without sacrificing their freedom and mobility.

6.7 Chapter Summary

This chapter investigates challenges students face to maximise their human potential. Challenges that students face to enjoy a healthy life, to be able to play and create, and to be safe. Challenges that need to allow students to have the opportunity to feel positive emotions, and create hope towards their own learning. In this regard, the study found four key challenges. The first challenge is time constraints. Time create constraints on students' achievement of a number of

central life capabilities (Nussbaum, 2011) especially health and play. Schools start early in the morning which give students less time for sleep and healthy nutrition at home. Schools also provide less time for play and social activities. The second challenge is the lower level of students' empowerment. The study found a lower level of students' empowerment in schools with students lack control over their learning environment and have few opportunities to voice their needs. The third challenge is school design. School design provides limited space for students to run, to play, and to enjoy more social and physical activities. This situation is worse in leased buildings which usually been designed for other purposes and not necessarily for learning. The fourth challenge is related to safety and mobility. The study highlighted a number of issues around safety and mobility in schools. The gender difference is evidence in bullying and out of school safety.

CHAPTER SEVEN: Critical Systemic thinking to address human

development challenges: application of the Critical Systems

Heuristics (CSH)

'When one is considering systems, it's always wise to raise questions about the most obvious and simple assumptions'.

-- C. West Churchman, (1968, p. ix)

'We do not need the systems concept at all if we are not interested in handling systems boundaries critically.'

-- Werner Ulrich (1996, p. 17)

7.1. Introduction

The previous chapters (Chapters 5 & 6) discusses findings about students' learning and life capabilities in schools. The analysis in this chapter addresses human development challenges in terms of Critical Systems Heuristics (CSH). The analysis questions the current status quo and make policy suggestions guided by a design for inquiring systems (DIS) that draws on the work of C. West Churchman (1971). The DIS is elegantly summarised by West Churchman's colleague Werner Ulrich (see Ulrich, 1983, Ulrich et al., 2010) who distilled the DIS into 12 guiding questions. The 12 questions can help to reduce the gap between learners and service providers or make policy suggestions to address the educational and human development challenges. It highlights what is the case compared to what it should be or 'ought to be' the case. These questions attempt to address key aspects of the system to achieve its goal. The education system needs to address development issues in social, economic, and environmental terms.

Critical Systems Heuristics (CSH) looks to who needs to be involved in defining what students' need to strive to achieve in schools. It also addresses the processes for measuring how

progress can be achieved in terms of agreed goals. Furthermore, how can we secure the change when addressing what ought to be done. It is about making education policy that appreciates the importance of seeing the world through 'the eyes of different stakeholders' (Churchman, 1968).

Ulrich (2005) points out 3 main concerns that in using Critical Systems Heuristics (CSH) that can help in thinking about social issues. The first is it provides a reflective process for practitioners and service users to think about issues from different angles. Secondly using the 12 questions helps people challenge the boundaries of some theatrical framework that sometimes shape the understanding of social problems. Third, the CSH analysis can help the analysts to choose the required intervention methodologies based on the outcomes of answering the 12 questions.

Following (Ulrich & Reynolds, 2010, p. 244) the analysis in this chapter is divided into 4 main categories of analysis. The first set of questions is called 'sources of motivation'. This category has 3 questions. It asks about the beneficiary, the purpose of the system, and the measure of improvement and success. The second category asks questions about the source of control. In particular, decision makers, resources, and decision environment. The third category is about the source of knowledge in the system. It asks about experts. People who are providing skills and knowledge for the system and who guarantor its success. The third category also considers questions about what kind of expertise and knowledge do we need for the system. The fourth category involved questions about the affected. How the system is going to address the interest of the affected. Human or non-human groups who are affected by the system but are not considered as direct stakeholders.

7.2 Education for human development: source of motivation

This section addresses how we can achieve education for human development by thinking about the purpose of the system. What education for human development should be about? Is it only about education that graduates skilled labour or is it more about education that foster human development in term of students being able to achieve their learning goals as well as to maximise their human potential. Such education includes students being able to think, to reason, and to be able to develop life and learning capabilities (Nussbaum, 2011). This section also considers thinking of how to achieve human development in terms of thinking about the whole system. Stakeholders and beneficiaries that have a stake in the system and can also enrich our thinking about education that has the potential to address development issues in social, economic, and environmental terms.

Part of the analysis of this section consider measuring what ought to be achieved. Based on the governance framework for this study (Stiglitz et al., 2010) that highlighted in the literature review, measuring success should be informed by the normative assumption for the system. For this study, it is informed by the Capabilities Approach and Critical Pedagogy for enabling students to be more critical and capacity building for achieving well-rounded students.

7.2.1 The purpose of the system: what ought to be the case?

Central to CSH is to investigate the purpose of the system. On anther word, are we doing the right thing? (Flood & Romm, 1996). The purpose of the system then compared to the actual

practice or what is the case. It is to investigate 'are we achieving what we care about?' (Stiglitz, 2010, p 15).

The vision for Saudi public education until 2022 represents what ought to be the purpose of the system. According to the Ministry Strategic Plan for General Education the vision for public education is as follows:

Student achieves their highest potential, have integrated personality, participant in community development, and affiliated to their religion and their country, through high-quality education system (Ministry of Education, 2013, p 16).

The previous view suggests graduating well-rounded students who are able to contribute to development in Saudi Arabia in social, economic, and environmental terms. Similar view to education has been put forward by the Universal Declaration of Human Rights, Article 26 that:

Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace (United Nations, 1948).

The research findings suggest that the ambitious view to education seemed to be rhetoric compared to what policy makers and students strive for. The empirical findings from the study highlighted in Chapter 4 suggest that policy makers are concern about education for economic growth. This approach emphasises students' development in terms of academic achievement to meet narrowly defined economic goals. Therefore, students are not encouraged to develop lifelong learning skills. It is representing what (Ackoff and Pourdehnad, 2001) call it the misdirected

system. Instead of focusing on doing the right thing, the system is focusing in doing the wrong thing (Ackoff and Pourdehnad, 2001, p. 199). The following quotation from one policy maker describe the issue of the misdirected system:

The problem is our education system and after 12 years of schooling, the graduates just memories the content without real skills. (Khalid, policy maker at the Ministry of Education's head office, interview, 21 January 2014).

The following table (7.1) summarise the current gap to achieve education for human development. The table compares what is the purpose of the system compared to what ought to be the case. This simple and same time powerful idea of system analysis shows the gap Saudi public education has.

What ought to be/is the purpose of the system							
what is the case	what ought to be the case						
The system focuses on improving the role of	Education needs to appreciate the wider role of						
education in economic development.	human development in term of social, economic,						
	and environment dimensions (Stiglitz et al., 2010)						
More emphasis is being placed on the instrumental	Education as a human capability needs to value for						
role of education in the Ministry's head office,	the intrinsic role, not just the instrumental roles						
schools, and among students. Students perceive	(Sen, 1999)						
public education as an instrument for further							
education and employment.							
Narrow view of students' education which limited to	Students need to get the message that education is						
academic achievement from the central textbooks.	matter of being well informed citizen in the future						
Students are not being able to develop life learning	and for the development of well-rounded human						
skills.	beings who engage in lifelong learning.						
The goal of education in policy document has not	A priori norms for education policy should						
translated in well- round learner. Measurements	emphasize a posterior governance process and						
emphasis on achieving narrow form of academic	structure to support the policy goals (McIntyre-						
results not unable to appreciate life-long learning	Mills, 2014b).						
skills.							

Table 7.1: Summary of what is the purpose of public education compared to what ought to be the case.

The previous table shows how the education reality contrast the way education should be. Instead of schools play a major role in developing students learning and personality, learning in schools become shaped around narrow goals that do not address the real purpose of education.

7.2.2 Education for human development: The key stakeholders

If education is supposed to contribute to human development in many aspects, it needs to consider who is involved as a key stakeholder in the system. It is to avoid seeing through a single set of eyes that may 'misdirect' the system in ways that encourage 'doing the wrong things right' (Ackoff and Pourdehnad, 2001; Reynolds & Holwell, 2010). To achieve more inclusive approach across senior management, middle management and with the teachers and students which needed to guide the a priori norms and a posteriori measures of performance (McIntyre-Mills, 2014b).

In the ideal situation, stakeholders ought to include students, teachers, staff, and planners. The view of internal stakeholders can inform what education for human development should focus on student's learning needs as well as understanding teacher's views and perspectives. These are the starting point for policy researchers when they work with schools to set goal for the future. The client of the system also includes thinking about the system environment. It includes external stakeholders such as parents/guardians and the wider community. Because education as a process for development needs to consider the view of public. Sen (2005, p. 158) insist on the importance of public participation for individuals being able to achieve the variety of needs they have. The acknowledgment of public participation is drawing on the different needs, choices that people may have.

However, the top down approach make actual practice limited to policy makers themselves. This situation is best described by the word of one policy officer. She said:

[The system] is still according to changes made by legislators in the Ministry who are just the decision-makers themselves (Norah, policy officer at Riyadh Education Department, interview, 16 December 2013).

In the top down approach many policy officers, head of schools, teachers, and students report their exclusion from education policies. The limitations on internal stakeholders are discussed in more details in this chapter when considering who involved in decision making process (see Section 7.3.1).

The Ministry of Education central approach also limit the chances of external stakeholders to be involved in the system. In particular, it creates limitations on the 'sweep in' process (Churchman, 1971) for ideas and inputs from student's families and the public. The limitation on sweep in process from the external stakeholders is described in the following quotation from one policy maker:

There are variables in the community that have stronger influences than the education system. You can imagine how media and Masjids have a stronger impact on the community than the education system. The competition is imbalanced. If you ask me: what is the solution? I will answer: the solution is actually through institutional work and open community participation to all. There are very important factors that the management system does not consider. Unfortunately, these factors have more impact on the system output over the impact of the system itself (Khalid, policy maker at the Ministry of Education's head office, interview, 21 January 2014).

7.2.3 Measuring education for human development

As system thinking concerned about priori norms (McIntyre-Mills, 2014b), it also concerns of how to achieve these norms in term of measurement. It is to ask about whether the purpose of the system is 'reflected in our metrics' (Stiglitz, 2010, p. 15). It requires posteriori measures of performance (McIntyre-Mills, 2014b) for the governance process to address the policy goals.

When making policy suggestions about what ought to be the case it suggests a raft of measures should be included to measure educational outcomes (Stiglitz et al., 2010). Posteriori measures to assess the performance of administrators, teachers and learners in standardised measures that incorporate gender mainstreaming and awareness of the UN Millennium Goals and Sustainability. Performance measures need to be much broader to take into account core skills as well as core wisdoms that reflect environmental awareness and respect for human diversity. It thus needs to include indicators of the 10 human capabilities. Nussbaum's (2011) ten central capabilities represent a normative approach for the measurement of the success for education where the list includes basic learning and life capabilities (see Chapter 2/ Section 2.4.2 of this thesis). In this view, performance measures need to be developed to measure the extent to which students are able to achieve problem solving tasks that demonstrate ethical literacy (McIntyre-Mills, 2014a). Also, this requires respect for many ways of knowing, ability to work across disciplines and cultures including different religions. The policy could include respect for diversity in the same way the Indonesian Constitution introduces the importance of respecting religious diversity in the interests of multicultural education.

The National Education Policy (1969) emphasis on success in education in terms of developing well-rounded students:

Providing students with Islamic values, instructions and ideals, enabling them to obtain knowledge and various skills, promoting constructive behavioural inclinations, developing society economically, socially and culturally, and preparing individuals for becoming a useful member in building their society (National Education Policy, 1969, p. 5).

