

The Role of Education in Building Individual Human Capital:

How Do Professionals Look at It?

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## **Abstract**

This study followed a qualitative research approach to investigate how well-educated professionals see the role of formal education in building human capital. Individuals need to understand the relationship between education and their human capital to justify the time and money they invested to get their education. Colleges and universities need to know the value of their output, to better value and promote the process of knowledge production and transmission and help the general public appreciate their work more. While the importance of a good education is a key factor in the success of learners, this study revealed the power of social capital in making this success a reality. It may not be enough for an individual to acquire good education to guarantee a better future. The power of social connections can be the main determinant in one's wellbeing. This study shows that it is important to address students' life outside school beside the importance of a classroom education.

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## **CHAPTER ONE: INTRODUCTION TO THE STUDY**

The aim of this research study is to seek professionals' opinions on the role of formal education in building individual human capital. This study also seeks professionals' opinions on how has education contributed in building their own human capital. It is important for individuals to see the value of their human capital (skills, knowledge, and capabilities), which is mainly built through education and experience. Through education, the skills and knowledge of individuals come into the needed shape to form future workers, which makes education the virtual factory of the success of future generations.

To understand the views of educators on the issue of human capital, I searched many national and international educational journals. Among these journals are: Canadian Journal of Educational Administration and Policy, Harvard Educational Review, British Educational Research Journal, European Journal of Education, Frontiers of Education in China, Russian Education & Society, Journal of Comparative Education, Journal for Critical Education Policy Studies, Assessment and Evaluation in Higher Education, Journal of Education Policy, Economics of Education Review, Peabody Journal of Education, Educational Studies, Higher Education, and Journal of Philosophy of Education. I found articles expressing the views of educators (Curtis, 2010; Fan-sing, 2008; Farrell, Tayler & Tennent, 2004; Georgiadis, 2007; Gewirtz, Dickson, Power, Halpin & Whitty, 2005; Girot, Miers, Coles & Wilkinson, 2006; Hartog, 2000; Jiang, 2009; Killeen, Turton, Diamond, Dosnon & Wach, 1999; Kirby, 2007; McClenaghan, 2000; Quinn & Price, 1998; Rolle & Houk, 2004; Vandenberghe, 1999; Vila, 2005; White, 2007; Wiles, 1974; Zarycki, 2007).

While there are different interpretations of capital and what human capital is (Bourdieu, 1986), most scholars consider human capital with an economic lens (Abhayawansa & Abeyssekera, 2008; April, Bosma & Deglon, 2003; Benjamin, Gunderson & Riddell, 2002; Bontis, 2001; Chatzkel, 2006; Georgiadis, 2007; Judson, 2002; Langelett, 2002; Mayo, 2000; Morissette, Ostrovsky & Picot, 2004; Smith, 1776; Thanki, 1999; The World Bank, 2006; Townsend, 2007; Wiles, 1974). The role of education in building human capital became an important matter after the shift in developed countries from an industrial based economy to a knowledge-based economy. This shift has to be considered by individuals and institutions to adapt to the new economy. This means that building and managing human capital can be the main factor in building and sustaining a competitive advantage for individuals and institutions. Girot et al. (2006) argue that the case for growth in higher education is due to the recognition that the economy needs a better balanced workforce with modern skills at all levels. They add that the rapid global expansion of knowledge has led to the goal of professional education to enable students to take responsibility for their development, to be prepared for the dynamic and uncertain world of work.

Just like the importance of land in an agricultural economy, and the importance of machines in an industrial economy, human capital is the key factor in a knowledge economy. Building human capital for the needs of today and tomorrow should be the aim of educational institutions at all levels. Addressing the role of education in building individual human capital can give more ammunition to educators and educational institutions and strengthen their argument for further developing education.

### **Background of the Research Problem**

There is a need to highlight the role of formal education in building individual human capital and to promote the value of this capital to all education stakeholders. Sometimes, the value of human capital is hard to see at all levels of society. Students and parents range from strong believers in education as the main source of human capital to those who deny its value, especially during an economic downturn. Different governments may increase or decrease their level of funding according to their views of education. The fact that an individual's human capital is an intangible asset, and may have different values in different places at different times can complicate the issue. This intangible asset is built mainly through education, and no other way is known to be able to replace education. It is the main way to develop skilled workers for organizations, and contributing citizens for nations. It is the base of success for individuals and organizations, and it is also helpful for individuals to understand their human capital.

One may argue that there is no need to analyze individual human capital, and that knowing the value of this capital does not add any value to education. I argue that by knowing the role of education in building human capital, the case of educators can get a boost and their argument in promoting education can be stronger. Morissette et al. (2004) indicate a direct positive relation between education and income, and their argument for education is strong, but more specific research is needed in shedding light on the relationship between education and human capital. Highlighting individual human capital that can translate into a tangible wealth in the form of earnings is an important issue. It may provide support to the study conducted by Statistics Canada (2006) that highlights

the widening gap in incomes between young workers who are less-educated and those who are well-educated.

The justification of investing time, money, and efforts in education is available in human capital literature. It was highlighted by Adam Smith (1776) more than 200 years ago: “The work which he learns to perform, it must be expected, over and above the usual wages of common labour, will replace to him the whole expense of his education, with at least the ordinary profits of an equal valuable capital” (p. 101). According to Canadian educators Benjamin et al. (2002), the empirical evidence strongly shows that individual earnings increase with education.

### **Statement of the Problem**

The role of formal education in building individual human capital by acquiring skills, knowledge, and capabilities needs to get more attention from all education stakeholders. Knowing this role can shed light on the leverage of education, and can justify the investment in different educational programs. There is also a need to shed light on the importance of human capital which can explain the return on investment from education for individuals, and encourage them to invest in their education. Knowing the importance of human capital can be an effective way to get the attention of younger generations by assigning a visible value to the outcome of education. At the same time, organizations can see the value of their most valuable assets and increase their investment in training and retaining programs. A better understanding of human capital may change the way organizations look at their employees from being an expense in the form of salaries, to becoming a resource, an asset, and a capital.

Balance sheets of service organizations like schools, colleges and universities, which depend heavily on their human capital in the form of teachers, lecturers, professors, and researchers to deliver their services, still lack the reference to human capital among their listed assets. They only show their financial and physical assets and there is nothing one can see that shows their human capital as assets. Institutions that depend heavily on their teachers, professors and researchers only show their financial wellbeing by displaying the value of buildings, equipment, tables, and chairs. What good can an empty laboratory do without the talent of researchers? And what can an entire classroom building do to advance the cause of an educational institution if classrooms are not occupied by talented professors?

Abhayawansa and Abeyssekera (2008) argue that external disclosure of human capital has been on the agenda of academics and practitioners since late 1980s. Recently, the emphasis on the voluntary disclosure of non-financial assets of organizations is giving more attention to intangible assets, which include human capital. This led some organizations to issue a separate statement as a complement to their annual report or as a separate report to highlight the role of their human capital (Bontis, 2001). But it is fair to say that the nature of financial statements is limiting the disclosed information to those items that can be quantified. This means that it is easy to disclose physical assets of organizations because they have a known value. Those assets that have an unknown financial value like human capital, and are not owned by an organization, are excluded from the list of assets. This is another reason behind the quest for a value for the most valuable asset in organizations, human capital.

The rising importance of human capital in the normal operations of modern organizations creates the need to study this issue. Today more organizations depend on the intelligence, knowledge, and skills of its management and employees. Their main assets are the highly educated, skilled and intelligent employees. Universities can be successful with their researchers and professors, but they can do little with their tangible physical assets only. If human capital is the resource behind the wellbeing of today's organizations, then organizations have to carefully study this issue.

April et al. (2003) state that organizations that measure, report and manage their intellectual capital, which includes human capital, have a competitive advantage because they have identified all the assets at their disposal, tangible and intangible. April et al. also highlight that organizations will be in a position to operate at their full potential by making maximum use of their asset pool. This point can be further explained by arguing that understanding the value of all assets provides a more accurate reflection of the worth of an organization, which supports organizational goals of transparency to all stakeholders.

### **Purpose of the Study**

The purpose of this study is to investigate how well-educated professionals see the role of formal education in building human capital. Understanding the role of education in building human capital can give more attention to education. Organizations including non profit and business organizations need to see the role of education in building human capital to increase their investments in training and development. There is a need for a better understanding of the role of education in building human capital so that policy makers at all levels may consider increasing educational funding. Individuals

also need to understand the relationship between education and their human capital to justify the time and money they invested to get their education. Colleges and universities need to know the value of their output, to better value and promote the process of knowledge production and transmission. By knowing the role of education in building human capital, different stakeholders of education can have more answers to different questions regarding education. Thanki (1999) states that many studies have identified different contributions higher education institutions make to regional development, but little effort has been made to measure all elements related to higher education.

The issue of human capital has grown beyond the individual and organizational levels. Chatzkel (2006) notes that the field has developed the perception that human capital is also the base for building wealth in communities, regions and nations. This is due to the fact that individuals are the backbone of organizations and nations. It is individuals who founded institutions, towns, cities, regions, and nations. Products are made by individuals to satisfy other individuals' needs and desires. Services are provided by individuals to satisfy other individuals, and many things one can think of have something to do with the human capital of individuals. Organizations and nations are managed and led by individuals. A good corporate leader can transform a losing company into a profitable one, and a good national leader can transform a nation from poverty to economic prosperity.

### **Research Questions**

To fulfill the purpose of the study, two research questions were asked: (a) how do well-educated professionals see the role of education in building human capital? (b) how has education contributed in building professionals' own human capital?

### **The Rationale for Addressing Individual Human Capital**

The wealth of individuals, organizations, and nations is not just their tangible wealth, in the form of financial and physical resources (The World Bank, 2006). Japan as one of the G 8 nations has little natural resources. Yet it is capitalizing on the know-how, skills, innovations, and capabilities of its individuals and organizations (Education and the wealth of nations, 1997). China and India's main competitive advantage as nations is their human capital. China imports oil and other raw materials, and transforms these raw materials into finished goods, using its wealth of human capital in the process. India is capitalizing on its technological progress and manpower to become with China the new world industrial powers.

It is important for organizations to focus on building and managing their human capital to remain competitive (The World Bank, 2006). Google's main asset is its skilled, well educated, innovative, and capable human resources. Microsoft, Yahoo, Cisco Systems, and Research in Motion, are just some examples of organizations that depend on the human capital of their employees. Research and development is the key success factor for these organizations. Research and development is performed by skilled and talented individuals in these organizations. This by itself justifies the need for education to build human capital for the success of individuals, institutions, and nations.

The need for talented and knowledgeable individuals to gain and maintain competitive advantage in a contemporary high-tech organization is a key factor for its survival. The highly trained and skilled individuals are needed to run high-tech operations in organizations. The skills and knowledge of employees are now the main factors of production in many organizations. It has become a necessity for organizations

to have well educated human resources to remain competitive at the international level. Organizations are faced with higher international competition due to free trade agreements (Townsend, 2007). These trade agreements have fuelled the race to come up with new technology to obtain and retain international competitive status. This race makes organizations more dependent on human capital to achieve their objectives. It makes highly educated employees the means of production in modern organizations, not machines in factories.

It is through education that one can learn skills and knowledge to have competencies to perform tasks more effectively. Education and training develop employees' understanding of their tasks, and motivate them to learn to perform certain tasks because their efforts will result in a desired performance. In addition, learning generates the feeling of accomplishment for employees who make progress through mastering new skills. Learning is important for organizations to share and use knowledge in ways that let them survive and be successful. At the same time, more employees value learning in their organizations, and see that learning new skills is their second pay cheque that they go home with. Mayo (2000) argues that "people ... can add value to the business day by day, but it may be (on average) the same value. Or people can be incrementally different each day, as they learn, innovate and contribute" (p. 525). When employees leave an organization, they take their skills and knowledge with them, and move on to acquire and share new knowledge in another organization.

### **Conceptual Framework**

This study is based on the concept that education contributes toward building human capital. According to Namasivayam and Denizci (2006), human capital refers to

education, know-how, work-related competencies, and psychometric assessments. This concept that links productivity of workers to their education and know-how was first addressed by Smith (1776). According to Smith, skilled workers should be compensated more than unskilled workers because of their higher productivity. This statement is a core component of the human capital theory which was developed later. Judson (2002) explains that individuals with more education earn higher wages and richer countries have higher levels of educational attainment. Langelett (2002) explains that human capital theory considers formal education or on the job training as an investment for individuals and nations that provide resources for education. Langelett claims that individuals invest in education based on their expected future return while governments subsidize developing human capital for social considerations. Abhayawansa and Abeyssekera (2008) state that: “according to human capital theory, an individual’s skills, experience and knowledge generate economic value to the firm, and individuals enhance their human capital through education and training” (p. 55).

Georgiadis (2007) explains that the theory of human capital was developed in the 1960s due to extreme conditions of rivalry between the United States and the Soviet Union for international economic, technological and military superiority. He claims that the human capital paradigm affected the direction of education policies adopted by national governments and international organizations throughout the 1960s. Georgiadis adds that the human capital theory has been widely adopted in capitalist countries, and it justifies the increased public expenditure on education, connecting it directly to economic growth. This theory, according to Georgiadis, contributes significantly to the ideological

and political promotion of the notion about equality of opportunities in education, and thus provides an answer to the critique of the inequalities in capitalist societies.

### **Scope and Limitations of the Study**

This is a study of the role of education in building individual human capital. Topics like intellectual capital, knowledge management, organizational learning, and human resources accounting are related issues but are not within the scope of this study. These topics are not the focus of the consideration. Each one of these topics is a field of knowledge by itself, and addressing all of them is beyond the scope of this study. The topic of human capital is highly related to education, and that is why it is chosen as the focus of this study. Wiles (1974) defined human capital as “the economic value of a higher education to its recipient or his employer” (p. 43).

The next chapter, Chapter Two, is a review of the literature on human capital, in which books and peer reviewed articles from educational journals, as well as journals in other areas, are discussed. Educators, economists, and management scholars share the interest in human capital. This shared interest has generated different perspectives of examining this issue, and enriched the human capital literature. Chapter Two is followed by a detailed explanation in Chapter Three of the research methodology that was used to conduct this study. Chapter Four is a detailed presentation of the data collected from the research participants. Chapter Five concludes this study and includes a summary, discussion of the findings, and implications for future research.

## CHAPTER TWO: LITERATURE REVIEW

Many education scholars address the relationship between education and the wellbeing of individuals. This positive relationship spreads across the social, cultural, and economic aspects of education. According to Vila (2005), a higher income is only one part of the benefits of higher education that directly improves the well-being of individuals. Vila explains that education reduces the risks of poverty and social isolation due to the involvement of educated people in the development of their societies. Vila explains that citizens with high levels of education volunteer more frequently in their communities and make more charitable contributions than citizens with less education. Vila highlights the civilized nature of educated individuals and their high level of tolerance to others and states that “educated communities are generally more stable and less likely to experience violent social conflicts than societies with a less educated population” (p. 7).