Despite what been put forward by the National Education Policy (1969) to be the goal of education, students are not encouraged to develop life-long learning skills. As highlighted previously in Chapter Four and Chapter Five, the central grading system focuses on academic achievement in a narrow functional sense. One student words best describe this situation:

We just memorise for the test. The first question the student asks the teacher at the beginning of the term is 'teacher how our test will be'. From the beginning, they think of exams. They do not want to increase their knowledge and understanding (Fawaz, a student at a public boys' school in the Border province, focus group discussion, 2 February 2014).

Education, however, is not about just achieving grades in narrow functional sense. As the student mentioned, measurement is shaped in a way that supports passive learning and only memorisation without giving them the opportunity to learn more skills. Measurement also focuses on textbooks not to include measuring and rewarding formal and informal learning. This creates more limitations on students' opportunity to be creative, to learn more skills, and to develop lifelong learning habits. Measurement gives no consideration to the complexity of education capabilities in terms of the development of well-rounded human beings. A wider perspective of education is needed that is supported by a variety of integrated measurement that appreciates the instrumental and intrinsic role of education in students' current and future lives.

For the Ministry to achieve its goal of 'student achieves their highest potential' (Ministry of Education, 2013, p. 16) it needs to measure students' achievement using much wider approach than just narrow academic scores. Measuring students' achievement needs to include indicators of

other human capabilities that contribute to human development. This challenge of measuring human lives in a more comprehensive way has been addressed by many scholars such as Stiglitz et al. (2010) and Nussbaum (2011). In 'Mis-measuring Our Lives', Stiglitz, Sen, and Fitoussi (2010, pp. 10-21) suggest a dashboard to measure and promote human development progress in different aspects (see Chapter One of this thesis/ Section 1.2). Measuring students' development requires a dashboard that considers the many capabilities that students need to achieve.

Nussbaum's (2011) capabilities approach to human development is applied critically and systemically in this study to address the complex needs of students pertaining to 10 capabilities spanning learning and life capabilities. However, Nussbaum (2011) recognises the difficulties of measuring human development in some aspects using numerical scale (p. 61). She argues for qualitative measures to supplement our evaluation of human capabilities (p. 62). For the Ministry of Education, measuring students' capabilities could be achieved using a raft of measures to measure educational outcomes. This could supplement the current traditional grading system to achieve well-rounded students. The expanded form of assessment could also be used to encourage students to address wider areas of concern such as building an awareness of social and environmental rights and responsibilities.

7.3 Decision makers and issues of control

The second category of Critical Systems Heuristics (CSH) analysis investigate issues of power and control in the system. Questions in this category ask similar questions to (Flood & Romm, 1996) questions in the third loop of learning which is about who decide and in whose opinion decisions are made.

The first question in this category is about decision makers in the system. It asks about who decide and who have the power to direct the change. Questions in this category also involved control over resources that essential of successful implementation. The last question asks about decision environment and factors that should be out of the control of decision makers (Ulrich, 2005, p. 11).

7.3.1 Decision making for education for human development: current status and what ought to be the case

To depart from the economic view to education we need to enrich our view to education through more engagement. Engagement of students, teachers, staff and the wider community to draw future directions. For students it is to put their learning and life capabilities first not being only means to promote the industry and the market. In this regard, the first question for the source of the control in Ulrich's (1983) framework is about decision makers. 'Who ought to be/is in control of the conditions of success of [the system]? (Ulrich & Reynolds, 2010, p. 244). On another words, it is to investigate to what extent the current approach provides opportunity for the Ministry to create an area of shred concern (McIntyre, 2003) among different stakeholders in a way improve the system and enhance students' human development.

The ideal state for decision makers suggests that students, teachers, and staff have a real role in decision making process. According to Article 12 of the United Nations Convention on the Rights of the Child the views of the children should be respected:

1. States Parties shall assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child.

2. For this purpose, the child shall in particular be provided the opportunity to be heard in any judicial and administrative proceedings affecting the child, either directly, or through a representative or an appropriate body, in a manner consistent with the procedural rules of national law' (United Nations, 1989, p. 4).

External stakeholders also need to have a role in decision making as they are part of the system's beneficiary. The Ministry Strategic Plan (2013) states that;

Real participation according to specific roles from all the community members and institutions. It is to include: the family, the Masjid, Islamic institutions, media, the private sector, higher education, and other government institutions (Ministry of Education, 2013, p. 16).

Involvement of external stakeholders is also has been recognised by the United Nations. The Universal Declaration of Human Rights states on parents to have a role on their children education. According to article 26 'Parents have a prior right to choose the kind of education that shall be given to their children' (United Nations, 1948).

The recognition of involving many stakeholders in decision making process is less recognised in the National Education Policy (1969). The National Education Policy does not state any opportunities for students and other key stakeholders to voice their needs or to shape the education future. The only way the National Education Policy recognizes others role in the education process is through the teacher's participation in developing textbooks (National Education Policy, 1969, p. 22). The great emphasis from the National Education Policy on the central role in planning and developing education policies represent a serious limitation in one key

policy document that guide education practice. The priori norms (McIntyre-Mills, 2014b) for public education should provide a more inclusive view to many internal and external stakeholders.

The actual practice of decision making in the Ministry suggests that policy makers are the ultimate controller. Policy officers in education departments, head of schools, teachers, and students report limited opportunity to be involved decision making.

In the Ministry' head office, before I started data collection, I tend to believe that policy makers at the Ministry will be defensive for their central decisions and policies. Contradict to my belief; they have a common sense of the important of change and the negatives of following the less participatory approach in planning and policy design. The following quotations are examples of how policy makers perceive the negativity of following central approach:

If we want to improve the education system, we need to get rid of centralization and give more authority. I want the Ministry to give more authority to education departments, and education departments to give more authority to schools. Part of education reform is to be free from negative factors and to delegate authorities. The most important authority we should be given is the financial aspect. Budgets should be given to schools so they can develop their own. I am not calling for complete freedom to schools. They must be subjected to transparent and accountability. (Hassan, a policy maker in the Ministry of Education's head office, interview, 11 December 2013).

We have few chances for involvement in the system. I am very honest with you. Decision making process is still to be top down approach. The result is few involvements from beneficiaries in the system (Thamer, a policy maker in the Ministry of Education's head office, interview, 15 December 2013).

As policy makers in the Ministry ask for more participatory approach, interestingly they also lack participation in some aspects of decisions. The fact that the Ministry of Education has central policy design does not mean it includes all the key stakeholders in the Ministry. One policy maker describes the closed circle for policy making:

Decision-making is limited to few number in the system. Those people do not reflect the Ministry nor the community in large scale. They work based on the old concept in which seniors plan for juniors (Khalid, a policy maker in the Ministry of Education's head office, interview, 21 January 2014).

Another policy maker, give an example for how he excluded from planning for education programs related to his departments. He said:

A Large part of needs for educational programs within my department are related to other departments within the Ministry. The problem is I do not have a decision nor participation in the allocation of the resources to these programs (Faisal, a policy maker in the Ministry of Education's head office, interview, 20 January 2014).

Furthermore, in strategic decisions for the Ministry and education in Saudi Arabia. Khalid, who works as a policy maker in the ministry and heads one of the central departments, mentioned that he is unhappy with the way the preparation of the plan, and when I asked him why, he said:

Because everyone in the Ministry has been excluded from this work and the plan has been developed by a limited number of people (Interview, 21 January 2014).

The previous quotations from policy makers in the Ministry's head office show how the system is structured in a way that power and control come from the top. Following a central approach limited participation even within the Ministry's head office. Following central approach also may lead to what Kabeer (1994) call it 'gender-blindness policies'. One size fit all is criticized in planning for development especially for gender groups (Kabeer, 1994, Moser, 1993, March et al., 1999). Gender sensitive practice means there is a need for gender-aware policies that transform power and create more balanced of disruption of responsibilities between both genders (Kabeer, 1994). This balance is missing in the current education system where men control most of the leadership position in the Ministry (Al-Issa, 2009, p. 27). This may explain how women find difficulties to achieve some of their practical and strategic gender needs (Moser, 1993). As has been discussed in Chapter Six, girls face many challenges in term of physical education and sports facilities. Moving to a more participatory system will enhance girls' opportunity to voice their needs and achieve better human development.

With this less participatory system, it was not a surprise to hear many voices indicating their lower participation. In particular, from lower levels in the system, namely education departments and schools. For example, Rashed, a policy officer at the education department in the border provinces, said:

Rules and regulations come from the Ministry. My department has no role. Head of departments just receives regulations and instructions from the Ministry. We have no role or participation. There are some rules and regulations that we do not agree with it, but we have to follow it. We wonder why the Ministry does not take feedback from people in the field. We are just implementers (Interview, 27 January 2014).

Another key stakeholders in the system are teachers. Teachers play an important role in education. Their roles are not limited only for teaching but also include influencing students thinking and behaviours. Einstein once said, 'The supreme art of the teacher is to awaken joy in creative expression and knowledge' (Cited in Hayes, 2007, p 150). This due to the fact that the teacher has the greatest responsibility in the implementation of the educational process with students. Most participants highlighted this important role. Usually, when we asked – me and the co-researcher- about most important thing in education, it was the teacher who been referred to. However, despite this importance, teachers report their exclusion from the central education decisions. 'They do not take our ideas' said Ebtesam, a teacher at a public girls' school in Riyadh, describing her involvement. She adds:

Even my supervisor does not take inputs from me. She thinks she is on a higher level than me and my role is only to implement. Nevertheless, this is not true; I am the one who works and know more than people in the office because I am living in the situation and I can see clearly my school needs (Interview, 16 February 2014).

This lower of teachers' participation was despite the great value teachers attaches to their voices and their ability to change the system to the better. For Reem, a teacher at public girls' school, participation in central decisions is the most important issue in education:

The most important thing is teacher's participation in the education process. It does not work when we feel like we are living in a different world. We should have a role. For example, teachers' councils or teachers' unions (Interview, 3 February 2014).

Mansour, a teacher at a public boys' school in the Border Province, highlighted the issue of participation and the benefit for the system from obtaining or drawing on teacher's inputs. He said:

Teachers always seek to change, but no one listens to them. I think if the Ministry could do the same as what you are doing in your research: namely, visit many schools around the country and listen to the staff and students so they could respond to change. There are teachers who have a significant impact on education process through the Internet, not through the education system. For example, a teacher in Alqunfudah¹³ has a website that benefits all Saudi schools and has become a reference without relying on a Ministry request. It was his own initiative and no one sponsored him. Therefore, if the Ministry adopts teachers' and students' ideas we will have a better education system indeed (Interview, 3 February 2014).

The importance of teacher's participation mentioned by Reem and Mansour do not get the same level of attention. Teachers in the current policy approach do not play their important role. They only carry the stigma of the fall of the system and receive the most criticism from the media and the public. That level of criticism made some of them hide their identity when they are in the public:

Teachers' reputation in the community is not good. In social activities, some of my colleagues told me they feel sham to told others they are teachers (Khaleel, a teacher at a public boys' school in Riyadh, interview, 4 March 2014).

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¹³ Algunfudah is a city in the west of Saudi Arabia located on the Red Sea coastline.

To improve the system, teachers needs to be empowered for the change. Not only carry the stigma of the systems outcomes without having control over the process. Teachers need to be included through a more inclusive approach to decision making. Giving them more power will improve their accountability and performance.

From teachers' to students' participation. Based on my meetings with students, they showed the ability to diagnose problems concerning their learning and their development. Students were more animated and engaged and more open than any other participants group. They made a very positive first impression because of their wider views and the way they expressed their ideas about the context of learning in Saudi Arabian schools. For example, some students compare and contrast with other education systems in other countries like United Arab Emirates, Jordon, and the United States of America. Digital world seems to influence the way they think of their education and open more opportunities for students to explore more ideas. Students also showed the ability to diagnose problems concerning their learning and their development. Their voices enrich the analysis in Chapters 4, 5, 6. Their comments were memorable as were their insights about what could be done to improve education policies and governance performance. If I have not met students, I may miss the chance of knowing that some of them have not read any single book in their lives except the standard textbooks. I may also miss the chance of knowing that some of them come to school without breakfast, and some stay all the school day without food.

The ability of students to perceive needs support Lansdown's (2001) argument for how children are capable of diagnosing their issues and to express their needs. Similar findings of how students value their voices is also evidence by the study of Biggeri (2007) where he conducted a

study across three countries, namely: Italy, India, and Uganda. Participation was among of the list of children's valued capabilities (p. 204).

What student want, however, is not the same as their reality. Expanding students' capabilities (Sen, 2003) hindered by the centrally controlled policy approach. While students are the most group targeted by education policies, this importance is not reflected in the current policy cycle. Students in schools report no way to inform the policy design:

There is no way to share our views. The education department did not come to listen to us (Eyad, a student at a private boys' school in the Border Province, focus group discussion, 4 February 2014).

If the Ministry had listened to student's voice before, issues we are talking about now would have been addressed (Ayman, a student at a public boys' school in the border province, focus group discussion, 2 February 2014).

The current approach rarely addresses the views of the students. Their view and needs seem separated from the current policy design which raises concern about putting the first last in developing education policies (Chambers, 1997). Policy makers in the Ministry' head office admit that they are far away from students:

We have not reached the stage of being close to students and listening to their voices. We are far away from reaching this stage (Saleh, a policy maker in the Ministry of Education' head office, interview, 15 December 2013).

The lack of communication in central decisions affects understanding students' needs (Faisal, a policy maker in the Ministry of Education' head office, interview, 20 January 2014).

Unlike teachers and students, head of schools report some level of participation:

The Ministry embrace our ideas and always motivate us to send our suggestions (Muhsin, a head of a private boys' school in Riyadh, interview, 31 December 2013).

The unbalanced participation from different stakeholders in schools is despite the different responsibilities they have. Also, I found that each participants group in schools have different concerns. In this regard, head of schools concern more about administration aspect, teachers concern about teaching and their rights, and students concern about their learning and future opportunities. Colebatch (2005) emphasizes that public policy concerned a variety of people that they have different reality and interests. Therefore, the public policy should by attention to the diversity of human needs in evaluation and planning. Improving education outcomes at schools need to conceder all these aspects. This diversity and variation of people needs cannot be achieved by only by central planning and a small circle of decision-making. The second concern, of the risk of having imbalanced understanding in schools, is when I found that head of schools sometimes tries to draw a false picture about their schools. It was on many occasions that I heard different stories from what the head told when I met teachers and students. The point I want to emphasis on it is the risk of depends on the principal participation because it may give false perspective about what happens in schools. In this regards, involvement needs to be inclusive and participatory so that the service users and providers are included at all stages of the process (McIntyre-Mills, 2010a). To provide a real opportunity for participation that exceeded the threshold of the minimum requirement for human dignity and development suggested by Nussbaum (2011). Human capabilities need to be fostered through appropriate educational development programs that narrow

the gap between perceived needs and outcomes from the point of view of both services users (the students) and service providers (upper and middle management and teachers).

With the lack of control from education departments and schools over the decision making process, the Ministry sometimes takes the input it needs from people without stakeholders having the power to follow through their suggestions or to take part to implement their suggestions. People only being to what Sen (1999) describe as 'passive recipients of development results' (p. 11). One policy makers in the Ministry clearly describes this issue. He said:

Unfortunately, we did not listen to the beneficiaries the way it should be. Moreover, in the case there some level of participation, we did not employ their view adequately in the process (Khalid, policy maker, Ministry of Education's head office, interview, 21 January 2014).

The previous quotation from one policy maker shows how the Ministry tends to use very limited type of participation which regarded as a form of de valued 'tokenism participation' according to Arnstein's (1969) ladder of participation. According to Arnstein (1969) in the level of tokenism, people can voice their needs without having control over the decision making process (p. 217). Another example from another policy officers. She said:

When students or a school held a meeting and worked hard to send in their recommendations, they were not included. Until now, I have not seen a changed policy or procedure that has come about as a result of their suggestions (Norah, a policy officer at Riyadh Education Department, interview, 16 December 2013).

Rowan, head of public girls' school in Riyadh give some examples about the absence of their voices in changing the policy for food or service in her school. She said:

I feel it is not our business when we criticise. We sent our criticism about the canteen, but they never listen to what we have said. We sent our criticism for the school's manual; nothing has changed (Interview, 16 February 2014).

The previous quotations give real examples of how the system face the challenge of lack of participation. This highlight the importance of the using Critical System Thinking (Churchman 1971; McIntyre-Mills, 2006) when considering improving human development in schools. From CST perspective, the service providers and the service users have very different points of view. The Ministry needs to open more channels for dialogue and involvement to narrow the gap in perception between service providers and service users. To narrow the perceive needs of the service providers and the service users, policy making cycle needs to be inclusive and participatory. Therefore, the service users and providers are included at all stages of the process. Narrowing the gap in order to develop better policy outcomes in term of education for human development.

7.3.2 Control over resource

The second question that investigates issues of control in the system asks about control over resources. When making policy suggestions about what ought to be the case, teachers requested to have some level of control over engaging with the curriculum for creative teaching and learning. This could be addressed by introducing standardised text books that introduce a parallel curriculum that develops gender mainstreaming norms, ethical literacy and respect for diversity.

Students ought to have some level of control over what they learn and some control over resources in schools. This could increase students' abilities to use resources to the best of their

ability and to optimize their development. It is to increase students' freedom of being and doing to achieve their learning and life capabilities (Sen, 1999; Nussbaum, 2011). Girls could be empowered to achieve their practical and strategic needs (Moser, 1993; Kabeer, 1994). They need to be given more time for leisure and extra mural activities that extend the core curriculum, such as art, science or sport, for example.

In the actual case, the study found that the central learning limit students' opportunity to learn out of textbooks. The central learning policy erodes teachers' sense of agency and makes them passive as their role is limited to pass knowledge from textbooks to students. Therefore, students tend to memorise as a result of the top down approach of learning in the classroom (see Chapter 5/ Section 5.4). The limited control from teachers and students on learning limit the ability of students becoming more productive thinkers and harm their critical abilities (Freire, 1970; Giroux, 2011).

Also, in the actual case, students face many challenges for control over resources. As discussed in Chapter 6, students report a lack of visits to the schools' library and laboratories. They also deprived of using school resources after school hours. Schools usually closed its doors after the school day finish. No opportunity for students and the public to use school resources for better human development results.

Kabeer's (1994) framework for institutional analysis provides further understanding for the issue of control, especially for girls. The framework suggests that the challenges facing females in the education system are beyond school's level. It is to include other institutional levels namely education departments and the Ministry level. Representing females in decisions making in education departments and the Ministry' head office could improve control over resources in schools. Also, the institutional analysis (Kabeer, 1994) suggest the state, community, and the market play critical role in women development. Therefore, building girls capacity demand more roles for women in the community and the government to improve the life chances of girls' students.

7.3.3 Improving decision environment for better human development

The third question in the issues of control in Ulrich's (1983) framework asks about decision environment. 'What conditions of success ought to be/are outside the control of the decision maker? (Ulrich & Reynolds, 2010, p. 244). In the ideal state, the Ministry of Education should have less centralise system. Many aspects of learning and development in schools need to be left to people who are the most affected. This demand less central approach and a lower level of the notion of subsidiarity. In other words, decisions need to be made at the lowest level possible to underpin a participatory approach to policy making and governance.

In the actual case, as discussed previously, the centralise system create issues of power and control. Regardless of some centralise efforts to engage people, it would be impossible for the central departments in the Ministry of Education to listen to each student and teacher. This challenge has been highlighted by one policy maker that they could not respond to the diversity of expectations in very large number of schools:

I think participation exists. As an example of participation, recently I have been visiting schools, I met students, and I had an open dialogue talking to them. Nevertheless, dialogue and engagement are an individual right. Everyone has the right to express his/her point of view and to be involved in the process of community

development. However, we have more than 34,000 schools for boys and girls, and we have very large number of teachers. Also, we have more than 5 million students. The number is very large, and sometimes our efforts almost disappear in the sea of such large numbers (Thamer, a policy maker in the Ministry's head office, interview, 15 December 2013).

The previous quotation shows how the high level of control limits the voices of many students and teachers to be heard. The highest level of control limits the opportunity of students and teachers to control conditions of success (Ulrich & Reynolds, 2010) of participatory policy and governance. The ought to be the case as the Ulrich's (1983) suggest need to include less control from policy makers on the decision making environment and more control from people for whom decisions are been made. The policy maker in the previous quotation highlight his personal efforts to listen to students. In the same time, he admits the inability of the central system to represent the diverse needs of students and teachers. This give more evidence of the limited results of the current policy approach to touch the needs of people on the field. This situation is best to be described by one policy maker words:

We need to demystify the relationship between the top of the organizational hierarchy primed and the lower level in order to accelerate decision-making process. The current workflow routines ruined our energy and our efforts were lost like a mirage without any real contact with the field (Hossam, a policy maker at the Ministry of Education's head office, interview, 12 December 2013).

Participation at the lowest level possible is important for decision making as summed up by the principle of subsidiarity. This helps to overcome 'power distance' (Romm & Hsu, 2002) which is currently prevalent between students and policy makers. It also can be used to provide more power to schools and educations departments. Strong relationship between participation and power has been reported in the literature. According to (McIntyre, 2003; McIntyre-Mills, 2010a) enabling all the members of a system to have a say is vital in order to improve decision making through testing out ideas with people who have lived experience. Kabeer (2003) also indicates the importance of power to exercise participation. She said:

Institutions, and the relationships of power, access and exclusion that they embody are relevant because they determine the terms on which people participate in their societies and gain access to the resources they need to live their lives with dignity (p. 1).

Decision making environment also requires more control from the key stakeholders on the policy agenda. The ideal state suggests students and teachers to have a say in things that to be included or excluded in policy design. To priorities what is more important or not. In practice, The Ministry setup the agenda that not include all aspects of change that service users and providers want. For example, teachers stressed that their participation is limited to the development of textbooks. Khaleel, a teacher at public boys' school, make this point clear:

Often the Ministry does not ask for our views and if so it is from a selected sample of teachers and often on the subject of textbooks [not workbooks]. For other decisions and regulations, to my knowledge, they do not involve the teachers (Interview, 4 March 2014).

Suleiman, who works as a teacher in another boys' public school in Riyadh, thinks there is no official process to follow in order to participate in decision making except in feedback related to curriculum. He said:

Possible indirectly through unofficial links like Twitter or newspaper or TV events. However, officially what I know and what I have experience with is just feedback about the curriculum. For example, misspelling in a textbook or the difficulties of a specific lesson (Interview, 30 December 2013).

This limitation on the scope of participation highlighted by teachers is not coming only from practice. The National Education Policy only recognise teacher's participation in developing textbooks (National Education Policy, 1969, p. 22) without addressing the need for co-creation of workbooks with learners and teachers to ensure that they achieve their educational goals. However, from a human development perspective, the scope of participation should provide a real opportunity for people to build and create valuable life capabilities (Sen, 1999; Nussbaum, 2011).

7.4 Source of Knowledge

The third category of Ulrich's (1983) framework asks about the source of knowledge. Who are the experts and what expertise do we need in the system? (Ulrich & Reynolds, 2010, p. 244). In this regard, the critical systems thinking approach places more emphasis on the lived experience of people. The idea is that: 'there is no such thing as an expert' and that 'the systems approach begins when first you see the world through the eyes of another' (Churchman, 1968, p. 231; Midgley, 2000, p. 35). In other words, Critical Systems Thinking (CST) perceives expertise in the system by emphasising that those at the receiving end of a decision should be party to the decision-

making process (McIntyre-Mills, 2003, 2008). People who are the most affected need to be given the opportunity to participate. The three questions in this category of the Design of Inquiring System are discussed in more detail below.