Noddings (2003) claims that a goal of a good education should be happiness, and there is a necessity to rethink how education can help the cause of social justice. Michalos (2008) highlights the influence of education on the wellbeing of individuals and the complexity of this issue. Michalos tries to answer these questions: “Does education influence happiness and if so, how and how much?” (p. 348). He argues that the answer to these questions depends on how one defines education, happiness, and influence. He explains that the attainment of education by individuals is positively associated with health and healthy lifestyles. He states that investing in education can reduce long-term health care costs and asserts that Canadians with less educational attainment are more likely to be overweight than those with higher education. He explains the effect of

education on the Canadian society and claims that 34 percent of provincial prisoners, and 46 percent of federal inmates, who are the most dangerous criminals, have less than a grade 10 education. Michalos attributes the level of political involvement and the peace and security of all nations to education. He points to the constitution of the United Nations Educational, Scientific and Cultural Organization (UNESCO) that states “since wars begin in the minds of men, it is in the minds of men that the defences of peace must be constructed” (UNESCO, as cited by Michalos, 2008, p. 359).

Jiang (2009) addresses the role of higher education in achieving social justice. Jiang argues that a key mission of universities is to promote social justice by communicating and advocating the related ideas to help advance social justice consciousness of the public. Jiang points out that there is a scarcity of both natural and social resources in today’s world and that it is hard for any society to equally distribute its resources among its social members. He claims that universities have to educate individuals with the knowledge of social justice and spread, promote, and safeguard the idea of social justice. Jiang explains that the role of higher education is beyond the production of knowledge and should include the spread of moral ideals to society.

Education and the wellbeing of individuals is the main topic White (2007) discusses. He states that a major purpose of education in a democratic society is to provide people with the tools for a promising life. Through education, White claims, people become qualified to live a flourishing life and become good contributors to national and international dialogues. According to White, education in a democratic nation can guide citizens to participate as electors and decide the future of a political community by planning a flourishing life for people. He concludes that the more the

citizens are educated the less the citizens are misled by misconceptions and the better for the poetical regime.

According to Quinn and Price (1998), treating education, skill, and knowledge of individuals as goods that yield only a stream of future returns is clearly a mistake if one wants to assess all benefits gained by individuals. Quinn and Price claim that in undergraduate education, it is mostly the nonmonetary factors that attract some students. These factors include college sports, fraternity parties, and a chance to learn for the pleasure of knowing. Graduate or professional education, on the other hand, is often viewed mainly as an investment decision. According to Hartog (2000), obtaining human capital through schooling may not only raise an individual's market value, but may also increase enjoyment of literature and culture.

Quinn and Price (1998) find that despite the belief that the decision to attend a medical school would be based on an analysis of future earnings potential, the joy of learning about medicine and helping one's fellow citizens can be the main motive of some medical school applicants. Quinn and Price go on to explain that some medical organizations in the United States have portrayed medicine as a vocation, where a percentage of the population is drawn to the profession mainly to serve the public interest. However, in spite of the non-monetary love for medical education by some, Quinn and Price's empirical study concludes that physicians' income is the main factor behind the demand for medical education. Income is also found to be the driving force behind the decision to apply to medical schools.

### **Bourdieu's Forms of Capital**

Bourdieu (1986) states that it is impossible to explain the structure and function of a society without introducing capital in all its forms that includes social, cultural, and economic capital. Bourdieu believes there are three forms of capital:

1. *Economic capital*: This capital can be immediately converted into money and may be institutionalized in the form of property rights.
2. *Cultural capital*: This capital can be converted, under certain conditions, into economic capital and may be institutionalized in the forms of educational qualifications.
3. *Social capital*: This capital is made up of social obligations and connections which can be converted under certain conditions into economic capital and may be institutionalized in the forms of a title of nobility.

Each of Bourdieu's forms of capital requires, and is the creation of, an investment of a suitable kind, and each can give a return on that investment. Bourdieu (1986) explains school achievement by the sum and type of cultural capital inherited from the family rather than by levels of individual capacity or success. According to Bourdieu, cultural capital can exist in three forms: (a) in the form of long-lasting dispositions of the mind and body; (b) in the form of cultural goods (pictures, books, dictionaries, instruments, machines, etc.); and (c) in the form of educational qualifications. Bourdieu states that social capital is a credential that gives the right to the holder to receive benefits. He explains how one's access to a strong network of relationships can become a real or a possible wealth. According to Bourdieu, the volume of the social capital

possessed by a given individual depends on the size of the network of connections the individual can effectively organize.

In discussing social capital, Portes (1998) states that “Involvement and participation in groups can have positive consequences for the individual and the community is a staple notion” (p. 2). Portes explains that the concept of social capital focuses attention on the positive consequences of social capital and puts aside its less attractive features. This concept places positive consequences in the framework of a broader debate of capital and turns attention to how such nonmonetary forms of capital can be important sources of power and influence, like money in one’s bank account, and this reduces the distance between the sociological standpoint and the economic standpoint. Portes points to Bourdieu as the first person to analyze social capital and how his handling of the concept is influential, focusing on the benefits accumulating to individuals by virtue of participation in groups and on the planned creation of networks for the purpose of creating wealth.

### **Education and Social Capital**

McClenaghan (2000) states that social capital development can have direct links with community development and adult education. She explains that the social capital concept has entered into the dialogue of many academic disciplines as well as the day-to-day language. McClenaghan distinguishes social capital from other forms of capital and explains that “it is not possessed by individuals but exists in the relationships between individuals” (p. 569). Abada and Tenkorang (2009) examine the extent to which racial inequality in university educational attainment in Canada experienced by the children of Asian, South Asian, and Caribbean immigrants, and the social and cultural factors behind

it. They examine the degree to which families' social capital works to influence youth's post-secondary attainment and emphasise the social relations and networks that work as channels of information for various opportunities. Abada and Tenkorang also point to the level of human capital attained by young immigrants' parents and explain that the lowest levels of academic achievement are associated with low-skilled parents at the time of arrival. At the same time, they claim that immigrants, in spite of their higher levels of education, still run into barriers in the labour market and face a harsh wage disadvantage.

Abada and Tenkorang (2009) point to an inequality of immigrants' education and occupation and claim that twice as many university-educated immigrants compared to their Canadian-born counterparts hold jobs that require a high school education. They also highlight the reasons for this inequality and point to skills in official languages, recognition of foreign credentials, and discrimination, and warn that a low rate of return to schooling of first generation may affect the progress of the succeeding generation. Abada and Tenkorang conclude that parental social capital and close intergenerational family relations are helpful to the pursuit of higher education among the children of immigrants.

Gewirtz et al. (2005) explain that there is a debate about both the meaning of social capital and the claims about the nature and importance of the relationship between social capital and educational attainment. At the same time, they state that research in this area suggests that there is a fundamental relationship between social bonds within families and communities and children's accomplishment at school and their future economic success. This understanding, according Gewirtz et al., lead the Labour Government in Britain in 1997 to bring in a number of proposals intended to raise

educational attainment by constructing the social capital of families and communities recognized as socially disadvantaged and excluded. Pavey (2006) explains that “like financial capital, human and social capital ideas encompass the view that there is a stock that can be augmented, and it is desirable to have more rather than less of these commodities” (p. 218). According to Farrell et al. (2004), communities that are high in social capital have higher levels of well-being than communities with limited social capital. Their study concludes that children living in urban communities enjoy a higher level of social capital when compared to rural children.

### **Education and Cultural Capital**

The link between education and cultural capital is highlighted by Zarycki (2007). He addresses the accessibility of higher education and cultural capital, and uses parental education and the number of books in a family home as indicators of cultural capital. According to Zarycki, the maximum level of this indicator can be reached if both parents obtained a graduate degree, and the number of books at home is more than one thousand. At the same time, the minimum level is associated with parents of less than a high school diploma and the unavailability of books at home. Zarycki argues that cultural capital of families is an essential factor in accessing a higher education by children in these families. Zarycki’s study conducted in both Poland and Russia concludes that sixty percent of students in Moscow and forty percent of students in Warsaw came from families with a high level of cultural capital.

Waters (2006) studies the relationship between education, cultural capital and social class. She explains how the middle class in Hong Kong is encouraged by the demand for Western degrees to send students to the US, the UK, Canada, Australia, and

New Zealand. Waters argues that the working-class competition in Hong Kong forces middle-class parents to increase their investments in a prestigious international education to maintain the scarcity of their qualifications. According to Waters, two types of capital can give access to powerful positions and identify one's place in society that direct life chances and routes of individuals: economic capital and cultural capital. Waters explains that this understanding is behind the increasing migration of students from the East to the West.

Reay (2004) highlights the role of cultural capital in today's educational policy and how this capital operates to create educational advantage. She explains that it is becoming more and more possible to see the power of cultural capital in relation to the increasing importance of parental participation and involvement in their choice of programmes such as gifted programs. According to Reay, there is a close relationship between cultural capital and economic capital and they work together to strengthen each other. At the same time, she states that cultural capital can operate independently of economic capital to advance the wellbeing of individuals. Reay recognizes that the most clear-cut aspects of cultural capital are educational qualifications and involvement in high status activities.

### **Education and Human Capital**

The relationship between education and human capital is mainly related to the development of human capital through the building of skills, knowledge, and capabilities of individuals. Scholars have written extensively about the relationship between education and the economic wellbeing of individuals, organizations, and nations (Abhayawansa & Abeysekera, 2008; April et al., 2003; Benjamin et al., 2002; Bontis,

2001; Chatzkel, 2006; Georgiadis, 2007; Judson, 2002; Langelett, 2002; Mayo, 2000; Morissette et al., 2004; Smith, 1776; Thanki, 1999; The World Bank, 2006; Townsend, 2007; Wiles, 1974). According to Vandenberghe (1999), the relationship between education and human capital has grown beyond the cost benefit analysis of investing in education. Scholars' analysis of education covers the supply and demand of education, the quality of education, the finance of education, the commercialization of research (transfer of technology), the globalization of higher education, and many other educational topics.

Killeen et al. (1999) investigate the way in which students at schools believe their education is connected to the labour market and their insights regarding educational achievement and its translation into life chances. The authors point to the importance in the UK to redirect education towards what are perceived as the needs of the economy. In other words, the authors point to the integration of education and future occupations of students. Killeen et al. argue that the demand for higher education is tailored to the needs of the labour market and this means that individuals follow the courses that can increase their economic wellbeing. Killeen et al. highlight the influence of the labour market over educational institutions and the role of employers in "the credentializing of the labour market" (p. 100). Killeen et al. explain how the inflation in credentials can lead to the devaluation of academic qualifications which may not increase an individual's social opportunity, but will increase the screening cost of potential employees. Killeen et al. conclude that students believe strongly that education has a market-signalling role, and that education offers an "ideal-typical credentialised access to opportunities: that

qualifications are a paper currency, that can be exchanged for work opportunities” (p. 112).

Hartog (2000) concludes that human capital is a very important concept to understand individual performance in relation to education and the labour market. He explains his predicted incentives for individuals to build human capital with the following points:

1. An increase in future expected benefits in the form of higher wages and salaries for those who have finished their schooling.
2. Decrease in the cost of education through lower tuition and the subsidization of education by governments’ support to educational institutions and students.
3. Decrease in banks lending rates for students, the allocation of government financial resources to grant cheaper student loans, and any other way to make the financing of education easier.

The contribution of education in building human capital and the kind of knowledge that students need to know is addressed by Neumann (2010). He questions if education is equipping students with the required basic knowledge to prevent future national economic crises. He asks if high school graduates have sufficient knowledge and skills for political involvement and if these students have a good understanding of the connection between economics, politics and education. Neumann asks if students in the US know the influence of business, political groups, and lobbyists on crafting and implementing public policies and if students have the knowledge of deregulation and the possible costs of dismantling regulations on financial institutions? He finally asks if

students have the insight, ability, and initiative to help the nation prevent disasters, and he concludes that the answer to all these questions is no.

Cappelli (2008) discusses the role of education on the economic wellbeing of individuals and states that more education allows an individual to make more money and be less subject to unemployment. At the same time, he claims that if everyone had the same academic degree, they can not all make more money, and some may end up unemployed due to the excess supply of individuals with the same degree. Cappelli goes on to explain that individuals can accomplish better life chances through education if there is demand for their type of education. According to Cappelli, the best way to address concerns about skills of individuals is not by adding more years of traditional classroom education. The answer can be the expansion of work-based education through programs at the individual's workplace or by combining work and classroom experiences.

Fan-sing (2008) addresses the financial wellbeing of individuals in relation to education in Central and Eastern Europe and China. Fan-sing questions the conclusion of many studies that education is a gainful investment that provides a return to the individual regardless of their geographic locations. He argues that this conclusion can be questioned in the case of countries switching from a centrally planned to a market economy and asserts that returns to education may not be captured so well due to the economic nature of countries. Machin (2007) addresses the historical progress of research on education and human capital. He explains that education was considered by many to be a status good to be consumed by the rich and wealthy in society just like they consume

more physical goods. Machin explains how human capital theory proposes that education should be looked at as an asset or a capital with future benefits, and not as an expense.

Kirby (2007) explains the relationship between education, human capital, and the advancement of national economies with this statement: “With the advent of a ‘knowledge-based’ economy, education is increasingly viewed as an agency capable of fostering economic prosperity by facilitating innovation and providing sufficient human capital (i.e., educated workers) to meet the changing demands of industry” (p. 5). Kirby points to the potential for Canadian universities to supply the job market with highly skilled workers through their science, technology and professional programs. He explains that university programs are often linked to the needs of employers and the needs of the knowledge economy. Kirby highlights the economic-utilitarian policy approach that emphasizes the importance of post-secondary education to economic development, and he places less emphasis on humanist perspectives on post-secondary education which often highlight education for the shared benefits of a society.

Coyte (1984) studies professional teachers’ job market in British Columbia. He states that teachers’ productivity is positively related to the level of human capital, and both public and private schools have the incentive to self select teachers. Coyte adds that the public school system has a greater incentive to self select teachers because of the higher salaries paid through unionization. Killeen et al. (1999) address the ways in which high school students see the connection between their education and the labour market and how qualifications generate future benefits. Their study concludes that most students believe that education plays a significant role in the job market and that the role of education in raising productivity is minor.

A study conducted by The National Council on Teacher Quality (2009) in the United States highlights the importance of teachers' human capital in students' learning process. The study was conducted in the state of Connecticut that has the largest achievement gap in the US between children who are poor and/or minority and children who are middle class and/or white. The report of the study recommends raising teachers' salaries to attract and retain good teachers, providing tuition reimbursement for teachers seeking certification, and that secondary school teachers earn a master's degree in their subject area. The report also recommends a strategy for policy makers: "Compensation should be strategically targeted to make the profession attractive to new teachers, particularly in hard-to-staff assignments" (p. 11).

The value of teachers' human capital is addressed by Rickman and Parker (1990) who argue that in the United States, "teachers lack not only status in society that cast them as marginal middle class professionals but receive salaries that, on average, are equated with remuneration at slightly above the minimum wage" (p. 73). Rickman and Parker address questions like: who chooses to become a teacher, who exits the teaching profession, who remains as a career teacher and the economic forces governing those decisions. They conclude that 1 percent increase in a teacher's salary relative to other salaries of occupations teachers actually move into decreases the probabilities of leaving teaching by 2.1 percent.

Consortium for Policy Research in Education (2009) claims that "without strategic management of human capital the nation's schools will not be able to attain their goal: increased student achievement" (p. 1). The Consortium explains that human capital is simply the people side of reforming education, and in the US, it is not aligned with

academic goals in many large districts. The Consortium argues that managing human capital is essential for student success and this should be done by having an effective teacher in every classroom and an effective principal in every building. According to Curtis (2010), the education sector in the USA does not have a human capital management system to help in solving the teachers' quality problem. Curtis states that a human capital system is needed to define issues like teaching excellence, and the system should address the selection, performance, compensation as well as the preparation of teachers. Curtis concludes that by constructing a human capital management system, districts can raise the bar for quality to ensure that current and future teachers meet it.

### **Human Capital and the Quality of Education**

It is logical to think that academic institutions, degrees, and qualifications are not created equal. The name and prestige of an academic institution (e. g., Harvard, Stanford, Oxford, and Cambridge) can play a major role in the future life chances of an individual. According to Harvard University's website, seven US presidents and two vice presidents are Harvard graduates. While the skills, knowledge, and competencies can be acquired by individuals in many academic institutions around the world, the quality of an institution can be an important issue in building human capital. According to Abada and Tenkorang (2009), thousands of immigrants come to Canada every year, loaded with all kinds of qualifications and skills, but end up doing jobs they never expect to do as educated individuals. According to Sweetman (2004), their foreign education is usually an explanation to this phenomenon. Sweetman claims that immigrants with foreign education are observed to receive a lower average return to their schooling in the Canadian labour market. Sweetman argues that the country of origin of one's education is

an important issue in justifying differences in returns to education in the Canadian job market.

Daniel, Kanwar, and Uvalić-Trumbić (2009) claim that the dilemma of ministers of education is to provide a large access to high-quality education at a low cost. Daniel et al. argue that it can be impossible to change access, quality, or cost without effects on either or both of the others. Daniel et al. explain how stuffing more students in bigger lecture halls may increase access but with a lower quality due to a decrease in faculty-student interaction which triggers an increase in cost through hiring more professors. The authors explain how attempts to improve quality of education usually limit access and increase costs and conclude that wide access, high quality, and low cost are not attainable.

According to Dew (2009), there are five accepted ways to frame the issue of quality in higher education:

1. *Quality as endurance*: If an academic institution survives the test of time for more than a century, one might associate that survival with quality.
2. *Quality as luxury and prestige*: If the academic institution provides the most modern research facilities, light teaching loads for faculty, funds to support sabbaticals, and investment in scholarships to draw the most talented new students which can push up ranking and prestige.
3. *Quality as conformance to requirements*: The set of requirements that a college, university, or specific academic program is required to meet by the accrediting body can be an approach to quality.

4. *Quality as continuous improvement*: The achievement of the top rate of advancement and development in all aspects of an academic institution.
5. *Quality as value added*: An academic institution should add value to students and society through considerable advancement in student learning, social skills, social contacts, writing, reading, and critical thinking.

### **Human Capital and the Cost of Education**

Can everyone afford higher education? How can individuals build their human capital if they lack the required financial resources? What is the role of governments and academic institutions in this issue? How can we make education more affordable? Each of these questions requires a thesis or a dissertation alone. It is well known that building individual human capital through education is not cheap. In fact, it can be very expensive for those who lack the required financial resources in many places around the world.

The affordability of schooling and the finance of education is a key issue in building human capital. It is therefore important to review some literature on educational finance.

According to Rolle and Houk (2004), there are four foundational perspectives in educational finance and researchers organize their ideas considering one of these four perspectives:

1. *Equity*: when researchers address the fairness of distributing financial resources and the outcome of education.
2. *Efficiency*: when researchers address the levels of educational funding and educational outcomes.

3. *Liberty*: when researchers address an individual's freedom to choose without being affected by policy decisions.
4. *Adequacy*: when researchers address the availability of resources to students to pursue education.

The cost of education can vary at different places and different times. It can cost more during hard economic times when governments' funding is squeezed, but it can be more affordable during good times. According to United Nations Educational, Scientific and Cultural Organization (UNESCO) (2010), the economic crisis can create "a lost generation of children in the world's poorest countries whose life chances will have been irreparably damaged by a failure to protect their right to education" (p. 3). The UNESCO report explains that in the case of those individuals and societies directly affected by the recession, failure to maintain advancement in education would inflict a high price in diminished chances to escape poverty and vulnerability. The report adds that low-income developing countries do not have the ability to organize the required financing to maintain public spending in priority areas like education.

The downturn of the world economy at the beginning of 2009 affected many Western nations including Canada, and many organizations including universities. This crisis brought in new realities that universities are forced to deal with. Jack Lightstone, the president and vice-chancellor of Brock University, said in an e-mail to Brock community on March 3, 2009:

So where do we stand looking forward? We expect a gap of more than \$17 million in our operating budget for next year, 2009-10, a gap that will only continue in subsequent years if nothing changes. We have used up our surplus

from earlier years; the savings account is empty. And the world economic crisis has drastically affected the revenues of the Ontario government; it will not see surpluses again for a number of years. It was with such surpluses that the government was able to provide additional allocations to universities in the first place. ... So let us use this exercise to implement creative initiatives today that will pay off down the road. Let us be strategic. Let us think beyond tomorrow.

Asplund, Adbelkarim, and Skalli (2008) explain how failure to have fair access to university studies has directed attention to the funding of higher education. Asplund et al. argue that monetary obstacles can prevent students who are ready and qualified to access higher education from enrolling and continuing after they start. This can raise the question of whether or not the financial aid to students is well aimed from an equity point of view and whether the sharing of public financial support across various student groups is undertaken. Asplund et al. assert that there is a convincing proof for the need to revise higher education financing not only on effectiveness grounds but also on fairness grounds.

### **Human Capital Definitions in Literature**

Canadian educators Benjamin et al. (2002) define human capital as the characteristics people can gain to improve their productivity through education and other forms of training. According to Langelett (2002), human capital is “the ‘know how’ of the work force that increases the productivity of each worker” (p. 1). According to April et al. (2003), human capital includes employee know how, employee education, vocational qualification, work related knowledge, work-related competency, and entrepreneurial spirit. Bontis (2001) defines human capital as the individual stock of

knowledge embedded in a firm's capability to get the best solutions from its individual employees. McGregor, Tweed, and Pech (2004) take an aggregate view of human capital and define it as the size and quality of the broader labour markets. According to Wasmer (2001), human capital of individuals is usually thought of as having two main components: education and experience of the labour market. Hartog (2000) simply defines human capital as "the value of a person's productive, marketable skills" (p. 7).

According to Nerdrum and Erikson (2001), William Petty, a seventeenth century English economist, was the first person to emphasize labour quality differences and the first to identify what is known now as human capital. Later, Smith (1776) states that education and learning should be considered as investments in human-beings and skilled workers should be compensated more than unskilled workers because of their higher productivity. Nerdrum and Erikson argue that the accumulation of human capital embodied in human beings will increase the productivity of its owner, and lead to increased earnings. Nerdrum and Erikson state that "human capital theory affirms that people invest in themselves, through accumulation of different types of human capital goods like formal education and productive knowledge and information in order to constitute stocks of generally intangible human capital" (p. 130).

### **Human Capital and Organizational Performance**

Linking organizational performance to human capital is in the heart of human capital literature. A case study conducted by Cantrell, Benton, Laudal, and Thomas (2006) shows the development and use of a measurement tool that assesses the maturity of an organization's human capital development processes, benchmarks the processes' performance against other organizations, and determines the relationship of each process

to bottom line business results. The case is a study of an American software organization that depends heavily on the effectiveness of skills, knowledge, and capabilities of its employees. The study concludes that improving the organization's human capital processes that include employee engagement and training and development yields outstanding results. The organization's customer and employee satisfaction ratings have done a complete turnaround, and employee turnover has dropped between 5 to 10 percent. This has an effect on the profitability and overall success of the organization.

In an empirical study, Seleim, Ashour, and Bontis (2007) link human capital to organizational effectiveness and performance of software companies in Egypt. The authors highlight human capital as one of the core components of intellectual capital, and a significant resource for many industries including software development, management consulting, and financial services. The authors argue that individuals, organizations, and nations increasingly recognize that high levels of education, skills and capabilities are vital to future security and success. They conclude that organizational performance in software firms is mostly influenced by software developers who have superior capabilities such as a high level of intelligence, creative ideas, initiation, ambition, and individuality.

The human capital of an organization in any industry is a major part of that organization. The role of human capital can be even greater in service organizations. Namasivayam and Denizci (2006) argue that front line workers play a very important role in shaping customers' view about an organization. They state that some services, such as medical services, are more dependent on the knowledge of the service provider. This suggests that the value of an organization in the eyes of its customers is seen through

employees at the front line. The authors go on to say that “it is therefore important to consumers that the service provider has the kind and amount of knowledge required to recognize and help create a suitable service product” (p. 386). They conclude that because consumers depend on the front line employees to produce a service of appropriate scope and conditions, it is important that such employees are well-educated about the service.

The value of today’s organizations and their relation to human capital can be seen clearly in the high-tech industry. The skills and knowledge of employees in this industry drive the value and success of their organizations. Johnson (2002) argues that knowledge processes are naturally related to individuals, and managers need to focus on developing and retaining valuable knowledge workers. O'Donnell, Regan, Coates, and Kennedy (2003) address the effect of human capital on the value of organizations in the Irish information and communication technology sector. The authors state that a large amount of organizational value comes directly from individuals’ working, thinking and communicating within this industry. Pena (2002) states that the human capital of an entrepreneur, namely, the entrepreneur’s level of education, experience and motivation, is positively related to new venture performance (as cited by Abhayawansa & Abeysekera, 2008, p. 52).

Thorbjornsen and Mouritsen (2003) state the individual is the key of knowledge. Linking the knowledge, skills, and competencies of individuals with the success of organizations is addressed in discussions of intellectual capital and organizational learning. According to Senge (1990), personal mastery is one of the five disciplines of a learning organization. He argues that organizations learn only through individuals who

learn, where individual learning does not guarantee organizational learning, but without it no organizational learning occurs. Senge describes personal mastery as the discipline of continually clarifying and deepening personal vision, focusing energies, developing patience and seeing reality as it is.

Organizational duties and functions are performed by individual employees in an organization. Each employee performs a set of tasks that together with the rest of tasks performed make a working organization. Even though we see an organization as one unit, in reality it is a collection of many individual units, performing different duties, and organized together in what is known as the organization. With this understanding, one cannot assume that organizations learn themselves, but employees inside organizations are the ones who learn. For this reason, Argyris and Schon (1984) focus much more on individual and group interactions than on systems and structures. Organizations need to understand that in order to have a learning organization they need to facilitate individual learning and interaction. Organizations need the right culture that supports the process of learning, and the right leadership to normalize the process of learning. Swenson (2008) highlights the importance of knowledge and employees' skills in organizations. She states that successful organizations will hold on to employees because these organizations continue to challenge and empower employees to use their knowledge to benefit the organization. She adds that because of the need for learning "resumes will boast the ability to learn, incorporate, and synthesize new knowledge, transforming new value for the organization" (Swenson, p. 65).

### **Intellectual Capital and Human Capital**

There is no general agreement on how to define intellectual capital. This is how Seetharaman, Sooria, and Saravanan (2002) define intellectual capital: “Intellectual Capital is intellectual material, knowledge, information, intellectual property, experience, that can be put to create wealth” (p. 2). According to Rodov and Leliaert (2002), a firm's intellectual capital consists of human, customer and structural classes. Quite a few articles I have reviewed classify the following as parts of intellectual capital: human capital including management; organizational processes including culture, structure and operational design; customers and organizational relations, research and development, brands, copyright, patents, technological know-how, and any non physical factor that is contributing to the wellbeing of the organization (Andriessen, 2001; April et al., 2003; Bose & Oh, 2004; Chatzkel, 2003, 2006; Chen, 2003; Firer & Williams, 2003; Guthrie Petty, & Ricceri, 2006; Holtzman, 2004; Lim & Dallimore, 2002; Mouritsen, 2004; Palacios-Marques & Garrigos-Simon, 2003; Reed, Lubatkin & Srinivasan, 2006; Rodov & Leliaert, 2002; Seetharaman et al., 2002; Tayles, Bramley, Adshead & Farr, 2002; Vandemaele, Vergauwen & Smits, 2005). Human capital is recognized as one of the three main parts of an organization's intellectual capital.

According to Bontis (1999), the three components of an organization's intellectual capital are:

1. *Human Capital*: The collective knowledge, education, skills, attitudes, and experience of a firm's employees.

2. *Structural Capital*: Routines, systems, processes and information within an organization including its culture that helps employees in their pursuit of quality in organizational performance.
3. *Relationship Capital*: The value of external organizational stakeholders' relationships such as creditors, suppliers, and customers.

Researchers in this fairly new field of intellectual capital came from different disciplines including management, accounting, finance, economics, and social science. In the published academic articles in this field, researchers have been using both intellectual capital and intangible assets to describe similar things. Chatzkel (2006) uses intellectual assets for the same things, stating that “The stance towards intellectual assets is that they do not generate value by themselves, but that management must utilize them to create value” (p. 5). It is useful to clear some of the confusion about these different terms.

Intangible assets are broadly defined by The Canadian Institute of Chartered Accountants (CICA, 2003) as “assets that lack physical substance and are not financial assets” (CICA, 2003, section 3062.05). These intangible assets are divided into two groups. The first group is identifiable intangibles, which are defined as “results from contractual or other legal rights, or can be separated from the entity and sold, transferred, licensed, rented, or exchanged” (CICA, 2003, section 1581.48). The second group is the goodwill and other intangibles that are not separable from the rest of the entity, and the control over their future benefits is not the result of a contractual or legal right. For example, a group of trained employees or an excellent management team can be classified as intangibles, but due to the inability to separate their benefits and exchange them with others, and the inability to have control over their benefits by legal rights,

accountants cannot recognize these assets as identifiable intangibles. These assets, therefore, are considered by accountants as part of goodwill.