7.4.1 Working with the expert

The first question in the source of knowledge asks about the expert. 'Who ought to be/is providing relevant knowledge and skills for [the system]?' (Ulrich & Reynolds, 2010, p. 244). In policy making, the ideal states suggest students and teachers lived experience should be appreciated through more participatory approach. The challenges that students face to achieve their learning and life capabilities (Nussbaum, 2011) should inform decision making process.

In learning, according to Freire (1970), learning practice that advance thinking in the classroom cannot be achieved by assuming that the teacher is the only expert and the only knowledgeable (p. 54). Creative learning recognises the ability of students to have input in their learning. Through dialogue between teacher and the student, knowledge can be achieved and learning become liberating process (Freire, 1970, p. 60). In the ideal situation, students should be able to raise ideas, topics, problems in the classroom. Teachers should be able to link students to their culture and their environment. Having education promote dialogue can advance human development in many ways. One potential is learning become more active and can advance thinking and learning in the classroom. Another potential is education become sensitive to real live issues such as environmental and sustainability issues (Romm, 2016).

The actual practice of teaching and learning in the classroom impose passive role of students in their learning. As discussed in more details in Chapter Five, the central learning

approach limits learning only from textbooks do not recognize any expertise from students. Communication and dialogue become less important. Therefore, this approach creates an environment for banking education (Freire, 1970) where students are waiting for their teacher to fill their mind with knowledge.

7.4.2 Source of knowledge and expertise

The second question that investigates knowledge in the system asks about the source of new knowledge and skills. When considering 'what ought to be the case', the system should be open to ideas and expertise other than what the education system already has. This openness could benefit students and reflected positively in the outcomes. The National Education Policy emphasis such importance:

Conscious interaction with the global cultural developments in the fields of science, culture and literature. Which includes tracking, participating in knowledge for the good and benefit of the community and all humanity (National Education Policy, 1969, p. 3).

In this respect, there are some positive indicators of the Ministry of Education opening more channels for new ideas and knowledge. Part of this effort is the national development project 'King Abdullah Public Education Development Project'. The project represents the official initiative to develop education based on new knowledge and expertise. Also, the Ministry started a partnership with some of the big publishing companies. The partnership includes learning series and developing new standard curriculum for high school students (Ministry of Education, 2011, p.

71). However, the openness at the Ministry level is not the same in school level. School are less connected to the outside world. There are few opportunities for schools to benefit from parents and the wider community involvement.

7.4.3 Securing Change

The last question that investigates knowledge in the system is about the so-called 'guarantee of success'. 'What ought to be/are regarded as assurances of successful implementation' (Ulrich & Reynolds, 2010, p. 244). This question is about 'securing' (Churchman, 1971). That is the capacity for the system to have continuous improvement (Flood, 1999, p. 65). To secure change and improvement, Critical Systems Thinking (CST) stresses the need to work with people who have a stake in the issue (McIntyre-Mills, 2006; Midgley, 2000). Therefore, solutions and interventions are based on real needs, not on the views of top management. Nevertheless, the structure of Saudi Education tends to be top down which make the change sometime isolated from people needs. Therefore, sustainable improvement persists to be an issue in the current management practice. Norah, a policy officer, describe the challenge for securing the change in the Ministry:

We have an issue here in the Ministry in which excellence and improvement are linked to personal efforts. If this person retired or move to another place, everything change (Interview, 16 December 2013).

The challenge to secure improvement for the system is also based on many interventions that developed centrally without inputs from the affected. 'Initiatives are not based on the voice of Page | 301

stakeholders to meet their needs' said Khalid, policy maker in the Ministry' head office. Thamer, a policy maker in another department in the Ministry, admitted the absence of stakeholders' view in shaping the policy agenda. He said:

Policy not necessarily to be coming from the field. I will be honest with you. Sometimes a new regulation approved after trying it in a sample. If the new regulation succeeded and made improvement in education practice, then the idea will be adopted it in the system (Interview, 13 January 2014).

The previous quotations show how policy agenda then is prepared only at the top. The suggested ideas, as the policy makers, mentioned above, may not be based on issues that students and teachers face in schools. It even sometimes may come from other context and no needs at all have brought forward from people in the field. In this respect, some of the suggested policies are based on what Khalid call it 'international best practice'. International best practice in this way guides the change instead of people's views and needs. Khalid, a policy maker in the Ministry, continue to describe the way solutions are not based on real life problem:

Initiatives are based on best practice in the sense that we bring solutions like canned food and interject it into the system. The same with transplant rejection, the system considered these solutions as strange organs and rejected by the rest of the body. Teachers' and students' voices and problem have not been included. Student problems are different form solutions...then the new solutions create new problems besides old ones (Interview, 21 January 2014).

Policy transfer in the form of best practice usually fails because of the lack of informed design from people (Dolowitz and Marsh, 2000). Participants believe that some of these adapted solutions and regulations lack understanding the Saudi context and its culture:

To see others experiences is good. However, we want to think of how it is applied or not to our education system and whether it fit to Saudi society or not. Unfortunately, we take some ideas applied in in the West, for example, as a mimicry that may not fit to our society. We need things that are based on our needs as well as our country culture not what other country develop to satisfy specific needs (Khadijah, a head of a public girls' school in Riyadh, interview, 16 February 2014).

Khalid, policy makers at the Ministry, refuse the current approach of setting the agenda from the top by relying on best practice not based on evidence from the ground:

Best international practice must have to be grounded and linked closely to our reality. You cannot import clothes and distributes it to people and assume it will fit for everyone. Impossible (Interview, 21 January 2014).

At the school level, Maha, a head of a private girls' school, stresses how solutions from the top result in demotivation and passivity:

We become like a puppet. There are many efforts, projects, and programs. However, theses effort made us like a puppet that moves with strings (Interview, 2 January 2014).

Policies in term of best practice, fail as highlighted by participants because it lacks understanding the context and people's needs. A similar note has been made by Sen (2005) that people views should guide human capability planning (p. 157). Nussbaum (2011), even she

develops a list of central capabilities, she left the door open for people in any context to modify or add human capabilities that they believe it deserves more attention.

7.5 Seeing through the eyes of another: the affected

Critical Systems Heuristics pays attention to the affected. Those who cannot involve in the system and have a positive or negative impact such as the next generation and other sentient beings other than human beings (Ulrich, 2005, p. 11). The idea of protecting the environment and other non-human beings is also presented in Nussbaum (2011) 10 central capabilities. She stresses on the importance for social policy to protect and respect the right of animals and other species (p. 34). It is a moral obligation about the system roles in the society. Other main concern to address the affected is because social problems are not isolated from its context (Capra, 1996, p 32; Jackson, 2003, p. XIX). In this regard, the last section of Ulrich's (1983) framework ask questions about the affected from social systems.

In the ideal situation, the education system should make sure that needs of non-humans and future generation are presented. However, the top down approach for decision making raise concern about the capacity of the system to represent those who cannot speak for themselves. Furthermore, the emphasis on education for the economy as opposite for education for human development represent challenge about the education system to protect wellbeing stocks (Stiglitz et al., 2010) and the needs of the future generation.

7.6 Chapter Summary

The analysis in this Chapter addresses human development challenges in terms of Critical Systems Thinking (CST). The analysis utilises the (CSH) 12 questions (Ulrich, 1983) that questioning the current status quo and making policy suggestions guided by a design for inquiring systems (DIS) that draws on the work of C. West Churchman (1971).

The analysis heighted the issue of central decision making which affects the successful application of education for human development. Policy needs to be developed in terms of inclusive discussions across senior management, middle management and with the teachers and students to guide the priori norms and the posteriori measures of performance (McIntyre, 2014b). A more systemic approach to education in terms of the content, structure and delivery of education is needed based on an open, not a closed policy making cycle (Colebatch, 2005, Althaus et al., 2013). In order for education policy to contribute effectively to human development, it has to consider needs of people affected by it. Their needs can be achieved through participation to deliver their requirements, or through give people enough agency to achieve their development needs. This would facilitate better accountability across public and private schools so that gender mainstreaming, respect for diversity as well as social and environmental responsiveness can be achieved across the public and private schools.

CHAPTER EIGHT: Conclusion: Human Development in Education

8.1 Introduction

The case study of the Ministry of Education was designed to investigate key policies and governance challenges that face the development of well-rounded and lifelong learners who are aware of social and environmental justice issues. This critical systemic case study analysed the extent to which human development goals are achieved in secondary schools administered by the Saudi Ministry of Education. The study stresses that the education system needs to appreciate the importance of social and environmental diversity, in order to support the UN Sustainable Development Goals and to reward engagement in the learning process that will prepare students to become lifelong learners.

It applies qualitative methods including documentary review, interviews, focus groups, and field notes. The study participants included students, teachers, and administrators in public and private schools for boys and girls in two provinces in Saudi Arabia, as well as policy officers in provincial education departments, and policy makers in the Ministry of Education's Head Office.

The theoretical contribution of this research is to combine the Capabilities Approach with Critical Pedagogy to understand students' capabilities to think and imagine in ways that influence their learning and their lives. Critical Pedagogy highlights key issues that are faced at the school A Critical Systemic Approach was employed in the analysis of people's perceptions and values.

The study explores the key issues faced by Saudi students in order for them to be capable lifelong learners and well-rounded human beings. The research defines human development in education in terms of students' ability to achieve their learning goals as well as to maximise their human potential. The study draws on Amartya Sen's and Martha Nussbaum's Capabilities Approach to analyse the complex needs of students pertaining to the ten basic capabilities including basic physical needs, educational content and context, and social empowerment.

The thesis makes a case for enhancing the life chances of girls through gender mainstreaming in the education system. The process of extending gender mainstreaming requires reading and researching questions that extend the capability of students to think critically and systemically about social and environmental justice concerns. Thus the thesis emphasizes the importance of imbedding a gender mainstreaming approach in the content, structure and process of learning. It also requires empowering young people to have a say in the classroom, aspects of curriculum review and some of the policies that shape school governance and gender relations beyond the school walls.

The thesis concludes that the education system needs to appreciate the importance of social and environmental diversity, in order to support the UN Sustainable Development Goals and to reward engagement in the learning process that will prepare students to become lifelong learners.

The capabilities perspective explores students learning as well as other aspects of students' lives. The focus was on students being able to maximise their human potential in term of achieving their learning goals as well their quality of life. Those efforts were guided by the research objectives which are to:

- Investigate policy and governance challenges that face the Ministry of Education to achieve education for human development;
- Identify if there are any disparities between provinces, the public and private sector, and between gender groups in terms of human development;
- Provide policy recommendations that promote human development in the education system;
- Enhance the role of education in human development outcomes for Saudi students.

8.2 The Study Findings

The study concludes with policy and governance recommendations on the need to build in a so-called 'parallel curriculum' to address social and environmental justice. This dissertation is designed to contribute to understanding the extent to which human development goals are achieved in the Saudi education system. Special attention to the process and content of education, in order to critically investigate the development of students' capabilities and the extent to which the educational outcomes are able to produce well-rounded graduates. Research findings suggest that in Saudi Arabia education tends to focus on its economic benefits. A little consideration of the complexity of education capabilities in terms of the development of well-rounded human beings who engage in lifelong learning and the development of measures that reflect the extent to which these goals are achieved. The narrowly defined learning outcomes affected the development of well-rounded and lifelong learners who are aware of social and environmental justice issues. The

key challenges that face the process of developing students for the future are highlighted in the following subsections.