CICA (2003) defines goodwill as follows: “Goodwill is the excess of the cost of the acquired enterprise over the net of the amounts assigned to identifiable assets acquired and liabilities assumed” (CICA, 2003, section 1581.06). This definition of goodwill by accounting regulators puts all the unidentifiable intangible assets that include employees, management, culture, structure, supply chain, and other unidentifiable intangible assets under goodwill, which only shows up on the balance sheet after a business combination.

The unfavourable treatment of the unidentifiable intangible assets fuelled the emerging of the use of intellectual capital by researchers to give these assets some more attention. The word “capital” is used in sociology, accounting and economics literature. The use of intellectual capital by management practitioners and academic researchers led to the progress in measuring and managing intellectual capital, which made it easier to analyze, measure, and manage the individual components of intellectual capital. According to April et al. (2003), intellectual capital includes the following three categories:

1. *Human capital*: employee know how, employee education, vocational qualification, work related knowledge, work-related competency, and entrepreneurial spirit.
2. *Internal capital*: patents, copyrights, trademarks, management philosophy, corporate culture, management processes, information systems, networking systems and financial relations.

3. *External capital*: brands, customers, customer loyalty, distribution channels, business collaborations, licensing agreements, favourable contracts and franchising agreements.

Both Bontis (1999) and April et al. (2003) classify human capital as a major part of an organization's intellectual capital. Johnson (2002) argues that human capital is also a major player in the internal and external capital of an organization. In the internal capital, patents, copyrights, trademarks and management philosophy are the output of human capital. A patent is given to a pharmaceutical company after the discovery and production of a new drug by researchers in that company. This patent which will create future revenue for the company throughout and after the patent period is the result of researchers' knowledge and skills. The same can be said about copyrights and trademarks owned by organizations which can only exist due to the creativity and hard work of employees. The same can be said about external capital that includes brands, customers, customer loyalty, and distribution channels, which are also attributed to the hard work of talented employees. Johnson argues that all intellectual capital originates first as a human capital because all innovations come from the intellect and knowledge of human beings.

### **Human Capital Measurement**

According to Bontis (1999), the human capital component of intellectual capital is the most difficult to measure. Samudhram, Shanmugam, and Low (2008) state that the current interest in measuring human capital is driven by the increasing attention given to intangible assets of organizations with the recognition that the wealth creation of organisations are driven by these intangibles. Samudhram, Shanmugam, and Low propose a framework to measure human capital by identifying the different types of cost-

benefit associations that can be established for the different types of expenditures on human capital. The shortfall of this approach is that it is hard to separate expenditures that can be classified as expenses and those that can be classified as assets. Also, determining the useful life of this capitalized asset can be very difficult and can never be accurate, and employees may choose to leave an organization after receiving training.

Bose and Oh (2004) state that the traditional valuation models have limitations when used to measure intellectual capital components like human capital. Firer and Williams (2003) note that traditional measures of corporate performance based on conventional accounting principles of determining income may be unsuitable in the new economic world where competitive advantage is driven by intellectual capital. Mouritsen (2004) indicates that there is a measurement problem in the field of human capital, but it is less clear what the problem is, and that measuring human capital provides the input to start future actions. Chatzkel (2003) recognizes that the growing number of organizations with a large intellectual capital require the reconsideration of how these organizations value and measure this capital. He argues that accounting for hundreds of years does only account for transactions involving physical and financial assets, and was not designed to deal with intangible assets. He highlights the need for accounting reform to deal with the increasing dependence on intangible assets in the daily operations of today's organizations.

Mayo (2000) highlights the fact that measuring human capital is a challenge and states that the more we see people as the key driving force of value, the more important it is to understand their value. Mayo argues that strategically focused employee development should be, and can be, in the direct line of value creation and as a result the

strategic goal of the organization. Bontis and Fitz-enz (2002) state that the development of human capital is positively related to education and conclude that measuring and modeling human capital are critical.

Bart (2001) connects the measurement of human capital to the mission statement of an organization. He argues that the most notable absences from recent explanations on measuring human capital appear to be the degree to which employees know, understand and accept their company's strategy in general and their mission statement in particular. While the importance of a mission statement is clearly known, the connection between mission statements and measuring human capital is not clear. Knowing and understanding an organization's mission statement by its employees may not make employees follow it or be affected by it. Organizations do not succeed only due to the availability of a mission statement and employees do not perform their duties only because of the mission statement. There are some successful companies that do not even have a mission statement, and in companies with a mission statement some employees do not know that there is a mission statement. I worked for an international pharmaceutical company for three years and I was never informed of the availability of a mission statement.

Wasmer (2001) provides a methodology to calculate the levels and development of aggregate measures of human capital accumulated through labour market experience across different countries. Wasmer's methodology does not provide a measure for individual human capital, and as many economists, Wasmer takes an aggregate view of human capital and studies the experience and education of the overall labour market. Mulligan and Sala-I-Martin (2000) propose a methodology for the construction of human

capital stocks and state that the early empirical economists used school enrolment rates as a proxy for the stock of human capital. Mulligan and Sala-I-Martin propose a measure of human capital based on the education attainment of the labour force.

Judson (2002) proposes a model to measure human capital by its replacement cost which is similar to measuring physical capital. Judson's measure uses the average educational attainment of the labour force and argues that more educated individuals earn higher wages and richer countries have higher levels of educational attainment. The shortcoming of Judson's way of measuring human capital is that the money spent on education cannot be a guaranty of the quality of human capital. An Executive MBA program from Queen's University but offered in Toronto to those who are willing to pay but not willing to go to Kingston to do a regular MBA costs around \$100,000. An Executive MBA is an MBA that is created by universities to generate more tuition money. The goal is to attract corporate executives by offering classes in a convenient location like Toronto, and by lowering the admission requirements like the GMAT scores. The University of Toronto, York University, and Queen's University charge around \$100,000 per executive MBA student compared to \$15,000 – \$20,000 per regular MBA student. The same can be said about some programs in other universities, which may make the replacement cost of education as a base of value misleading.

Mulligan and Sala-I-Martin (1997) propose a measure of human capital based on labour income believing that individual human capital would be related to the income the individual receives in the marketplace. They divide each individual's wage rate by the wage rate of the unskilled worker. Their measure of human capital for an economy is the weighted sum of all workers, where the weights are the ratio of their wage to the wage of

the zero-human-capital worker. This measure does not treat individual human capital value and uses an aggregate approach to deal with the measurement dilemma. Also the existence of a zero-human capital worker is questionable. Another shortfall of this measurement is the assumption that the unskilled worker has the same skills anytime.

Van Trinh, Gibson, and Oxley (2005) state that an accurate and a consistent measure of human capital is needed because of the impact that human capital has on economic growth. They argue that few attempts are made to place a value on human capital and instead the practice in economics has been to estimate human capital on the basis of years of schooling or formal educational achievement levels. They adopt the lifetime labour income approach to measure the monetary value of the stock of human capital in New Zealand. Their method is to value the human capital embodied in individuals as the total income over their lifetime. Their measure is based on the discounted present value of expected lifetime labour market incomes. However, Van Trinh et al. do not address individual human capital value and only study the whole labour market of a country.

A review of literature by Seetharaman et al. (2002) assesses whether the current accounting and financial reporting framework is adequate to undertake challenges posed by the emerging knowledge economy. Seetharaman et al. highlight the issue of ownership and the control of an organization over human capital, clients and company culture when compared with the control over its tangible assets. The above discussion highlights the need for an approach to measure human capital that can be easily applied to individuals.

### **Individual Human Capital**

An individual is born with his or her individual genetic inheritance. According to Hudson (1993), human capital is defined on the individual level as the combination of four factors: (a) individual genetic inheritance, (b) education, (c) experience, and (d) attitudes about life and work. Unless a person is born to find something to inherit from a rich family member, this person will usually be without any form of capital. As this individual grows up and learns different things, this individual's human capital grows, before any form of tangible capital can be generated. During this phase, building human capital can be the only way for this individual to earn any tangible capital in the future. After this individual's human capital is put to work, this individual human capital can be measured and assigned a value.

The building phase of human capital for any individual starts after the birth of that individual. On the day the person comes into life the learning journey begins. Soon a baby will start learning from parents some simple words like *mama* or *papa*, and slowly the number of words grows, and the words start forming into simple sentences. This goes on over the years, and the accumulation of learning keeps building up this person's human capital, through the knowledge obtained during school years, at the university level, and through work and life experience. This process is a continuous process that can go on from birth until this person retires, when the person starts losing some of the acquired human capital earned earlier.

When this individual dies, the human capital disappears. It is a highly personal type of capital that cannot be passed on, or inherited by family members, except in the case of an author's royalty. At the same time, the diminishing of a person's human capital

can happen due to illness, or old age complications. It can also happen due to an accident, which can cause that individual to lose some or all components of human capital. A loss of human capital can happen due to some legal actions forced on that individual that can strip the individual of some of the intellectual rights. It could also be as simple as stripping a person of a license to practice a certain profession.

The four components of human capital: capabilities, skills, knowledge, and other intangible personal assets, can be formed into two groups:

1. An acquired human capital.
2. A born with human capital.

A person can be born with some components of human capital that may not be acquired otherwise. A singer's human capital can be a beautiful voice, which was born with that person. An actress's human capital can be her beauty and attractiveness. All these are some examples of intangible personal assets, the fourth component of human capital, which are born with the individual, and very little can be done to give it to a person who does not have it.

Acquired human capital, capabilities, skills and knowledge, can be learned and mastered. Skills can be gained by practicing, knowledge can be gained by learning, and capabilities are a combination of skills, knowledge, and other intangible intellectual personal assets. If we can assume that a born with individual human capital is the gift of God to the individual, then the acquired components are obtained by individuals. Human capital has a value. This value is intangible, and cannot be physically felt, or cashed at a bank counter. But it is a capital that can be used to generate real income. Individuals use their human capital by performing a job for an organization, and take home a salary. A

person's salary is real money generated by using skills, knowledge, and capabilities at that person's organization. If that individual does not have human capital, the individual will not generate a salary at that organization. This means that individual human capital has a value. The question is then, what is the value of that individual human capital? Is it his or her hourly wage? Is it the earning per month or per year? Or is it the money this individual spent to acquire his or her skills and knowledge? It is important to highlight the following points when addressing the issue of human capital:

1. Human capital has different values in different places (e.g., the value of the skills and knowledge of an engineer in India is different than that of a similar engineer in Canada).
2. Human capital has different values at different times (e.g., the value of the skills and knowledge of an engineer is worth less during an economic slow down, and more in a booming economy).
3. Different individuals with different skills and knowledge can have the same value of human capital.
4. Finally, human capital does not have a fixed value. It may increase or decrease according to circumstances, and can have a zero value at the death of the individual.

### **CHAPTER THREE: METHODOLOGY AND PROCEDURES**

The nature of a research study does have much to say in terms of the approach a researcher can take. To understand the views of different individuals, the use of a qualitative methodology was the appropriate approach to conduct this study. This study followed a qualitative research approach (Creswell, 2008) to get the views of well-educated professionals on how they see the role of education in building individual human capital and how education contributes toward their own human capital. Creswell explains that “qualitative research is interpretive research, in which you make a personal assessment as to a description that fits the situation or themes that capture the major categories of information” (p. 245). My interpretation of the collected insights from well-educated professionals was a major part of the study and I used my own perspective in analyzing the collected data.

Creswell (2008) says, “Qualitative research is a type of educational research in which the researcher relies on the views of participants; asks broad, general questions; collects data consisting largely of words (or text) from participants; describes and analyzes these words for themes; and conducts the inquiry in a subjective, biased manner” (p. 46). In conducting this study, the subjectivity and bias because of my background may play a role. The subjectivity in a research due to the researcher’s own interpretation needs to be recognized in qualitative studies. This subjectivity can be viewed as a limitation to qualitative studies. At the same time, the nature of some topics requires qualitative techniques. The imbedded knowledge and experience of individuals that cannot come up to the surface through quantitative means can be revealed through the use of qualitative methods. Sometimes the knowledge formed through the process of

education and personal experience cannot be translated into numbers, and may not have an accurate measure on a quantitative scale. It is difficult to measure insights, feelings, love, happiness, sadness, or emotions on a scale from one to five. At the same time, these feelings can go through the process of live, tell, retell, and relive (Clandinin, 2006; Clandinin & Connelly, 2000) to give the maximum understanding of the human side of an issue.

The interpretation a researcher makes of data may differ from another researcher's interpretation of the data. According to Creswell (2008), this does not mean that one researcher's explanation is better or more correct than the other. It simply means that the researcher is bringing his or her personal explanation and perspective to the interpretation. The insights of both the interviewer and the interviewee can add value to a study due to their own personal experience. In this study, it was unlikely that a random sampling of different individuals through a quantitative approach can reveal the intended implications, and it was unlikely that quantitative numbers can tell the whole story. In this study, the intent is to understand the insights of participants on individual human capital and not to generalize the results. Creswell explains that "in qualitative inquiry, the intent is not to generalize to a population, but to develop an in-depth exploration of a central phenomenon" (p. 213).

Qualitative studies use open-ended questions (Creswell, 2008). In this study, the following two questions were asked:

1. How do you see the role of education in building individual human capital?
2. How has education contributed in building your own human capital?

The use of open-ended questions in qualitative studies allows participants to reveal their insights into the issue under study. It can free participants from choosing pre-determined answers used in a quantitative study. This can maximize the understanding of participants' views by readers of a completed qualitative research study.

According to Creswell (2008), qualitative research is not used to develop a consensus of opinion. This means that the researcher searches for an in-depth understanding of the viewpoints of individuals and forms findings according to the data collected from the participants. Because much of the available literature on human capital is based on quantitative methods and little on the insight of educated individuals, with a qualitative approach this study was on the right track to add the perspectives of those whom we are trying to measure their human capital to the existing literature. The attempt to understand the views of the research participants justifies the use of a qualitative method in the study.

### **Research Design**

This study adopted a qualitative design to collect and analyse data, and to write the report. Designating a specific qualitative design (e.g., grounded theory, ethnographic design, or narrative research) was not needed in conducting this study. This is due to the fact that none of these three designs was a perfect fit for the study. There was a piece of each one of them in the study, and that was why it was more appropriate to use a general qualitative design.