8.2.1 Education for Human Development: Issues of Perspective

This study analyses the extent to which schools in Saudi Arabia foster human development in students and defines human development in terms of students' ability to achieve their learning goals and maximize their human potential. It draws on Amartya Sen's and Martha Nussbaum's Capabilities Approach to analyse the complex needs of students pertaining to basic capabilities including basic physical needs, educational content and context, and social empowerment.

Based on data collected from both public and private secondary co-ed schools in two provinces in Saudi Arabia the thesis finds that the process and content of education is important in the development of students' capabilities. It argues that well-rounded graduates are produced when learners and teachers are able to engage actively in the learning process within and beyond the classroom through covering the curriculum in textbooks that are combined with workbooks. The thesis makes the case that the latter that require reading and researching questions that extend the capability of students to think critically and systemically about social and environmental justice concerns. A case is made for imbedding a gender mainstreaming approach in the structure, content and process of learning. The thesis concludes that the education system needs to appreciate the importance of social and environmental diversity, in order to support the UN Sustainable Development Goals and to reward engagement in the learning process that will prepare students to become lifelong learners.

8.2.2 Achieving Learning Capabilities in Education

Education is a lifelong learning journey. Students need to be able to develop creative and critical thinking abilities in a learning environment that encourage active learning and enabling them to navigate different ways of knowing. Students' capability to be critical and to achieve their learning capabilities faces a number of challenges.

The first challenge is passive learning. In the top down approach for learning teachers and students have less opportunities to be active and more creative

The second challenge is related to the scope of learning evaluation. The current approach for students' assessment focuses only on evaluating students learning in the national textbooks. Students' assessment does not encourage nor reward students for demonstrating ability to work beyond the constraints of the textbook by providing them workbooks that encourage wider learning. Therefore, students are not encouraged to develop lifelong learning beyond schools. One implication is the lack of reading habit among students. Students have less opportunity for wider reading that could enhance their critical thinking and their lifelong learning capabilities. The third challenge is the absence of standardised tests. The absence of standardised measurement threatens the integrity of evaluation across schools. Teachers face pressure from students, students' families, and school administration to give higher grades which may do not reflect student performance. The forth challenge is related to conditions of employment in private schools. Private school teachers are employed by the school, and the demand for higher grades affects their career and the integrity of their evaluation. The study does not find a real difference between provinces or gender groups in terms of challenges for learning capabilities. The difference was evident between public and private schools associated with the conditions of employment of teachers, which impacted the interpretation of the curriculum.

8.2.3 Achieving Life Capabilities in Education

Part of the goals of this study is to investigate challenges that students face to acquire life capabilities to maximise their human potential. Life capabilities include health, play, safety, and students' empowerment. The qualitative case study in Saudi high schools highlights four key challenges. The first challenge is time constraints. The early time for schools is associated with lack of sleep and lack of healthy nutrition at home before school's start in the morning. School timetable provides limited opportunities for learners to play and socialised. Limitations on play and physical activities are higher in girls' schools with the absence of physical education for girls in the standard curriculum. The third challenge is limited agency and voice for students in their schools. Limitations on learners' agency limit their opportunities to achieve their needs and overcome many challenges. The third challenge is the restrictive or mismatched school design. School's design usually provides limited spaces and equipment that helps students for students to socialised, play, and recreate. The forth challenge is safety within and beyond the school and the limited mobility of female students.

The study does not find a real difference between life capabilities in the provinces and between public and private schools. The difference was evident between gender groups in terms of the time they have for leisure and the problems with the school layout and infrastructure. Girls also face restrictions on their mobility while boys face more safety risks out of their schools.

8.3 Policy and Governance Recommendations

The study findings suggest a number of policy and governance implications. **First**, the study findings highlight the importance of human capability perspective to education. Education system that benefits human development at the national and personal level needs to be based on a human capability approach (Sen, 1999). The Ministry of Education needs to consider a wider view of education based on students' needs and the future of Saudi Arabia. Relying only on economic view limits the role of education in development and the positive influence education can play. To cite Algraini and McIntyre-Mills (2016, forthcoming):

Education for human development represents a challenge for the education system to protect 'wellbeing stocks' (Stiglitz et al., 2010) and the needs of the future generations of living systems (McIntyre-Mills, 2014). The emphasis on education governed by economic norms is opposite to education for human development.

Secondly, education for human development requires performance measures need to be much wider than just narrow academic scores. It needs to include indicators of other human capabilities. The Ministry needs to set up working groups to discuss the:

- A Priori norms and values to guide the education system and curriculum development.
- A Posteriori measures (measures of performance that are multi-dimensions) to protect wellbeing and to foster an awareness of social and environmental justice as part of the parallel curriculum (McKay, 2016). Performance measurement also to assess the performance of administrators, teachers and students in standardised measures that incorporate gender mainstreaming and awareness of the UN Millenniums Goals and Sustainability Agenda across male and female schools and provinces.

Thirdly, to achieve the goal of human development in students' lives, education in Saudi Arabia needs to be addressed in a critical and systemic way. To insure that quality of life for the students is addressed and the curriculums are teaching necessary skills.

Critical Systemic Thinking offers a way of addressing the needs of many stakeholders. To narrow the perceive needs of the service providers and the service users, CST suggests inclusive and participatory policy design. Therefore, learners and service providers are included at all stages of the process. This is necessary in order to develop better policy outcomes in term of education for human development.

In policy terms it is suggested that the education system ought to pay attention to the affected. Drawing on McIntyre-Mills (2006, 2014a) it is argued that the top down approach for decision making raises concerns about the capacity to represent those who cannot speak for themselves. The idea of protecting the environment and the voiceless is also stressed by Nussbaum (2011) and McIntyre-Mills (2014a) who stress the importance for social policy to protect human beings and sentient beings within an environment that supports all living systems.

Fourth, to foster students' capabilities for lifelong learning, it is recommended to use workbooks that could motivate learners and their teachers to think and to solve problems. The workbooks provide the basis for developing a standard measure that would provide a broader measure of learning outcomes. Students also need to demonstrate the ability to work beyond the constraints of the textbook by providing them workbooks that encourage wider learning. To protect wellbeing and to foster an awareness of social and environmental justice as part of the parallel curriculum (McKay, 2016). Appreciation of the importance of wellbeing stocks' (Stiglitz

et al., 2010) could form part of the parallel curriculum along with UN 2030 Goals to enable students to understand that they are part of a living system (McIntyre-Mills, 2014b).

8.4 Recommendations for Further Research

Further research may consider other basic education levels; namely primary and intermediate schools. It may also build on the findings of this research to investigate different aspects of students' capabilities across gender groups. Using different research approaches to investigate human development in education is recommended. This includes quantitative and mixed methods approaches. Research recommendations also include exploring education for human development in higher education institutions such as universities and vocational colleges.

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Appendix 1: Ethics Committee Final Approval Letter from Social and Behavioural Research Ethics Committee to Conduct Research Project Involving Human Subjects

Dear Saad,

The Chair of the <u>Social and Behavioural Research Ethics Committee (SBREC)</u> at Flinders University reviewed the annual report that was submitted for project 6169 and it has been approved. Your annual report approval notice can be found below.

ANNUAL REPORT (No.1) APPROVAL

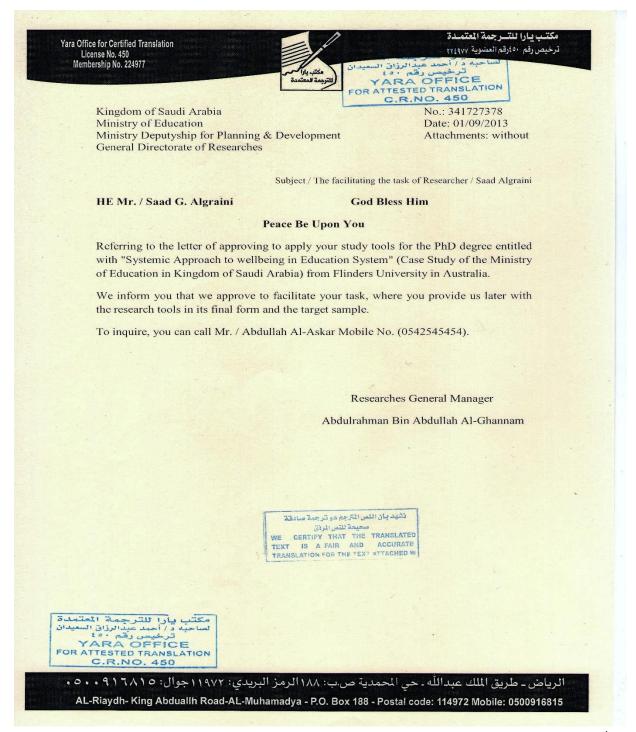
Project No.:	6169	Ethics Approval Expiry Date:	3 September 2016	
Project Title: Wellbeing and the education system: A case study of the Ministry of Education				
Principal Researcher:		Mr Saad Algraini		
Email:		algr0002@flinders.edu.au		
Address:		41A Dalkeith Avenue Dover Gardens SA 5048		

RESPONSIBILITIES OF RESEARCHERS AND SUPERVISORS

1. Provision of Relevant Permissions and Approvals

Please ensure that any relevant permissions (e.g., from recruitment sites, organisations, data custodians etc) and other Committee approvals that may have been requested on your approval / final approval notice are submitted to the Committee. Provision of these documents is a requirement of the ethics approval granted by the SBREC and it is the responsibility of the applicant to submit them as requested. You only need to submit relevant permissions and approvals if it was requested in your approval / final approval notice.

Appendix 2: Letter of Permission to Conduct the Research from Ministry of Education



المملكة العربية السعودية ورارة البربية والتعليم

الإدارة العامة للبحوث التربوية

وكالة الوزارة للتخطيط والتطوير والامالتوبة والتعليم الإدارة العامة للبحوث

الموضوع: بشأن تسهيل مهمة الباحث / سعد غنام القريني

وفقه الله

سعادة الأستاذ/ سعد بن غنام القريني السلام عليكم ورحمة الله وبركاته

إشارة إلى خطابكم بشأن الموافقة على تطبيق أدوات دراستكم لمرحلة الدكتوراه بعنوان "المنهج المنظومي لرفاه الإنسان في التعليم" (دراسة حالة وزارة التربية والتعليم بالمملكة العربية السعودية) من جامعة فلندرز بأستراليا.

نفيدكم بأنه لا مانع لدينا من حيث المبدأ من تسهيل مهمتكم على أن يتم تزويدنا لاحقاً بأدوات البحث بصورتها النهائية وتحديد العينة المستهدفة.

وللاستفسار يمكن الاتصال على الأستاذ/ عبدالله العسكر جوال (٥٤٢٥٤٥٤٥٠)

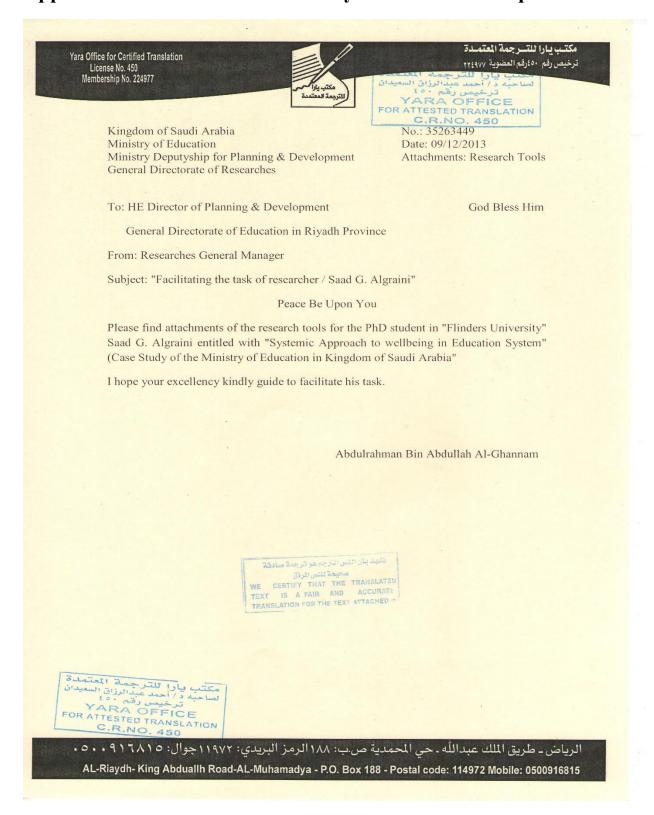
والسلام عليكم ورحمة الله وبركاته

تشهد باز النص الترجم هو ترجمة صادقة صحيحة للنص الدوق WE CERTIFY THAT THE TRANSLATED TEXT IS A FAIR AND ACCURATE

TRANSLATION FOR THE TEXT ATTACHED W

مدير عام البحوث عبد الرحمن بن عبد الله الغنام

Appendix 3: Permission letter to Riyadh Education Department:







المراح التربية والتعليم ورارة التربية والتعليم وكانة الوزارة للتخطيط والتطوير الادارة العامة للبحوث

وفقها الله

إلى : سعادة مديرة إدارة التخطيط والتطوير الإدارة العامة للتربية والتعليم بمنطقة الرياض

من: مدير عام البحوث

الموضوع: تسهيل مهمة الباحث / سعد بن غنام القريني.

السلام عليكم ورحمة الله وبركاته

تجدون سعادتكم برفقه أدوات بحث لطالب الدكتوراه بجامعة "فلندرز" سعد بن غنام القريني بعنوان "المنهج المنظومي لرفاة الإنسان في التعليم دراسة حالة وزارة التربية والتعليم في المملكة العربية السعودية"

آمل من سعادتكم التكرم بالتوجيه بتسهيل مهمته . والسلام عليكم ورحمة الله وبركاته

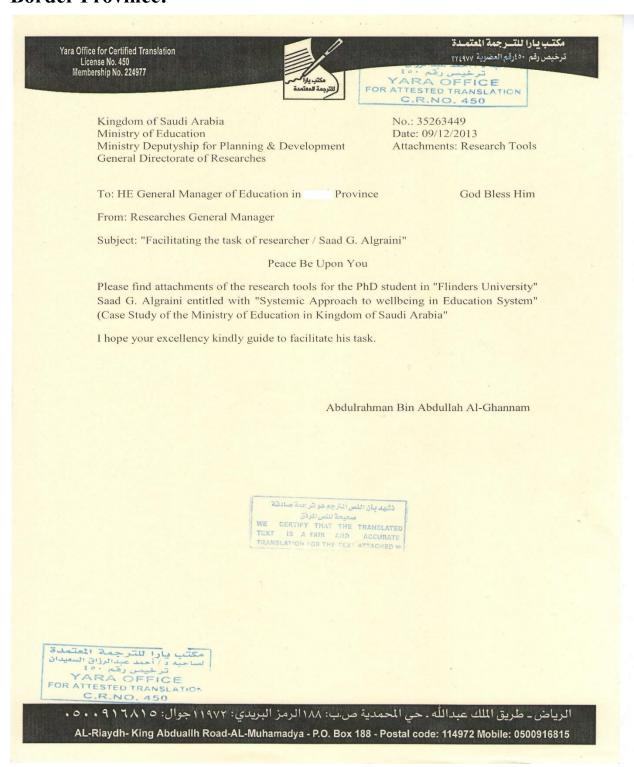


عبدالرحمن بن عبدالله الغنام

تشهد بنان النص المترجم هو تدرعمة معادقة صحيحة للنص المروق WE CERTIFY THAT THE TRANSLATED TEXT IS A FAIR AND ACCURATE TOWNSLATION FOR THE YEXY ATTACHED »

> ص. للإدارة ص. لخدمات البحث ص. للباحث

Appendix 4: Permission letter to Education Department in the Border Province:









وفقه الله

إلى : سعادة مدير عام التربية والتعليم بمنطقة

من : مدير عام البحوث

الموضوع: تسهيل مهمة الباحث / سعد بن غنام القريني.

السلام عليكم ورحمة الله وبركاته

تجدون سعادتكم برفقه أدوات بحث لطالب الدكتوراه بجامعة "فلندرز" سعد بن غنام القريني بعنوان "المنهج المنظومي لرفاة الإنسان في التعليم دراسة حالة وزارة التربية والتعليم في المملكة العربية السعودية".

آمل من سعادتكم التكرم بالتوجيه بتسهيل مهمته.

والسلام عليكم ورحمة الله وبركاته



عبدالرحمن بن عبدالله الننام

تشهد بأن النص المترجم هو تترجمة صادقة صحيحة لنس المروق WE CERTIFY THAT THE TRANSLATED TEXT IS A FAIR AND ACCURATE TRANSLATION FOR THE YEXT ATTACHED W

> ص. للإدارة ص. لخدمات البحث ص. للباحث (۲۸۰)

Appendix 5: Proposed interview questions – Policy makers

Education Policy

- 1. How were regulations and policies developed?
- 2. How can stakeholders (e.g., staff, students, community) contribute their ideas to education policy? Please, will you explain your answer?
- 3. Are there standards of quality? Please explain your answer.
- 4. Do you have measurement systems for performance? If yes: a) What are these indicators?, B) Are these indicators measure things that are not educational (such as health, safety, equality, education environment, the views of students, relationships)? Please give reasons for your answers.
- 5. In your opinion, what are the important issues in education which need to be resolved or more attention?
- 6. What policy changes do you feel might need to be undertaken?

Access

- 7. Do you think that all students, irrespective of their circumstance, have equal access to quality education opportunities? Please, will you explain your answer?
- 8. Are the needs of disabled people taken into account? Please, will you explain your answer?

Teaching and Learning

- 9. In your opinion, what is a good education, which contributes to human wellbeing and development?
- 10. In your opinion, what are the factors that will help to reach this good education?
- 11. What are the obstacles facing this good education?

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هذه توجيهات للمقابلات التي سيقوم بها الباحث.

C.R.NO. 450 الأسئلة المقترحة للمقابلة - صانعوا السياسات

نشهد بان النص المترجم هو ترجمة صادقة WE CERTIFY THAT THE TRANSLATED TEXT IS A FAIR AND ACCURATE TRANSLATION FOR THE TEXT ATTACHED W

الرقم المرجعي

- أ. المعلمون وغيرهم من العاملين في المجال التعليمي
- ١. هل تعتقد أن المعلم لديه المؤهلات المرتبطة بعمله؟ يرجى إعطاء أسباب لإجابتك.
- ٢. هل تعتقد أن التدريب الحالي المتاح لك له علاقة بإحتياجاتك؟ يرجى إعطاء أسباب لإجابتك.
- ٣. هل لديك عدد كاف من المعلمين؟ إذا كانت الإجابة لا، ما هي الأسباب في إعتقادك؟ وإذا كانت الإجابة نعم ما هي نسبة الطلبة / المعلمين؟
- ٤. هل تعتقد أن ميثاق أخلاق مهنة التعليم يتم إحترامه من قبل المعلمين؟ يرجى إعطاء أسباب لإجابتك.
 - ب. العلاقات
- ٥. هل يشارك أعضاء المجتمع في العملية التعليمية؟ إذا كانت الإجابة نعم فما هي مستويات مشاركتهم؟
- ٦. هل هناك إجتماعات تعقد مع مدراء المدارس؟ إذا كانت الإجابة نعم، كم مرة، والهيكل (فردي، أم جماعي) وما هي الأغراض؟
- ٧. هل هذاك إجتماعات تعقد مع المعلمين؟ إذا كانت الإجابة نعم، كم مرة، والهيكل (فردي، أم جماعي) وما هي الأغراض؟
 - ت. الوصول إلى التعليم:
- ٨. هل تعتقد أن جميع الطلاب، بغض النظر عن ظروفهم، على قدم المساواة في الحصول على التعليم الجيد؟ يرجى شرح الإجابة.
 - ٩. هل متطلبات ذوي الإحتياجات الخاصة تؤخذ بعين الإعتبار؟ يرجى شرح الإجابة.
 - ث. السياسة التعليمية
 - ١٠. كيف تم تطوير اللوائح والسياسات؟
 - ١١. كيف يمكن للعاملين في المجال التعليمي المساهمة بأفكار هم في السياسة التعليمية؟
 - 11. كيف يمكن للطلاب المساهمة بأفكار هم في السياسة التعليمية؟
 - ١٣. ما هو نوع التقييم التي تستخدمها لإحتياجات التعليم؟
 - ١٤. ما هي نوع المؤشرات المستخدمة في قياس الأداء التعليمي؟
 - ١٥. ما هي التغييرات التي تشعر بأنه يجب القيام بها؟

مكتب يارا للترجمة المعتمدة لصاحبه در / أحمد عبد الرزاق السعيدان تعرفيس رقم ٤٥٠ YARA OFFICE FOR ATTESTED TRANSLATION

Appendix 6: Proposed interview questions – Heads of Schools

Learning Environment

- 1. Is the learning environment free from sources of harm (e.g., a) social harm, b) infrastructure issue, etc)? If no? What are the sources of harm?
- 2. Do you think that the school is in a location close to populations they serve?
- 3. To what extent does the design of the school supports /or hinders/ the educational process (e.g., a) classes design, b) play grounds, c) labs, etc.)?
- 4. To what extent does the school provide a healthy environment for students (e.g., a) healthy nutrition, b) health service, c) safe water, and sanitation facilities, d) physical activity, etc.)?
- 5. Do you think students like school? If so, why? If not, why not?
- 6. What is the prevalence of risky behaviors among students?
- 7. What risky behaviors occur? (e.g., a) in the classroom, b) outside the classroom.)
- 8. What do you think about safety for students to and from school (e.g., a) safety of access routes, b) safety of school transportation, etc.)? Please give reasons for your answers.

Teaching and Learning

- 9. In your opinion, what is a good education, which contributes to human wellbeing and development?
- 10. In your opinion, what are the factors that will help to reach this good education?
- 11. What are the obstacles facing this good education?
- 12. Do you think that school prepares students well for future? Please give reasons for your answers.
- 13. Do you think there are sufficient teaching and learning materials? Please give reasons for your answers?

Teachers and Other Education Personnel

- 14. Do you think that teacher has the qualifications relevant to their work? Please give reasons for your answers.
- 15. Do you think the training that is available is relevant to needs? Please give reasons for your answers.
- 16. Do you have a sufficient number of teachers in your school? If no, why do you think the reason(s)? If yes what is the student/teacher ratio?
- 17. Do you think that the code of conduct is respected? Please give reasons for your answers.
- 18. What is your opinion about the performance appraisals process for the teacher? Please give reasons for your answers?
- 19. Dose students provide feedback on teacher performance? If yes, please explain the process.

Relationship

- 20. How would you describe the relationship between school and the surrounding community?
- 21. Do community members participate in the education process in your school? If yes, what is the level of their engagement?
- 22. Do you conduct meetings with students' parents? If yes, for what purposes?
- 23. Do you conduct meetings with students? If yes, for what purposes?

Access

- 24. Do you think that all students, irrespective of their circumstance, have equal access to quality education opportunities? Please, will you explain the answer to why you think they have equal access or not?
- 25. Are the needs of disabled people taken into account? Please, will you explain your answer?

Education policy

- 26. Have you developed a yearly plan for the school? If yes, please explain planning process.
- 27. Which kind of indicators do you use to measure performance in your school?
- 28. How can you contribute your ideas to education policy?
- 29. How can staff contribute their ideas to school management?
- 30. How can students contribute their ideas to education process in your school?
- 31. Do you have a school council? If yes, what is your opinion about its role of in school governance?
- 32. In your opinion, what are the important issues in education which need to be resolved or more attention?
- 33. What education policy changes do you feel might need to be undertaken?