### **Selection of Site and Participants**

In this study, a qualitative method was used to get information from participants on their views of the role of education in building individual human capital and on the

contribution of education in building participants own human capital. For this reason, participants in this study were not selected randomly. They were five professionals in my place of work, who are well educated and have the technical knowledge and experience. According to Creswell (2008), in purposeful sampling, researchers intentionally select individuals and sites to understand the central phenomenon. Creswell adds that this purposeful sampling applies to both individuals and sites. The five chosen individuals were highly skilled and educated professionals. They were chosen to get their opinions on the role of education in developing individual human capital and on how education had contributed toward their own human capital.

This targeted selection of research participants was made because of the need to uncover the views of well-educated professionals in a knowledge-based division of an organization. Professionals with technical skills (e.g., CA, CMA, CGA, and MBA) were targeted and selected as participants because of their investments in their own human capital to obtain their professional designations. These individuals were able to reflect and comment on the role of education in building human capital. It was relevant for them to describe their experience with education in building their own human capital and how they would value their accumulated human capital. As Patton (1990) explains, “the standard used in choosing participants and sites is whether they are information rich” (as cited by Creswell, 2008, p. 214).

I obtained participants’ consent through an invitation and consent form and got their signature. Securing interview times with participants was not a challenge. I approached the company president and obtained his approval to conduct interviews with employees. Gaining access to participants was secured by talking directly to, calling, or

emailing them as we share the same floor and meet regularly during lunch time. I talked to potential participants about the study and how their contribution could add value to the study. I discussed with potential participants how long the interview would be and when it could be appropriate for them to have the interview. This process was used with every potential participant until a minimum of five participants were available and their consents were obtained to participate in the study.

### **Instrumentation and Data Collection**

This study used one-on-one interviews to collect data. According to Creswell (2008), qualitative research depends on interviews and observations for data collection. The one-on-one interviews were more comfortable to participants and allowed for some privacy. This technique produced an in-depth response from each single participant when compared with using a focus group interview technique. The two research questions in this study were followed by other small questions to allow the participants to elaborate on certain points. Probing questions were asked for explanation (e.g., please explain, please give details, in which way?). These probe techniques were used to obtain additional information from participants in order to clarify points mentioned by them. I used an interview protocol to record information during the interviews. The interview protocol is attached at the end of the thesis as Appendix A. Creswell (2008) explains that an interview protocol “is a form designed by the researcher that contains instructions for the process of the interview, the questions to be asked, and space to take notes of responses from the interviewee” (p. 233).

After each interview was completed, I thanked the participant and told the participant that I might make a phone call to clarify some points if needed. The duration

of the interview was around one hour. This length of time was sufficient for participants to answer questions and probes. I gave attention to participants' time and made sure of the efficient use of this allocated time. I was not engaged with participants with any type of debate around the research issue and I spent all the allocated interview time listening and recording information. A short telephone interview followed the first interview for clarification on some points the day after the interview. At the same time, I offered to send a copy of the completed study to the participant and assured the participant that the collected responses would be kept strictly confidential.

### **Data Processing and Analysis**

Creswell (2008) explains that qualitative researchers collect and prepare the data for analysis through “developing a general sense of the data, and then coding description and themes about the central phenomenon” (p. 244). He uses the word *inductive* to describe how data go from their particular and detailed form as interview notes and transcripts to general codes and themes. This process helps in forming a broad sense of the data and finally generates a larger picture of the issue under study.

A qualitative researcher does not have to wait for the completion of data collection to start the analysis. According to Creswell (2008), qualitative researchers can analyse data simultaneously while collecting the data. I used this approach in analysing the data after the first interview. This allowed me to discover areas of further investigation to probe the next interviewee. It also told me if another short interview with the same interviewee was needed to clarify some points. Creswell calls it iterative, which means that the researcher goes back and forth between data collection and analysis to fill

some gaps of information. I read the collected data several times to generate a deeper understanding of the views of participants and to see what themes emerge from the data.

To organize the data collected, a file was created to store each participant's interview notes. The interviews were recorded and transcribed. Through the transcription process, these interview recordings and notes were then converted into text data. I then used hand analysis to analyze the data. Creswell (2008) explains that using hand analysis "means that researchers read the data, mark it by hand, and divide it into parts" (p. 246). According to Creswell, the use of hand analysis of qualitative data can be used if transcripts are less than 500 pages. I assigned a number to each participant's data. I coded the data by labelling and segmenting them. According to Creswell, there are no specific rules to code the data. I listened to the recorded interviews multiple times to transform the data into text. The text data were segmented and labelled to form 16 different headings (codes). Further analysis of the text data was conducted to reduce the overlapping and redundancy of the codes. These codes were then collapsed into seven themes. Chapter four presents the full details of these themes.

### **Limitations**

The purposeful sampling of this study and the selection of participants from one organization with a common financial background maybe considered a limitation to this study. As the purpose of this study was to obtain the opinions of participants on the role of education in building individual human capital, some common views of the issue did arise from the data collected due to some similarity in educational backgrounds of the participants. The views of employees from one organization can be unified due to some corporate culture effects, and may not give a diversified set of opinions. On the other

side, these same points were a positive part of the used methodology. Understanding how similar professionals with similar educational backgrounds view the investigated issue in this study can increase our understanding of the views of that group. This can leave the door open for future research on this issue using a quantitative approach to conduct a study by randomly sampling a group of similar professionals. Future qualitative studies can study a different group with different educational backgrounds.

### **Accuracy and Credibility**

In this study, I confirmed the authenticity of the data collected through the use of member checking. Analysis and interpretation of the data were taken back to participants to conduct a member checking. In this process, Creswell (2008) explains, “the researcher asks one or more participants in the study to check the accuracy of the account” (p. 267). I asked the participants to check if my interpretations were fair and representative, and whether the description and analysis were full and accurate.

### **Ethical Considerations**

The guidelines of the Brock University Research Ethics Review Board (REB) were followed in this study. Because there was human involvement in the research, an approval was obtained from the REB (Appendix B). The general details of the study were submitted to the board along with the invitation and consent form that participants would sign. No data were collected before the REB approval was obtained. After I received the approval from REB, I recruited participants for the study. I explained the research process to the participants and how the interview would be conducted and their right to withdraw from the study if they wish. Participation in this study was voluntary. Participants were not obligated to participate and no punishment in any form would be

enforced over participants if they decided to withdraw. Participants also had the right to refuse to answer any question at anytime during the interview. The names of participants were not identified with the completed interview data. Information was kept strictly confidential. Identifying information was coded and used for the purposes of analysis only.

The purpose of this study was to seek participants' opinion on the role of education in building individual human capital and on the contribution of education in building participants' own human capital. The two research questions this study addressed were:

1. How do participants see the role of education in building individual human capital?
2. How has education contributed in building participants' own human capital?

Understanding the role of education in building human capital may let people give more attention to education. Organizations need to see the value of human capital to increase their investments in training and development. There is a need to promote the role of education in building human capital to policy makers at all levels to increase educational funding. Individuals also need to understand the value of their human capital to justify the time and money they invest to get their education. Colleges and universities need to know the value of their output, to better value and promote the process of knowledge production and dissemination. By knowing the role of education in building human capital and the value of human capital, different stakeholders can have better answers to different questions regarding education.

## **CHAPTER FOUR: PRESENTATION OF RESULTS**

This study investigated the role of formal education in building individual human capital by asking five participants two main research questions. The research questions focused on participants' perceptions of the role of education in building individual human capital and the contribution of education in building their own human capital. The collection of data was conducted through one-on-one interviews at different locations including restaurants, offices, and homes. Participants' answers to the research questions were audio taped and analyzed, and a detailed presentation of the findings of this study is the focus of this chapter.

To analyse the data, I listened to the recorded interviews multiple times to transform the data into text. The text data were segmented and labelled to form 16 different headings (codes). Further analysis of the text data was conducted to reduce the overlapping and redundancy of the codes. These codes were then collapsed into seven themes. These seven themes are: (a) the role of education and human capital, (b) education and the wellbeing of individuals, (c) the goal of education, (d) building individual human capital, (e) education's effect on one's life, (f) a second chance of education, and (g) advice to educators.

The five research participants selected for interviews were five coworkers who are first or second generation immigrants from five different countries of origin. The four males and one female had business degrees except for one who had an engineering academic background. Participants had foreign education, Canadian education, and foreign and Canadian education. Participants' ages ranged from 25 to 67 years old and

had different marital status. The following pseudonyms' represent the five participants in this study: Diana, Zakaria, Rafi, Ekioss, and Colin.

Diana who is a first generation immigrant has a degree in elementary education from her native country and a bachelor of business administration from an Ontario university. Her overseas education and work experience as a teacher and her Canadian education and business experience made her an excellent fit to participate in this study. She works as a human resources administrator. Zakaria who is a first generation immigrant is a senior accountant who has more than 40 years of work experience in and outside Canada. His wide business and life experience acquired after completing his accounting degree and his Canadian and foreign work experience made him a good source of information for this study.

Rafi who is the youngest participant in this study (25 years old) is a second generation immigrant. He has a bachelor of business administration from an Ontario university and works at the business operation section of the company. His views as a young professional are important in this study. Unlike the rest of participants, Rafi was born in Canada, educated in Canada, and has only Canadian work experience. His views of the research issues are driven from his education, work, and life experience. Ekioss has a foreign degree in engineering and a Canadian college diploma in graphic design. He works as a product manager and has more than 20 years of work experience. Ekioss is the only participant who does not hold a business degree. The Canadian and international education and work experience of Ekioss make him a good candidate for this study. Colin has a foreign bachelor of business administration and works at the business operation section of the company. He has more than 25 years of Canadian and international work

experience and a diversified knowledge of the different administrative sections of the company.

The five participants are my colleagues whom I interact with on a regular basis in my daily work which facilitated the process of data collection. At the same time, participants voluntarily accepted to participate in this study. The paragraphs that follow provide a description of the seven themes developed from the data and direct quotations that support these seven themes.

### **The Role of Education and Human Capital**

The importance of education at both the individual and societal level was well understood and highlighted by all five participants. Rafi explained how education can be the first step in building individual human capital. He stated that:

Education is the stepping stone I believe in order to gain individual human capital. There may be cases where a zero higher education can put someone on the right path, but those cases, in my opinion, are very rare, so you will need education to make yourself worth more as an individual.

Zakaria explained the importance of education by giving an example of two individuals working in the same organization. One with education related to the performed work, and the other with experience but less education. Zakaria stated that one can rely on the educated individual because of that individual's educational background which makes him more reliable. He explained that:

The educated one can rely on himself because he knows the principles, the needed fundamentals, and when he faces any case he can solve it because of his good understanding of the underlying theory. He does not need to

go to his manager to ask about this or that, and this is unlike the experienced individual with less education who can say that I did not face this problem before so I do not know it. But the educated person has the weapon of education that makes him solve any problem.

Colin stated that there are both social and economical benefits of education. He explained that:

Socially means that every person has some needs. These needs can not be filled by persons on their own. They have to be connected to the people around, and education will help you get the right person and have the right answer. Economically, you can use your knowledge to set your goals and use your capabilities positively and efficiently without going to the negative sides that can make you lose.

Diana stated that education provides skills and information for students that help them build their human capital. She explained that:

Education has many important things such as the building of skills and information and this is very important for a person or a student to get from his or her educational institute or school. Also education has an important role in building students' social capital and I think that anyone should get three things from education: skills, information, and social capital.

Zakaria explained his understanding of individual human capital as an investment in the individual. He explained that:

My understanding of individual human capital is the investment you put in the human being to develop his understanding, skills, and education. In my

opinion, when you build up a person through different means of education, it is a kind of investment. When you have a son and you send him to school, you try to give him all means of education and development and whatever you pay for him it is an investment in that person.

Rafi believed that the skill sets that an individual has is reflected in that individual's income. He explained that: "all your skill sets are equal to the amount of money you make". Diana understood individual human capital as the skills and knowledge of individuals that can be obtained from school. Ekioss understood individual human capital as "the collection of information and awareness to the surrounding environment and what he is about to do in the world". Colin explained his understanding of human capital and stated that:

It is obvious as the word says 'human capital' that everything circles around the man or the human being. Education is like equipment or a weapon, and once you got the weapon, it is up to you how to use it. Education will never allow you to use this weapon negatively because education will give you a positive sense and you will not be polluted by the circumstances around or by the negative forces because you have education. These are all your capital and your assets, and if you make a decision under these qualities, we can expect that decision to be correct for you and for the other persons connected with you, for the society in which you live in, and eventually for the country or the institute you are working for.

### **Education and the Wellbeing of Individuals**

Rafi stated that education increases the wellbeing of individuals in many ways and that the more knowledge an individual has, the better it is for the individual. He explained that education is closely related to his wellbeing and that is linked to his happiness factor:

Wellbeing is your happiness factor. If you have the ability because of education to give yourself financial security, to give yourself social security, to give yourself networking security, this will all increase your wellbeing. In my case, university education has increased my wellbeing because it got me everything I need. It got me my house, it got me all my friends, and it got me a very good position in life and if I stayed without getting an education, I would not have all these things today.

Ekioss asserted that education definitely affects the wellbeing of individuals. He explained that:

The information an individual has or gained during his lifetime of course will build up his personality and make him more adopted to the world around him and more able to live a successful life. The more knowledge an individual has about what is around him, the more he is able to be a productive person. The more he knows about his specialty, the more he is worthy to the field he is in.

Diana stated that education affects the wellbeing of individuals by enabling them to enter the labour market and get jobs. She explained that:

Education of course affects people's wellbeing because when anyone has skills from his education, he will enter the labour market and find a job.

Another thing that is also important besides finding a job is having a wide base of social capital and friends which is added to his future life. Those friends can complete his life and make it excited and fun.

### **The Goal of Education**

All participants agreed that the social, cultural, and economic sides of an individual's life are important because they are all needed. Zakaria stated that:

I believe that the social, cultural, and economical sides are important.

When you take care of the three of them is much better. In order to be an important person in life, you should be well aware of all of these things.

When you are educated and you cover yourself with all of these topics, it is much better and I think that they are related to each other in a way.

Rafi declared that there should not be a focus on one side or the other but there should be a focus on all sides. He explained that:

I do not think that there should be a focus. I think there should be a well rounded attack because if you specifically focus on one thing you will lack in another. So if you are just taught theories but you do not know how to socialize or communicate probably with a prospective company, how will you expect to get that job? How will you expect to increase your worth?

So it has to be well rounded, you have to be taught in every single aspect, and I think that is where university is lacking because they teach you the theories, they teach you the points and everything you need to know but

they lack in the experience. They do not give that individual an experience. They throw a 22 year old into the world with very little to know experience and that is why I think it should be a well rounded attack.