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مكتب يارا للترجمة المعتمدة

ترخيص رقم ٤٥٠رقم العضوية ٢٢٤٩٧٧

لصاحبه قر/ أحيد عبدالرزاق السعيدال ترخيص رقم ٥٠٠ YARA OFFICE FOR ATTESTED TRANSLATION C.R.NO. 450

الأسئلة المقترحة للمقالبة - مدراء المدارس

هذه توجيهات للمقابلات التي سيقوم بها الباحث.

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الرقم المرجعي.....

- أ. بيئة التعليم
- ا. هل بيئة التعليم خالية من مصادر الأذى (على سبيل المثال: أ) المخاطر الإجتماعية، ب) مخاطر البنية التحتية للمدرسة....إلخ)؟ إذا كان الإجابة لا، فما هي مصادر الأذى؟
 - ٢. هل تعتقد أن المدرسة في موقع قريب من الطلاب؟
- ٣. إلى أي مدى تصميم المدرسة يدعم أو يعرقل العملية التعليمية (على سبيل المثال، أ) تصميم الفصول الدراسية، ب) الملاعب، ج) المعامل، إلخ).
- ٤. إلى أي مدى توفر المدرسة بيئة صحية للطلاب (على سبيل المثال: أ) التغذية الصحية، ب) الأنشطة البدنية، ج) الخدمات الصحية، د) والمياه المأمونة ومرافق الصرف الصحي، ..إلخ).
 - ٥. هل تعتقد أن الطلاب يحبون المدرسة؟ إذا كانت الإجابة بنعم لماذا؟ إذا الإجابة بلا لماذا؟
 - ٦. ما مدى إنتشار السلوكيات الخطرة بين الطلاب؟
 - ٧. ما هي السوكيات الخطرة التي تحدث؟ (على سبيل المثال، أ) داخل الفصل، ب) خارج الفصل.
- ٨. ما هو رأيك في سلامة الطلبة في إنتقالهم من وإلى المدرسة؟ على سبيل المثال: أ) سلامة الطرق الموصلة للمدرسة، ب) سلامة النقل المدرسي، إلخ)، يرجى أعطاء أسباب لإجابتك.
 - ب. التعليم والتعلم
 - ٩. هل تعتقد أن المدرسة تعد الطلاب للمستقبل بشكل جيد؟ يرجى إعطاء أسباب لإجابتك.
 - ١٠. هل تعتقد بوجود العدد الكافي من مصادر التعليم والتعلم؟ يرجى إعطاء أسباب لإجابتك.
 - ت. المعلمين والعاملين في التعليم
 - ١١. هل تعتقد أن المعلم لديه التأهيل الكافي ذو الصلة بعمله? يرجى إعطاء أسباب لإجابتك.
 - ١٢. هل تعتقد أن التدريب الحالي المتاح مناسب للإحتياج التدريبي؟ يرجى إعطاء أسباب لإجابتك.
- ١٣. هل لديك عدد كاف من المعلمين؟ إذا كانت الإجابة لا، ما هي الأسباب في إعتقادك؟ وإذا كانت الإجابة نعم ما هي نسبة الطالب إلى المعلم لديك؟
- ١٤. هل تعتقد أن ميثاق أخلاق مهنة التعليم يتم إحترامه من قبل المعلمين؟ يرجى إعطاء أسباب
 لاجابتك.

١٥. ما رأيك فيما يخص عملية تقييم الأداء للمعلم؟ يرجى إعطاء أسباب لإجابتك.

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- ١٦. هل يقدم الطلاب تعليقات على أداء معلميهم؟ إذا كانت الإجابة نعم، يرجى توضيح الآلية.
 - ث. العلاقات
 - ١٧. كيف تصف علاقة المدرسة بالمجتمع المحيط بها؟
- ٨١. هل يشارك أعضاء المجتمع في العملية التعليمية في مدرستك؟ إذا كانت الإجابة بنغم، ما هو مستوى مشاركتهم؟
- ١٩. هل تعقد إجتماعات مع أولياء أمور الطلاب؟ إذا كانت الإجابة نعم، كم مرة، والهيكل (فردي، أم جماعي) وما هي الأغراض؟
- ٢٠. هل تعقد إجتماعات مع الطلاب؟ إذا كانت الإجابة نعم، كم مرة، والهيكل (فردي، أم جماعي) وما
 هي الأغراض؟
 - ج. الوصول إلى التعليم
- ٢١. هل تعنقد أن جميع الطلاب، بغض النظر عن ظروفهم، على قدم المساواة في الحصول على التعليم الجيد؟ يرجى شرح الإجابة.
 - ٢٢. هل متطلبات ذوى الإحتياجات الخاصة تؤخذ في الإعتبار؟ يرجى شرح الإجابة.
 - ح. سياسة التعليم
- ٢٣. هل لديكم خطة سنوية لإدارة المدرسة؟ إذا كانت الإجابة بنعم، ما هي الطريقة المتبعة في التخطيط.
 - ٢٤. ما هي المؤشرات المستخدمة لقياس الأداء في مدرستك؟
 - ٢٥. هل تساهم بأفكارك في سياسات التعليم؟
 - ٢٦. كيف يمكن للعاملين بالمدرسة المساهمة بأفكار هم في إدارتها؟
 - ٢٧. كيف يمكن للطلبة بالمدرسة المساهمة بأفكارهم في العملية التعليمية داخل المدرسة؟
 - ٢٨. ما رأيك في دور المجلس المدرسي في حوكمة المدرسة؟
 - ٢٩. ما هي التغييرات التي تشعر بأنه يجب القيام بها فيما يخص سياسة التعليم؟

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Appendix 7: Proposed interview questions – Teachers

Learning Environment

- 1. Is the learning environment free from sources of harm (e.g., a) social harm, b) infrastructure issue, etc)? If no? What are the sources of harm?
- 2. Do you think that the school is in a location close to populations they serve?
- 3. To what extent does the design of the school supports /or hinders/ the educational process (e.g., a) classes design, b) play grounds, c) labs, etc.)?
- 4. To what extent does the school provide a healthy environment for students (e.g., a) healthy nutrition, b) health service, c) safe water, and sanitation facilities, d) physical activity, etc.)?
- 5. Do you think students like school? If so, why? If not, why not?
- 6. What is the prevalence of risky behaviours among students?
- 7. What risky behaviours occur? (e.g., a) in the classroom, b) outside the classroom.)
- 8. What do you think about safety for students to and from school (e.g., a) safety of access routes, b) safety of school transportation, etc.)? Please give reasons for your answers.

Teaching and Learning

- 9. Do you think that school prepares students well for future? Please give reasons for your answers.
- 10. Do you think there are sufficient teaching and learning materials? Please give reasons for your answers.
- 11. Do you think that curricula are appropriate to students' needs? Please give reasons for your answers.
- 12. Do you think teaching methods are appropriate to the needs of students? Please give reasons for your answers.
- 13. Do you think the methods that are used to evaluate and validate learning outcomes are appropriate? Please give reasons for your answers.

Teachers and Other Education Personnel

- 14. Do you think the training that is available is relevant to needs? Please give reasons for your answers?
- 15. Do you think teacher have clearly roles and responsibilities? Please give reasons for your answers.
- 16. Do you think that the code of conduct is respected? Please give reasons for your answers.
- 17. What is your opinion about the supervisory system? Please give reasons for your answers?
- 18. What is your opinion about the performance appraisals process for the teacher? Please give reasons for your answers?

Relationship

- 19. How would you describe the relationship between school and the surrounding community?
- 20. How would you describe the relationship between you and school administration?
- 21. How would you describe the relationship between you and other teachers?
- 22. How would you describe the relationship between you and your students?
- 23. Do you conduct meetings with students' parents? If yes, for what purposes?

Access

- 24. Do you think that all students, irrespective of their circumstance, have equal access to quality education opportunities? Please, will you explain your answer?
- 25. Are the needs of disabled people taken into account? Please, will you explain your answer?

Education Policy

- 26. How can you contribute your ideas to education policy?
- 27. How can you contribute your ideas to school management?

- 28. In your opinion, what are the important issues in education which need to be resolved or more attention?
- 29. What policy changes do you feel might need to be undertaken?

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أسئلة المقابلة - المعلمين

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أ- بيئة التعليم:

- هل بيئة التعليم خالية من مصادر الأذى (على سبيل المثال: أ) المخاطر الإجتماعية، ب) مخاطر البيئة التحتية للمدرسة....إلخ)؟ إذا كان الإجابة لا، فما هى مصادر الأذى؟
 - ٢. هل تعتقد أن المدرسة في موقع قريب من الطلاب؟
- ٣. إلى أي مدى تصميم المدرسة يدعم أو يعرقل العملية التعليمية (على سبيل المثال، أ)
 تصميم الفصول الدراسية، ب) الملاعب، ج) المعامل، إلخ).
- إلى أي مدى توفر المدرسة بيئة صحية للطلاب (على سبيل المثال: أ) التغذية الصحية، ب)
 الأنشطة البدنية، ج) الخدمات الصحية، د) والمياه المأمونة ومرافق الصرف الصحى، ..إلخ).
 - ٥. هل تعتقد أن الطلاب يحبون المدرسة؟ إذا كانت الإجابة بنعم لماذا؟ إذا الإجابة بلا لماذا؟
 - ٦. ما مدى إنتشار السلوكيات الخطرة بين الطلاب؟
- ٧. ما هي السوكيات الخطرة التي تحدث؟ (على سبيل المثال، أ) داخل الفصل، ب) خارج الفصل.
- ٨. ما هو رأيك في سلامة الطلبة في إنتقالهم من وإلى المدرسة؟ على سبيل المثال: أ) سلامة الطرق الموصلة للمدرسة، ب) سلامة النقل المدرسي، إلخ)، يرجى أعطاء أسباب لإجابتك.

ب- التعليم والتعلم

- ٩. هل تعتقد أن المدرسة تعد الطلاب للمستقبل بشكل جيد؟ يرجى إعطاء أسباب لإجابتك.
- ١٠. هل تعتقد بوجود العدد الكافي من مصادر التعليم والتعلم؟ يرجى إعطاء أسباب لإجابتك.
 - ١١. هل تعتقد أن المناهج مناسبة لإحتياجات الطلاب؟ يرجى إعطاء أسباب لإجابتك.
- ١٢. هل تعتقد أن طرق التدريس مناسبة لإحتياجات الطلاب؟ يرجى إعطاء أسباب لإجابتك.
- ١٣. هل تعتقد أن الأساليب المستخدمة لقياس مستوى التحصيل العلمي مناسبة؟ يرجى إعطاء أسباب
 لإجابتك.

ت- المعلمون والعاملين في التعليم:

- ١٤. هل تعتقد أن التدريب الحالى المتاح لك له علاقة بإحتياجاتك؟ يرجى إعطاء أسباب لإجابتك.
 - ١٥. هل تعتقد أن مسؤوليات وأدوار المعلم واضحة؟ يرجى إعطاء أسباب لإجابتك.
- 11. هل تعتقد أن ميثاق أخلاقيات مهنة التعليم يتم إحترامه من قبل المعلمين؟ يرجى إعطاء أسباب
- ١٧. ما هي وجهة نظرك تجاه نظام الإشراف التربوي؟ يرجى إعطاء أسباب الجاباكا والترجمة المعتمدة
- ١٨. ما هي وجهة نظرك تجاه أسلوب تقويم أداء المعلم؟ يرجى إعطاء أسباب الإجابيت YARA OFFI

مكتب يارا للترجمة المعتمدة

ترخيص رقم ٥٠ رقم العضوية ٢٢٤٩٧٧

تساحبه د / أحمد عبد الرزاق السعيدان ترخيمي رقم ٥٠٠ YARA OFFICE FOR ATTESTED TRANSLATION C.R.NO. 450

ث- العلاقات:

١٩. كيف تصف علاقة المدرسة بالمجتمع المحيط بها؟

٢٠. كيف تصف علاقتك بإدارة المدرسة؟

٢١. كيف تصف علاقتك بز ملائك المعلمين؟

٢٢. كيف تصف العلاقة بينك وبين طلابك؟

٢٣. هل تعقد إجتماعات مع أولياء أمور الطلاب؟ إذا كانت الإجابة نعم، ما هو الغرض من هذه الإجتماعات؟

ج- الوصول إلى التعليم:

٢٤. هل تعتقد أن جميع الطلاب، بغض النظر عن ظروفهم، على قدم المساواة في الحصول على التعليم الجيد؟ يرجى شرح الإجابة.

٧٥. هل متطلبات ذوى الإحتياجات الخاصة تؤخذ بعين الإعتبار؟ يرجى شرح الإجابة.

ح- سياسة التعليم:

٢٦. كيف يمكنك أن تساهم بأفكارك في سياسات التعليم؟

٢٧. كيف يمكن أن تساهم بأفكارك في إدارة المدرسة؟

٢٨. ما هي وجهة نظرك في دور مجلس المدرسة في إدارة المدرسة?

٢٩. ما هي التغييرات التي تقترحها في سياسات التعليم؟

تشهد بان النص الترجم هو ترجمة صادقة صحيحة للنص الرفق WE CERTIFY THAT THE TRANSLATED TEXT IS A FAIR AND ACCURATE TRANSLATION FOR THE TEXT ATTACHED ##

مكتب يارا للترجمة المعتمدة لساحبه د/أحمد مبدالرزاق السعيدان ترخيص رقم ۲۰۰۰ YARA OFFICE FOR ATTESTED TRANSLATION C.R.NO. 450

Appendix 8: Proposed Focus Group Discussion Questions- Teachers and learner representatives:

Learning Environment

- 1. Is the learning environment free from sources of harm (e.g., a) social harm, b) infrastructure issue, etc)? If no? What are the sources of harm?
- 2. Do you think that the school is in a location close to populations they serve?
- 3. To what extent does the design of the school supports /or hinders/ the educational process (e.g., a) classes design, b) play grounds, c) labs, etc.)?
- 4. To what extent does the school provide a healthy environment for students (e.g., a) healthy nutrition, b) health service, c) safe water, and sanitation facilities, d) physical activity, etc.)?
- 5. Do you think students like school? If so, why? If not, why not?
- 6. What is the prevalence of risky behaviours among students?
- 7. What risky behaviours occur? (e.g., a) in the classroom, b) outside the classroom.)
- 8. What do you think about safety for students to and from school (e.g., a) safety of access routes, b) safety of school transportation, etc.)? Please give reasons for your answers.

Teaching and Learning

- 9. Do you think that school prepares students well for future? Please give reasons for your answers.
- 10. Do you think there are sufficient teaching and learning materials? Please give reasons for your answers.
- 11. Do you think that curricula are appropriate to students' needs? Please give reasons for your answers.
- 12. Do you think teaching methods are appropriate to the needs of students? Please give reasons for your answers.

13. Do you think the methods that are used to evaluate and validate learning outcomes are appropriate? Please give reasons for your answers.



مكتب يارا للترجمة العتمدة ترخيص رقم ٤٥٠رقم العضوية ٢٢٤٩٧٧

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أسئلة النقاش الجماعي المقترح - المعلمون وممثلو الطلاب

الرقم المرجعي.....

أ. بيئة التعليم

- هل بيئة التعليم خالية من مصادر الأذى (على سبيل المثال: أ) المخاطر الإجتماعية، ب) مخاطر البيئة التحتية للمدرسة....إلخ)؟ إذا كان الإجابة لا، فما هي مصادر الأذى؟
 - ٢. هل تعتقد أن المدرسة في موقع قريب من الطلاب؟
- ٣. إلى أي مدى تصميم المدرسة يدعم أو يعرقل العملية التعليمية (على سبيل المثال، أ) تصميم الفصول الدراسية، ب) الملاعب، ج) المعامل، إلخ).
- إلى أي مدى توفر المدرسة بيئة صحية للطلاب (على سبيل المثال: أ) التغذية الصحية، ب) الأنشطة البدنية، ج) الخدمات الصحية، د) والمياه المأمونة ومرافق الصرف الصحي، . الخ).
 - ٥. هل تعتقد أن الطلاب يحبون المدرسة؟ إذا كانت الإجابة بنعم لماذا؟ إذا الإجابة بلا لماذا؟
 - ٦. ما مدى إنتشار السلوكيات الخطرة بين الطلاب؟
 - ٧. ما هي السوكيات الخطرة التي تحدث؟ (على سبيل المثال، أ) داخل الفصل، ب) خارج الفصل.
- ٨. ما هو رأيك في سلامة الطلبة في إنتقالهم من وإلى المدرسة؟ على سبيل المثال: أ) سلامة الطرق الموصلة للمدرسة، ب) سلامة النقل المدرسي، إلخ)، يرجى أعطاء أسباب لإجابتك.
 - ب. التعليم والتعلم
 - ٩. هل تعتقد أن المدرسة تعد الطلاب للمستقبل بشكل جيد؟ يرجى إعطاء أسباب لإجابتك.
 - ١٠. هل تعتقد بوجود العدد الكافي من مصادر التعليم والتعلم؟ يرجى إعطاء أسباب لإجابتك.
 - ١١. هل تعتقد أن المناهج مناسبة لإحتياجات الطلاب؟ يرجى إعطاء أسباب لإجابتك.
 - ١٢. هل تعتقد أن طرق التدريس مناسبة لإحتياجات الطلاب؟ يرجى إعطاء أسباب لإجابتك.
- ١٣. هل تعتقد أن الأساليب المستخدمة لقياس مستوى التحصيل العلمي مناسبة؟ يرجى إعطاء أسباب
 لإجابتك.

تشهد باز النص الترجم هو ترجمة صادقة صحيحة للنص الرقق صحيحة النص الرقق WE CERTIFY THAT THE TRANSLATED ACCURATE TRANSLATION FOR THE TEXT ATTACHED **

مكتب يارا للترجمة المتمدة لصاحبه د/أحمد عبدالرزاق السعيدان ترخيس رقم 6 م YARA OFFICE FOR ATTESTED TRANSLATION

Appendix 9: Letter of Introduction by the Supervisor



Janet McIntyre Associate Professor

School of Social and Policy Studies

Flinders University

GPO Box 2100

Adelaide SA 5001

23/05/2013

Ref Reference

Dear Sir/Madame,

RE: LETTER OF INTRODUCTION

This letter is to introduce Mr. Saad Algraini who is a PhD student in the School of Social and Policy Studies at Flinders University. He will produce his student card, which carries a photograph, as proof of identity.

He is undertaking research leading to the production of a thesis or other publications on the subject of "Wellbeing and the education system: A case study of the Ministry of Education in Saudi Arabia". He would be most grateful if you would volunteer to assist in this project, by granting an interview which covers certain aspects of this topic. No more than forty-five minutes on one occasion would be required. Be assured that any information provided will be treated in the strictest confidence and none of the participants will be individually identifiable in the resulting thesis, report or other publications. You are, of course, entirely free to discontinue your participation at any time or to decline to answer particular questions.

Since he intends to make a tape recording of the interview, he will seek your consent, on the attached form, to record the interview, to use the recording or a transcription in preparing the thesis, report or other publications, on condition that your name or identity is not revealed.

Any enquiries you may have concerning this project should be directed to me at the address given above or by telephone on +61 8 8201 2075, by fax on +61 8 8201 5111, or by email (janetmcintyre@flinders.edu.au).

Thank you for your attention and assistance.

Yours faithfully

Assoc Prof. Janet McIntyre
Higher Degrees Co-ordinator
School of Social and Policy Studies
Flinders University
Adjunct Professor
University of Indonesia

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee. For more information regarding ethical approval of the project the Secretary of the Committee can be contacted by telephone on 8201 5962, by fax on 8201 2035 or by email human.researchethics@flinders.edu.au

Appendix 10: Information Sheet



School of Social and Policy Studies

Faculty of Social and Behavioural Sciences,

Flinders University

www.flinders.edu.au

INFORMATION SHEET

Title: 'Wellbeing and the education system: A case study of Ministry of Education in Saudi Arabia'

Invitation

You are invited to participate in a research study about (Wellbeing in education). Please take time to read the following information carefully and discuss it with others if you wish. Ask the researcher if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

Description of the study:

This study will explore the wellbeing of learners in Saudi public education. For more understanding of the factors influencing wellbeing in education, the study will investegate education policies, learning environment, and teaching and learning. This research will use a qualitative research approach to find out what the education system fails to address from the perceptions of the study participants. The participants will be policy officers and policy makers, school administrators, teachers, and students. Education departments will include Education Department in Riyadh and Education Department from one of the border provinces in Saudi Arabia. To add depth to data collection, the sub-unit of analysis will be high school level. Selected schools will be schools for boys and girls and will include the public and private sector.

The study will try to identify if there are any disparities between provinces, public and private sector, and between gender groups in term of wellbeing.

This project is supported by the Ministry of Education and the School of Social and Policy Studies of the Flinders University.

Purpose of the study:

This project aims to:

- Investigate wellbeing in the education system;
- Identify if there are any disparities between: provinces, public and private sector, and between gender groups in term of wellbeing;
- Identifying the goals of international education and compare it with the case of Saudi Arabia to address wellbeing; and

What will I be asked to do?

You are invited to attend a one-on-one interview with the principal researcher who will ask you a few questions about your views about your experiences with the education system. The interview will take

about 45 minutes. The interview will be recorded using a digital voice recorder to help with looking at the results. Once recorded, the interview will be transcribed (typed-up) and stored as a computer file and then destroyed once the results have been finalised. This is voluntary.

What benefit will I gain from being involved in this study?

Whilst there are no immediate benefits for those people participating in the project, it is hoped that the sharing of your experiences will help to improve education system and the future of students in Saudi Arabia.

Will I be identifiable by being involved in this study?

We do not need your name and you will be anonymous. Any identifying information will be removed and the typed-up file stored on a password protected computer that only the principal researcher (Mr Saad Algraini) will have access to. Your comments will not be linked directly to you or your organisation.

Are there any risks or discomforts if I am involved?

Other group members may be able to identify your contributions even though they will not be directly attributed to you.

The principal researcher anticipates few risks from your involvement in this study. If you have any concerns regarding anticipated or actual risks or discomforts, please raise them with him.

How do I agree to participate?

Participation is voluntary. You may answer 'no comment' or refuse to answer any questions and you are

free to withdraw at any time without effect or consequence. A consent form accompanies this information

sheet. If you agree to participate, please read and sign the form.

How will I receive feedback?

Outcomes from the project will be summarised and given to you by the principal researcher if you would

like to see them.

Thank you for taking the time to read this information sheet and we hope that you will accept our

invitation to be involved.

Saad Algraini

Saudi Address:

Al-olaya, Riyadh,11372

P.o. box: 300655

Mobile: +966 505103571

Australian Address:

Department of Politics and Public Policy

School of Social and Policy Studies

Social Science South Building, Faculty of Social and Behavioural Sciences

Flinders University, Sturt Road, Bedford Park, South Australia, 5042

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Mobile: +61477040922
Email:
Algr0002@flinders.edu.au
This research project has been approved by the Flinders University Social and Behavioural Research Ethics
Committee (Project number 6169). For more information regarding ethical approval of the project the Executive

Officer of the Committee can be contacted by telephone on 8201 3116, by fax on 8201 2035 or by email

human.researchethics@flinders.edu.au