Ekioss gave more importance to the social side of life and asserted that education should focus more on the social side. He explained that:

Over the time I get more and more convinced that education should concentrate on the social side. Education should teach students how to be more involved in their society and not just to teach them information taken from books and have nothing to do with the world around them. Students should be taught how to apply knowledge to the world they live in and the people around them, and how the people around them can benefit from what they gained at their academic institution. It is very important for students and those who seek information and skills to make their skills correlated to their society. They should not gain knowledge independently from where they live. It is very important to be involved as much as they could and should be able to apply what they learn in the places around them. Seeking information that cannot be used in a society or a community is worthless. Students should be able to use it or they should go somewhere else to use it. Co-op courses are very useful and it is one tool but there should be other ways to make students more involved in their society.

Colin stated that the focus of education depends on the goals and objectives of policy makers. He explained that:

Educator must have the knowledge about the deficiency of the different areas of education and you have to see different studies and look at the results of studies that show the strengths and weaknesses of educational areas and then you focus your capabilities accordingly. The weaker areas should get more focus. In other words, you must look at studies before you set your goals. The focus of education can also depend on the population of students and their cultural backgrounds.

Diana explained that education should focus on building the skills and knowledge of students and should teach students how to live outside schools and participate in their society. She explained that:

Elementary, middle, and high schools should focus on building skills, information, and also how to live outside school, how to live in the society, how to be friendly and how students build social life. Students should learn how to make friends and communicate with others. Teachers should also focus on teaching students the good behaviour, how to be a better person, and how to respect older people because this does affect the society. I think that schools build civilizations and it is important to feed our students good culture and behaviour and they should be taught both theory and practice. Families are now very busy and cannot play the first role in a student's life and teachers should play that role. Some schools do

not give any attention to student's behaviour and that is not good for students.

Participants explained their views on educational policies in different ways. The transfer of knowledge from educators to students was highlighted by Zakaria. He explained that: "the goal should be to transfer knowledge of teachers and instructors to the people they teach. They have to sincerely pass their knowledge to students". Rafi stated that the goal of education should focus on helping the younger generation fill the shoes of everyone to continue the cycle of life. Rafi explained that:

Generations have to be taught properly to increase and benefit human society. If our younger generations are not taught properly or we lose a focus on education, human culture and knowledge will start decreasing. Students have to be taught to the best of our abilities. The goal should be to increase what the students already know.

Ekioss stated that education should direct students to know how they can be beneficial to their societies and how they can be worthy to others around them. He explained that:

You need to teach students how to be beneficial to the people around them and that is the most important thing. Once the student becomes important to his surrounding, from there he can build his wealth and anything else he is looking for. We read in some books how to get rich, and how to develop your skills to become rich. I do not really like this materialism world. The way they should teach is how to be worthy to others.

### **Building Individual Human Capital**

Zakaria stated that academic programs should be the major way in building individual human capital, and any other way may not fill the gap of academic education. He explained that: “teaching through school is the most important way in this regard to learn the fundamentals and principles of things and that can be done first at an academic setting and anything else is not enough”. Zakaria asserted that whoever is capable of getting another academic degree should do so because education outside an academic institution is not enough. Rafi stated that building human capital of individuals depends on these individuals’ choices and preferences in life. Rafi explained that:

If my goal is to become a doctor, I have to go to university and take all the steps to become that doctor. If I see myself as a painter, I will have to take the proper workshops and the proper path to achieve that. If I want to be a business professional, I would go to university to get my B.A. and in a couple of years gain experience and go back to get an MBA or an accounting certificate, or anything that I can get to increase my worth, because when you increase your knowledge worth, you can increase your capital. You can increase your ability to earn an x amount of dollars.

Ekioss stated that students should learn how to be independent researchers to keep a continuous process of building their skills and knowledge. He explained that:

I think that everyone should learn how to become a researcher then he will be able to find the right way for him to build his skills. Students in our schools should be taught how to research themselves and find solutions for themselves. The way students can get information now is limitless. There

are so many schools on the internet. You can join societies and get involved with friends, so there are so many ways.

Colin had a different view and stated that building individuals' human capital depends on the capabilities of individuals. He explained that:

It is like entering a highway and the traffic is running at 100 kilometres per hour. If I am capable to merge with the traffic at the speed of 100, it is ok and I can go ahead. Otherwise I can start as a learner in a small street where the speed is 40 kilometres per hour, 50, or 80 then come to the highway with a high speed of 100. So it all depends on the personal capabilities and the opportunities are unlimited to go as far as the person can.

Diana had a view similar to that of Colin on the issue of building individual human capital and the abilities of individuals. She explained that:

I think that depends on the person's ability as it is different from one person to another. The person needs to find something he likes and can do at the same time. If I can do a certificate and I am very happy with it, this is fine. Also others have a PhD and became professors. This is because of their ability. In this life, anyone without skills cannot have a good life because of the high competition at this time. Everyone needs to have skills to be able to enter the labour market.

### **Education's Effect on One's Life**

Participants had different schooling experiences. They had Canadian degrees, foreign degrees, and Canadian and foreign degrees. Zakaria highlighted the importance of teaching the theoretical side of knowledge to students. He stated that:

When I was at school, I was taught the principles, fundamentals, explanations, and the theory of every development in the world. So when you go to school, you should study the theory. If you hold a good theory, you can always find an explanation for any development or anything in your life.

Rafi who is a graduate of a Canadian university promoted the way he was trained to deal and interact socially with whom he comes in contact with. Rafi explained that:

I went to a large university in southern Ontario. I learned business management. It was more geared towards how to deal with people, organizational behaviour, marketing, not so much on the numbers side but what it taught me is how to interact socially with everybody I come in contact with. It gave me the skill set to increase my worth in the company and get recognized to say that this person knows what he is talking about, believe in him. Follow through of what he says because he is right. But if I did not have the education to tell me that this is how you suppose to do business, these are the proper theories to do business, these are the steps, if I was not taught that or I did not have the experience to do that, they will not listen. Humans put their trust in the person who knows more about a subject rather than who does not know. So if I put myself versus another

person in the company, they will listen to my advice a lot more than they would listen to someone with lower educational level even if they have more experience.

Rafi explained how he learned the social aspects of life through university education. He stated that anyone can read books on his own at home or search the internet to learn everything there is to know. But if there are no interactions with professors and other students at an academic institution, an individual will not know how real life works. Ekioss explained how he regrets that he was able to get only technical skills during his educational journey that took place outside Canada. He explained that:

Unfortunately, I am one of those who learned outside Canada and the school did not give me anything other than technical information. From elementary school and all the way to university, they do not give you more than technical skills. Other than that you have to learn how to do it yourself. They do not give you more than technical skills. When I came to Canada, the school I joined for postgraduate also teach you technical skills rather than developing your personality.

Colin explained that education had taught him “not to be static and close his brain doors. It should be open as there is no end of knowledge”. Colin added that education taught him how to have a welcoming attitude to new knowledge and new ideology and this makes him a daily learner and gives him energy and self confidence. Diana explained that she came to Canada as an immigrant many years ago with some education and she was a teacher in her native country. But she was not able to practice her teaching career due to her English language skills. She explained that:

I came to Canada as an immigrant nine years ago. I was a teacher in my country and when I came to Canada, I put my degree in the garbage because I cannot use it here. I started from zero and went to university, started a new bachelor degree, graduated, entered the labour market and found a good job. That helped me to get new friends and share many activities with others. I have all things I want now. I learned more skills from my university in Canada. I gained skills and how to communicate with others and how I can live in Canada.

Education affected participants' lives in different ways. Zakaria stated that education had affected his life from all sides. He explained that because of education, he did not face problems throughout his long life, and that education affected positively his spiritual, cultural, social, and economical sides, but in different degrees. Rafi explained how education affected his life economically by getting him a job and a good salary to be able to have a good life. He stated that:

Economically, education gave me the ability to get into a job that gives me enough income to survive in this world. Most people struggle and I have been fortunate that education gave me the ability not to struggle. Socially, I gained my best friends. We all played soccer in first year and we have been friends for the last 10 years now. We see each other two or three times a week to play sports together. It is a sense of wellbeing that you are among family and friends all the time. Culturally, it puts me in a different status structure because when you get a degree you put yourself in a higher standard in the world but I try to be very humble about it and I

consider myself very lucky to be even given the opportunity to higher education.

Only the economic side of Ekioss's life was affected by education. He explained that this is due to the way he was educated and the focus of education on teaching technical skills only. Education in Ekioss' case did not affect social and spiritual sides of his life which he had to learn on his own. Colin declared that entering a university is just like entering the universe. He explained that:

University someone says is from the word universe, so if you enter the university then you enter the universe. There is an endless stream of knowledge at universities. How can I be away from knowledge if knowledge is power? When you enter the university it is like heaven as 100 percent of people are educated. There is no question that university can build up your personality and when you apply the power of knowledge, you yourself can get benefits, your institution, your society, your country, and indirectly the world.

Colin explained that education gave him a balanced look at things where he will not go to its extremes. This includes a balanced look at the economic side, spiritual side, social side and any other part of his life where he does not put a total focus on one side and leave the others. Diana explained that after graduating, she was able to get a job and her life turned in the normal direction. She explained that:

Education affected my life very strongly. I came to Canada like a zero person. My opportunity cost was zero. I was not able to speak English and I was not able to communicate with others. My education gave me many

things and most important is the economic side. I am now working, getting a salary, and have money. My education also affected my social life. I have many friends now. I do not feel that I am alone here as I do have many friends. I feel that I have many skills that I can go anywhere and I can do anything I want and I am very happy with this now.

### **A Second Chance of Education**

Four participants will choose a different path of education if they are given the chance to do so except Zakaria who would do the same things and take the same road of life if he is given the chance to go back to school and start from the beginning. “I came to Canada with education and money and faced no problems because of my background. So if I get another chance I will do the same thing”. Rafi would get into an internship program if he is given the chance to redo his university education. He stated that:

If given the chance again I would finish university a little faster. I also wish that I was put into an internship where I got to learn and gain experience while getting educated. The university I went to had very little internship programs. That is why I like the college structure a lot because they force you to go in the real world and learn so you can get into those businesses and learn what a real job takes. I wish that I did an applied program where I got an experience that can increase my value more than a degree. You can go to school for 15 years and get every degree in the book, but basically you still have to start from somewhere to gain real life experience.

Ekioss would choose a different school that can contribute to the social and moral sides of life besides teaching theories and technical issues. According to Ekioss, schools should teach students how to be useful contributors to their societies. Colin stated that if he is given the chance to repeat his schooling experience he will become a teacher. He explained that he inherited the ethics and values of education from his parents. He explained that most of his family members are teachers and that he has the quality of a teacher and can be a great one. Diana explained that if she is given the chance to repeat her schooling experience, she will choose to study medical science and become a physician because of the financial rewards enjoyed by physicians. She explained that:

If I go back to do school again, I would study medicine and become a doctor because I like money. Here in Canada, doctors earn more money than anyone. Because I have more life experience now, I know that life is hard you need money to build anything. So if I go back to school, I would take a new path which is to become a doctor.

### **Advice to Educators**

Participants were asked if they had any advice to educators. Zakaria's advice to teachers and professors was to use as much as possible the modern tools of technology like computers and go as much as possible beyond the normal methods of teaching. He stressed the connection of theory to practice; "If you are teaching diesel engineering, it will not be enough to explain how the machine works. Students should be taken to see the equipment itself, how the machine works, and let them practice". Zakaria concluded that students should learn how to apply theory in real life. Rafi's advice to teachers and university professors was to engage the students more and get them interacting and

involved with other students. He explained that “if students just sit back and listen to lectures, it goes in one ear and out the other”.

Ekioss’ advice to teachers and professors was to be close to their students. He stated that “the more teachers are close to students, the more students will like teachers and seek information from them and the more they will see value and accept the knowledge they get”. He added that teachers should guide students to the right path and be like their moms and dads. Ekioss’ other advice to teachers and professors was not just to teach students new information, but how to get this information because information can be forgotten and if students are not able to find the needed information themselves this will not be good to students. Ekioss believed that an educated person should always be able to retrieve information, and without learning the ways to do that the progress of learning will be halted.

Colin’s advice to teachers and professors was to be open minded to new knowledge and inventions. He pointed to the new scientific achievement of making a synthetic cell that can reproduce other cells automatically, and how teachers need to pay attention to the new development in science and technology. Diana’s first advice to teachers and professors was that they need to care about students and not look at students as customers. She said that:

I would like teachers to be more interested about students and not look at students as customers. Teachers should go beyond giving information to students and should care about their behaviour. Teachers should contact parents directly because it is important for parents to know all things about their children. I also have an advice for professors at universities.

Professors should teach more applied than theory. Some professors are very good at this, they ask for presentation and written reports but others depend on questions at the end of the book and this is not good for students.

## **CHAPTER FIVE: SUMMARY, DISCUSSION, AND IMPLICATIONS**

This study examined the role of formal education in building individual human capital. The acquired skills, knowledge, and capabilities of individuals through education need to get more attention from all education stakeholders and from the general public. Knowing the role of education in building human capital can shed light on the leverage of education, and can justify the investment in different educational programs. There is also a need to shed light on the value of human capital, which can explain the return on investment from education for individuals and encourage them to invest in their education. Knowing the role of education in building a valuable human capital can be an effective tool to get the attention of younger generations by highlighting the need for a good educational base for future success. A better understanding of human capital may change the way organizations look at their employees and change the way employees look at their wealth of knowledge.

The purpose of this study was to investigate how well-educated professionals see the role of education in building human capital. Understanding the role of education in building human capital can give more attention to education. There is also a need for a better understanding of the role of education in building human capital so that policy makers at all levels may consider increasing educational funding to benefit society. Individuals need to understand the relationship between education and their human capital to justify the time and money they invested to get their education. Colleges and universities need to know the value of their output, to better value and promote the process of knowledge production and transmission and help the general public appreciate their work more. By knowing the role of education in building human capital, different

stakeholders of education can have more answers to different questions regarding education.

While the importance of a good education is a key factor in the success of learners, this study reveals the power of social capital in making this success a reality. It may not be enough for an individual to acquire good education to guarantee a better future. The power of social connections can be the main determinant in one's wellbeing. This study shows that it is important to address students' life outside school beside the importance of a classroom education. The findings from this study are in line with Bourdieu's (1986) statement that it is impossible to explain the structure and function of a society without introducing capital in all its forms that includes social, cultural, and economic capital.

### **Summary of the Study**

This study followed a qualitative research approach to investigate the views of educated professionals on how they see the role of education in building individual human capital and how education contributed toward their own human capital. The imbedded knowledge and experience of the research participants was revealed through the use of the qualitative approach. The knowledge and experience of participants which cannot be translated into numbers, and may not have an accurate measure on a quantitative scale were revealed through the use of open ended questions. It is difficult to measure insights, feelings, love, happiness, sadness, or emotions on a scale from one to five. In this study, the intent was to understand the insights of participants on the role of education in building individual human capital. There was no intention to generalize the results.

The use of open-ended questions in this qualitative study allowed participants to reveal their insights about the issue under study without the need to choose from quantitatively pre-determined answers. This helps in maximizing the understanding of participants' views by readers of a completed qualitative research study. This qualitative research did not seek to develop a consensus of opinions. The aim of the research was to get an in-depth understanding of the viewpoints of individual participants who were purposefully selected for this reason. Participants were five educated individuals in my place of work who were intentionally selected to uncover the views of educated professionals in a knowledge-based division of a business organization. These professionals were able to reflect and comment on the role of education in building up human capital. It was relevant for them to describe their experience with education and how education contributed toward building their own human capital.

This study used one-on-one interviews to collect data, and only one participant at a time was interviewed. This process was comfortable for participants, allowed for some privacy, and yielded an in-depth response from each single participant. An interview protocol (see Appendix A) was utilized to record information during interviews and the data collected were recorded and transcribed. After data collection, a general sense of the data was developed to facilitate data analysis through an inductive process that transformed data from interview notes and transcripts to general codes and themes. During the process of data analysis, seven themes emerged. These seven themes are: (a) the role of education and human capital, (b) education and the wellbeing of individuals, (c) the goal of education, (d) building individual human capital, (e) education's effect on one's life, (f) a second chance of education, and (g) advice to educators.

This process helped in forming a broad sense of the data and generated a larger picture of the issue. Interview transcripts were checked, confirmed, and validated by the interviewees.

This study attempted to understand how some educated professionals view the role of education in building individual human capital through a set of main and sub-questions. The two main research questions focused on these two issues: (a) the research participants' perceptions of the role of education in building individual human capital and (b) the contribution of education in building the participants' own human capital. A wealth of understanding of these issues has been generated from the participants' comments and replies to the research questions. Their insights clearly highlight the important role of education in building the various aspects of their life, and how education can be a stepping stone in building human capital. They also highlight the advantage educated individuals have over less educated individuals.

Four participants clearly point to the social and economic benefits of education to themselves and all of them believe education is important in building their human capital and get them where they are today. They explain how education helps individuals connect to the right people to fulfil their social needs and how the stock of knowledge of individuals acquired through education can be used to set economic goals. One participant refers to individual human capital as the investment in individuals to develop their skills and knowledge through education. Participants connect their social and financial security and wellbeing to their education which has given them the tools to enter the labour market and the tools to make the right social connections.

All participants agree that the social, cultural, and economic aspects of an individual's life are important because they are all needed. They explain that students should learn the theories of knowledge and how to socially communicate with future potential employers to be able to get jobs. Four participants indicate the lack of focus by universities on other aspects of life that are beyond the teaching of theories, which may include a real life work and social experience. They state that the knowledge students obtain from education should be connected and directed to its applicability in the economic and social lives of communities. One participant explains that the focus of education can depend on who the students are and their cultural backgrounds and how the cultural dimension of education is important due to diverse students' cultures. The importance of teaching good behaviour is also highlighted and how education should build positive personalities and good attitudes in students.

Three participants point to the importance of academic programs in building the human capital of individuals and highlight how academic programs can be the major way in the construction of the skills and knowledge of individuals. They also explain that building human capital depends on the preference and ability of an individual. This means that people decide how to build up their stock of skills and knowledge but are limited and constrained by their abilities. One participant points to the importance of the internet at the present time in helping individuals connect to some academic programs and how it is important for students to become independent seekers of knowledge. One participant advises teachers and professors to utilise technology in education and connect theory to practice. Another participant advises teachers to involve students in class discussion, and teach students how to retrieve knowledge on their own when needed.

Another participant advises teachers and professors not to treat students as customers and to teach both curriculum and good behaviour. She also advises school teachers to communicate more with parents and engage them with school activities.

Four participants state clearly how education affected both their social and economic wellbeing. They highlight how education has enabled them to succeed in joining the labour force and in making their social connections and friends. The effect of education on participants' social and economic wellbeing depends on where participants got their education. Those who are Canadian educated benefit both socially and economically from their education and those with foreign degrees benefit less from the social benefits of their education. Four participants would choose a different path of education if they are given the chance to do so. Of these four, one would choose an academic program with internship that can make it easier to join the labour market and build up a social base. One would choose a different career and become an educator because of his natural ability and two would choose medicine because of its perceived financial rewards.

All five participants believe that highlighting the financial benefits of one's education gives an individual something to strive for and can be an incentive to new entrants to higher education to choose a good career. All participants state that they would benefit from knowing the economic benefit of their skills and knowledge obtained through education. One participant states that knowing the financial rewards of one's human capital can shed light on the issue of retirement planning. Participants believe that understanding the economic benefits of education is useful in helping people understand the advantage one's skills and knowledge can give.

Three participants state that high school teachers can motivate those students who are at risk of dropping out of high school by highlighting future financial rewards of education. They explain that the economic benefits of education can motivate students to achieve their academic goals if they know that their knowledge and skills acquired through education have a value. If students believe that if they increase their education, skills, and knowledge, they have the ability to make themselves worth a lot more than somebody else, they will be motivated to strive for more education. Participants state that knowing the economic value of education at the high school level can motivate students to complete high school and get good marks to be able to get into a good higher education academic program.

One participant states that highlighting the economic value of education can promote education. Another participant explains that it is in our nature as human beings to be proud of ourselves and when anyone looks at the value of skills and knowledge and sees that education makes a difference, that person will become motivated to get more education to advance to a higher level of worth. A third participant states that education is interlinked to the economy because education is the primary source for an individual to obtain employment. Participants conclude that knowing the economic rewards of education can help students stay at school until they graduate and then enter a college or a university to get higher education. According to these participants, building human capital can be the key for students' future success.

### **Discussion**

The development of human capital through the building of skills, knowledge, and capabilities of individuals is an important function of education. This is a qualitative

study. In a qualitative study, the researcher makes a personal assessment as to a description that fits the themes that capture the major categories of information (Creswell 2008, p. 245). The following paragraphs present my personal assessment of the information provided by the research participants, and I relate their views to those I have found in the relevant literature. Participants' understanding of education as the key factor in building individual human capital is consistent with the literature on human capital and its relationship with education. Namasivayam and Denizci (2006) claim human capital is people's education, know-how, and work-related competencies. Abhayawansa and Abeyskera (2008) state that "individuals enhance their human capital through education and training" (p. 55). Hartog (2000) notes human capital is an important concept to understand individual performance in relation to education. Neumann (2010) points to the contribution of education in building human capital and the kind of knowledge that students need.

The strong relationship between education and human capital noted by all the research participants is consistent with the human capital literature. This relationship is highlighted by Kirby (2007) who explains that education is increasingly viewed as an agency capable of fostering human capital by facilitating innovation and knowledge. Langelett (2002) states that human capital is "the 'know how' of the work force" (p. 1). April et al. (2003) state that human capital includes employee know how, employee education, vocational qualification, work related knowledge, work-related competency, and entrepreneurial spirit. Bontis (2001) states human capital is the individual's stock of knowledge. Wasmer (2001) divides human capital of individuals into two main

components: education and experience. These referenced statements support the findings of this study regarding the strong relationship between education and human capital.

One participant understands human capital as the investment in an individual to develop that individual's skills and knowledge through different means of education, which is in line with human capital definitions in literature. Benjamin et al. (2002) define human capital as the characteristics people can gain to improve their productivity through education and other forms of training. Smith (1776) stated that education should be considered as an investment in human-beings. Nerdrum and Erikson (2001) state that "human capital theory affirms that people invest in themselves, through accumulation of different types of human capital goods like formal education and productive knowledge and information in order to constitute stocks of generally intangible human capital" (p. 130).

The positive relationship between education and the wellbeing of individuals is clearly stated by all research participants and they indicate that wellbeing can be broken down into social and economic components. Both components are evident in literature. Vila (2005) asserts that education reduces the risks of poverty and social isolation which increases the social wellbeing of individuals. One research participant (Rafi) explains the wellbeing of individuals as related to the happiness factor, which is in line with the view of Noddings (2003) who asserts that one goal of a good education should be happiness. The happiness factor noted in the findings from this study is also consistent with Michalos (2008) who asserts that education influences people's happiness. White (2007) argues that a major purpose of education in a democratic society is to provide people with

the tools for a promising life. It is clear that findings of this study are in line with the relevant literature.

The economic wellbeing of individuals and its connection to education highlighted by participants is also in line with the relevant literature. This positive economic effect of education on individuals is the heart and soul of the human capital theory. Literature is available that asserts the positive relationship between education and the economic wellbeing of individuals. Cappelli (2008) discusses the effect of education on the economic wellbeing of individuals and states that more education allows an individual to make more money and be less subject to unemployment. Killeen et al. (1999) conclude that education plays a significant role in the job market, which reflects positively to the financial wellbeing of individuals. Smith (1776) stated that skilled workers should be compensated more than unskilled workers because of their higher productivity. Nerdrum and Erikson (2001) state that the accumulation of human capital embodied in human beings will increase the productivity of its owners, and lead to increased earnings. Apparently, research findings from this study are in line with the scholarly literature.

All five participants agree that the social, cultural, and economic sides of an individual's life are all important. This is consistent with the work of Bourdieu (1986) who states that it is impossible to explain the structure and function of a society without introducing capital in all its forms that includes social, cultural, and economic capital. Participants assert that education should focus on building the skills and knowledge of students and should teach students how to live outside schools, be involved in their communities, and build social capital. The participants' view is in line with Abada and

Tenkorang (2009) who examine the degree to which families' social capital works to influence youth's post-secondary attainment and emphasise the social relations and networks that work as channels of information for various opportunities. Abada and Tenkorang assert that immigrants, in spite of their higher levels of education, still run into barriers in the labour market and face a harsh wage disadvantage due to their lack of social capital.

The above paragraph clearly shows that both research findings from this study and previous literature emphasise the importance of social capital in an individual's life. This can be understood that social capital and economic capital can influence each other. It can be much easier to secure the economic wellbeing of individuals if their social capital stands on a solid ground which makes the economic wellbeing a dependent factor. At the same time, it can be easy to build relations and connections if individuals are financially secured which makes their social wellbeing a dependent factor. Participants think that schools should teach students how to live outside school, make friends, and build social capital.

Previous scholars and research findings from this study show that students would need good social connections to succeed socially and financially, and it is not enough to teach students the theories of knowledge only. Students and their families, according to Abada and Tenkorang (2009), would need a social connection to have a successful life. Pavey (2006) explains that "like financial capital, human and social capital ideas encompass the view that there is a stock that can be augmented, and it is desirable to have more rather than less of these commodities" (p. 218). According to Farrell et al. (2004),

communities that are high in social capital have higher levels of well-being than communities with limited social capital.

Qualitative research is subjective (Creswell, 2008), and I would like to add my interpretation of the data from this study to the discussion of the findings. It is sad to learn that an individual should be well connected to succeed. One wonders if the solution is to teach students how to build social capital. Maybe the solution can be the promotion of social benefits for those who are not well connected and the enforcement of a form of social justice that guarantees benefits for all regardless of their level of connectivity. I was shocked to know that the phenomenon of social capital is not only a sign of the East, but it is deeply embedded in Western societies as well. The sufferings of those who are socially marginalized are the same in the East and the West and the success of those who are well connected is almost globally guaranteed. Bourdieu (1986) explains that social capital is a credential that gives the right to the holder to receive benefits and one's access to a strong network of relationships can become a real or possible wealth.

Should educators teach students how to build social capital, or should they guide students to have a vision of social justice? Jiang (2009) addresses the role of higher education in achieving social justice and asserts that a key mission of universities is to promote social justice by communicating and advocating ideas to help advance social justice consciousness of the public. Jiang points out the scarcity of both natural and social resources in today's world and he states that it is hard for any society to equally distribute its resources among its social members. He claims that universities have to educate individuals with the knowledge of social justice and spread, promote, and safeguard the idea of social justice. Jiang explains that the role of higher education is beyond the

production of knowledge and should include the spread of moral ideals to society. I truly believe that making friends and being socially active should not interfere with fairness, and should not give a free ride to the friend maker. I describe my feelings in this poem:

I need a friend to be with me,  
And be where I will always be,  
Who shares my happiness and my pain,  
And I would also share with thee,  
Where we would have a happy time,  
Without we really have a spree,  
Who cares for me, for the sake of me,  
And builds a friendship for free,  
Who helps me when I need some help,  
And stands for me like an oak tree,  
Who loves to see me with a smile,  
Which I would also love to see,  
Whom I would share and give advice,  
And give support and never flee,  
Whom I would have a dialogue,  
Where we agree and disagree,  
Where care is really what we pay,  
And care is our only fee,  
A friendship that will last for long,  
That I would really guarantee.

Should educators start a race to build social capital or is the race already on? Can educators help build a society that is clean from the practices of social power where benefits are fairly shared by all social members? Can educators guide future generations to take the right social action to eliminate the suffering of socially marginalized members? Can educators pave the way for future generations so that minorities share the benefits of the majority? Can educators put an end to this social dictatorship? Can there be an end to this global social totalitarian regime, where benefits are inherited by social capitalists and hardship is inherited by the marginalized?

Findings from this study show that building individual human capital can be done through academic programs depending on the ability and preference of individuals. Certainly, it is only the acquired components of an individual human capital that can be built through education and not the inherited components. This is in line with the idea of Hudson (1993) who states that human capital is defined on the individual level as the combination of four factors: (a) individual genetic inheritance, (b) education, (c) experience, and (d) attitudes about life and work. An individual's genetic inheritance can affect what the research participants refer to as the ability of the individual to acquire human capital. However, an individual's genetic inheritance may be affected by education.

Findings from the study also show that the country of origin of an academic degree makes a difference. One participant had to disregard her previous degree obtained outside Canada and receive further education to obtain a Canadian qualification. This result is consistent with previous literature. Abada and Tenkorang (2009) state that thousands of immigrants come to Canada every year, loaded with all kinds of

qualifications and skills, end up doing jobs they never expected to do as educated individuals. According to Sweetman (2004), their foreign education is usually an explanation to this phenomenon. Sweetman claims that immigrants with foreign education are observed to receive a lower average return to their schooling in the Canadian labour market. Sweetman argues that the country of origin of one's education is an important issue in justifying differences in returns to education in the Canadian job market. Waters (2006) explains how the middle class in Hong Kong is encouraged by the demand for Western degrees to send students to the US, the UK, Canada, Australia, and New Zealand. Waters notes that the working-class competition in Hong Kong forces middle-class parents to increase their investments in a prestigious international education to maintain the scarcity of their qualifications.

Connecting theory to practice, co-op programs, and internship are highlighted by four participants as either an advice to educators or a desired educational experience that they would choose if they repeat their schooling experience. It is the issue of connecting academic knowledge to the labour market that is behind participants' emphasis on these matters. This research finding is in line with previous scholarly work by Cappelli (2008) who promotes an expansion of work-based education. Kirby (2007) states that university programs are often linked to the needs of employers. Killeen et al. (1999) assert the importance of integrating education and future occupations of students. Killeen et al. explain that the demand for higher education is tailored to the needs of the labour market and this means that some individuals take courses that can increase their economic wellbeing. Killeen et al. conclude that students in their study believe strongly that education has a market-signalling role, and that education offers an "ideal-typical

credentialised access to opportunities: that qualifications are a paper currency that can be exchanged for work opportunities” (p. 112).

The importance of the economic value of education to individuals, communities, and nations cannot be ignored. In addition to the social benefits of education enjoyed by individuals and their communities, the financial rewards of education should also be an important part of the discussion of human capital. One research participant asserts that if given the chance to redo university, the choice will be to study medicine for its financial rewards. Another participant says that he always wants to become a doctor because he knows that doctors earn excellent incomes. This is supported by Quinn and Price’s (1998) empirical study which concludes that physicians’ income is the main factor behind the demand for medical education, not the joy of learning about medicine and helping one’s fellow citizens. According to Quinn and Price, income is found to be the driving force behind the decision to apply to medical schools.

All five participants assert that they would benefit from understanding the value of their individual human capital. One participant highlights a natural personal interest in knowing one’s economic worth. Two participants realize that the research interview opened their eyes on how they should look at the return on their investment in their skills and knowledge, and how one can plan for retirement. Each participant finds something useful in understanding the value one’s skills and knowledge for personal benefit. This is consistent with scholarly research that highlights the need for understanding individual human capital. Bontis and Fitz-enz (2002) state that the development of human capital is positively related to education and that it is important to understand the value of human capital. Mayo (2000) highlights the fact that understanding human capital is a challenge

and states that the more we see people as the key driving force of value, the more important it is to understand their value.

One finding in this study is that research participants point to the benefits of highlighting the financial rewards of education and how it can be used to motivate students at the high school level. One participant explains that a child will always look at a value and if a student does not see the worth of it, the student will not strive for it. Another participant explains how high school teachers can motivate those students who are at risk of dropping out of high school by asserting the benefits of education. This participant believes that students who are on the right path and continuing their higher education are already motivated. But those who are about to quit school can be motivated. A third research participant explains that knowing the economic value of education at the high school level can motivate students to complete high school and get good marks to be able to get into a good higher education program. This participant explains that students in colleges and universities are already on the right path and that the economic value of education can motivate students at the undergraduate level to seek an advanced degree. This is consistent with the view of Quinn and Price (1998) who assert that graduate or professional education is often viewed mainly as an investment decision. According to Hartog (2000), the first incentive for individuals to build human capital is an increase in future expected benefits in the form of higher salaries for those who have finished their schooling. In addition, Hartog states that obtaining human capital through schooling may not only raise an individual's market value, but may also increase enjoyment of literature and culture.

One cannot build a liveable life without the use of financial resources. The monthly bills of a normal household can only be paid with the use of these financial resources. It is impossible to pay the day to day expenses without economic means, regardless the level of social wellbeing. Even some teachers will quit their teaching career if their salaries are not up to their expectations. This is what The National Council on Teacher Quality (2009) in the United States highlights in its report and it recommends raising teachers' salaries to attract and retain good teachers. The reality is that a teacher or any working professional cannot put a dish full of social values on the dinner table. It has to be filled up with real food paid for by real money. I describe this reality with this poem:

He took the time to count the money,

And added every dime and penny.

He checked the pockets and the bags,

For every ten and every twenty.

He added each and every bill,

In a large amount or even mini,

And ended up with a lonely fact,

That can not be good or even funny,

That all the bills are barely paid,

And he would need the VISA money.

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He stopped the count and told his wife,

To check her bills if she has any.

She said to him we need to count,  
And count again and do as many.  
Until we find a better way,  
To trim the bills and make it skinny.  
We need to fix the flow of cash,  
The flow of life and make it runny.  
And fix each and every light,  
Until we really see it sunny.  
And at the end, she said to him,  
That life is tough without the money.

According to Maslow's (1954) hierarchy theory, an individual needs to fulfill the physiological needs of food, water, shelter, and clothing before meeting the needs of security, love and affiliation, self-esteem, and self-actualization. These physical needs can only be met in normal situations with the use of financial resources available to individuals. It is therefore crucial to have a continuous flow of financial resources to meet the basic needs of life for every individual. With this fact in mind, it is logical to have the goal of future flow of income when one builds human capital. A continuous flow of income can even be a prerequisite to build social capital as one would need the peace of mind to even think about social relations. At the same time, building social relations is not cheap and can be very costly. In order for an individual to give a gift to someone for the purpose of building a friendship or a relation, the individual has to have financial resources that are beyond the individual's basic requirements.

An incentive to generate financial resources to meet basic needs and beyond can motivate individuals to pay more attention to the process of building their human capital throughout their lives. It is therefore, vital to manage one's input of education, skills, and knowledge so that they can be used to secure work and a flow of income. Those who did not and are not willing to invest in building their educational base of skills and knowledge must find another way to pay for meeting their basic needs. One way of replacing the use of one's human capital to generate a continuous flow of income is to invest an available amount of money in an investment and collect investment income. This amount has to be large enough to generate a liveable income without the need to use one's education, skills, and knowledge in income generation.

What has to be stated in this regard is that students need to see how different they can be with education. They need to see that those who are fortunate to get a good education will climb all the way to the top of Maslow's needs hierarchy. And those who are not fortunate enough to secure the needed education may struggle for long periods of their lives to meet their basic needs. It has to be clear to students that those who will not strive for education may become a burden on themselves, their communities, and their countries. Students need to see that those who can barely meet their basic needs due to the lack of education will not have a high level of social and financial wellbeing. Students need to see that if they strive for education, their chance of living a happy life will increase.

One value of Bourdieu's (1986) social capital is related to the possibility of converting this social capital into economic benefits. Lobbying is a perfect example on how social obligations and connections can be converted into economic capital, which

explains in one respect the quest to build social capital for its expected financial rewards. If one can justify the immoral search to build social relations and connections for the expected immoral returns and benefits, then it can be an honourable mission to build human capital for the purpose of earning an honest income. This means that a future stream of earnings can be the key goal in some cases to motivate individuals to build their human capital. Next, I simulate a dialogue between the well connected rich and the unconnected but educated poor:

A rich and a poor met in the mall,  
And had a discussion in the dining hall.  
The rich stood and said to the poor:  
I have the world in my control.  
I have the wealth and all the means,  
I have the power and have the tool,  
To go to the top and reach my peak,  
To get to the end and reach my goal.  
I have whatever money can buy,  
A car, a house, and a fancy school.  
I have the past and all the future,  
And as you know I have it all.  
I built connections with my wealth,  
And a castle that will never fall.  
People think that I am smart,  
And also think that you are fool.

And they believe that I am the best,  
To be around and I am the cool.  
I am the one who has the gold,  
And I am the one who makes the rule.

-----

The poorer man stood still,  
And shook his head and almost fell.  
After he heard the rich speak,  
Which turned him mad and made him ill,  
And said to the rich in a quiet voice:  
It's time for you to face the grill.  
I have the wisdom which you don't,  
I have the knowledge and the skill.  
I have the courage to care for all,  
I have the facts and you have nil.  
I live an honest way of life,  
I live a story that I can tell.  
I built a name and a reputation,  
I also built my goodwill.  
And when I go I will leave behind,  
A shiny name that rings a bell.  
I always do the best I can,  
And all my duties I fulfill.

My tiny home is my paradise,  
And your social kingdom is your hell.

-----

No one should build his happy fate,  
With social gangs or dare to create.

If it was meant for you to be,

No one will make you deviate.

So share your love and be as good,

And be the one who fascinates.

And open your heart and your mind,

And every door and every gate.

To all who are around your home,

And don't you ever isolate.

If you have failed to love someone,

Then you will never graduate.

One participant describes how her life turned in the normal direction after the completion of a university degree in Canada. Students need to see the colourful picture of education and the dark reality of ignorance. Students need to see the social, cultural, and economical colours of education and let them choose the colour they like. Let them mix their own colours and paint their own pictures within an educational frame. In reality, people do like different colours and can see one thing from different angles. One cannot imagine how life will function if all people like the yellow colour only, all men fall in love with blond women, and everybody drinks only Coca Cola. This can create an

imbalance in life caused by the demand for only one colour or one brand only, and a wide spread and unimaginable monopoly will be created.

### **Implications for Further Research**

On many issues a qualitative study can set the stage for more qualitative and quantitative research. The open-ended format of data collection used in this study brings in new topics of discussion to the issue studied in the research. In this study, more questions have emerged that do need further investigation using either a qualitative or quantitative method. First, a quantitative study can be conducted to survey undergraduate university students to see if they made the right academic choice, what was their motivation behind choosing a certain field, and what they would choose differently if given another chance to choose and why. According to Quinn and Price (1998), the motive behind graduate and professional education is often an economic motive. A quantitative study can also survey graduate students in different fields to uncover the motives behind their choice of an advanced degree.

Exploring the social, cultural, and economical values of education and their effects on the quest for education can be a topic of a qualitative study. To deeply investigate the level of effect associated with each of these values, a qualitative study can interview high school students to understand their motives for pursuing further education. Questions can be developed from the comments made by the participants in this study to seek information about how high school students think about completing their secondary education and pursuing higher education. The applicability of the financial motives in education needs more investigation and testing. How would high school teachers perceive the importance of education for their students? How would they think about highlighting

the economic rewards of education? Would it work in retaining students who are at risk of dropping out of high school and change their attitudes toward completing their education? These questions can be addressed in a qualitative study and these questions can be used to interview school teachers to get their views on these issues.

### **Implications for Theory**

The findings of this study are in line with the theoretical base of the human capital concept and confirm that education builds the skills and knowledge of individuals and increases their social and economical wellbeing. The human capital concept as framed by Adam Smith focused only on the increased productivity of educated workers and how that translates into economic benefits. The effect of education on the social wellbeing of individuals was developed later by education and economic scholars who highlighted the benefits enjoyed by individuals and societies because of education. The findings of this study are consistent with the theoretical ground of the human capital concept and may contribute to it by highlighting the effect of social capital to harvest the fruits of human capital. Certainly, the findings of a qualitative study are not to be generalized but may suggest further research that can shed light on the same issue with different research designs and different participants.

The findings from this study may extend the concept of human capital to include the effect of social capital on the overall success of an individual to benefit from receiving education and obtaining skills and knowledge. The research participants point out students' need to learn how to live outside school and communicate with future employers. This means that it may not be enough to learn skills and knowledge in school to succeed in landing a good job. The power of connections can make or break the efforts

to climb up the social and economic ladder. For this reality, a definition of human capital that includes the effect of social capital is needed. Based on an analysis of both the data collected in this study and the human capital literature, this is my definition of individual human capital:

*Individual human capital* is the combination of an individual's capabilities, skills, knowledge, and any other intangible personal assets including personal relations and connections, that helps in providing the value and earning ability of an individual, and it may or may not have a value after the death of the individual.

### **Implications for Practice**

Students at faculties of education need to be aware of the concept of human capital. The education sector and educators have the biggest stake in this concept, and it may affect educators more than economists and business scholars. While scholarly research in this field is widely available, there is more economic dominated literature and less literature to reflect the views of educators. Economists and educators may have different or similar views on this concept. They may agree on one thing and disagree on another. But what can be beneficial to advance this field is to encourage researchers at faculties of education to contribute more to this field and create graduate students' awareness about this concept by adding an article or a chapter on human capital to their curriculum. I, as a graduate of a business school and as a student at a faculty of education, do believe that some topics of educational leadership are shared with the field of management. The study of organizational culture, structure, leadership, change management, stress management, motivation, power and politics, knowledge management, organizational learning, and many other topics are just examples of what

educational leadership scholars and scholars of management share. Educators have expanded these topics with educational theories and practices. It is useful to add more information on the relationship between education and the concept of human capital.

This research shows that some well educated professionals believe education has a major role in building individual human capital and in building their own human capital. It also shows that social, cultural, and economic benefits of education are all important to receivers of education, and there should not be a focus on one aspect only and a neglect of the others. Educators need to show, stress, and promote all benefits of education to students and motivate students with all types of motivators. Using only a humanitarian view of education that highlights the social benefits of education for the society may not be enough to motivate those who lived or still live through economic hardship. The humanitarian views of education are important but may make no difference to those who are struggling to put food on the table of their family. It is hoped that there is an economic light at the end of the educational tunnel that can turn on the economically marginalized students and their families.

### **A Conclusion Note on Education**

The key role of education in building individual human capital is highlighted in this study. Indeed, the task to explain the effect of education in a limited number of pages in a study is a difficult task. As much as one tries to shed light on the powerful contribution of education to the success and wellbeing of humanity, education tends to be greater than what words can describe in the limits of a thesis. It seems that if one can hold the flow of an ocean or the light of a sunny summer day, it may be difficult to hold the continuous and generous giving of education. At the same time, there is no education

without educators and it is the educators whom one should salute. They are the caregivers of learners, the smile makers of happiness, and the candle holders in darkness. It is the educators who carry the flag of a better future, and it is them who will deliver. It is the educators who wipe the tears, remove the fears, encourage learning, and shift the progress to higher gears. It is them who care for others, and it is them who will always write the future in golden letters. I conclude my thesis with this poem:

Today I let loose my imagination,  
To go deep inside education,  
To see what has man ever seen,  
And read from the day of creation.  
Since man once stepped on this earth,  
And all up to my generation.  
To sail far inside the knowledge sea,  
And search everywhere in the ocean.  
To open the books of every art,  
And learn how to make a correlation.  
To wonder in the gardens of wisdom,  
Without having any deviation.  
Today let the sun shine again,  
Today we have a big celebration,  
Today I want to tell everyone,  
That we all have an obligation,  
To light up the darkness of the way,

To build up the skills of the nation.  
To spread all the knowledge of the world,  
And march for the love of education.  
Where knowledge is the real super goal,  
And knowledge is the only destination.  
And when we join the party to learn,  
We do not really need an invitation.

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## Appendix A

### Interview Protocol / The Role of Education in Building Individual Human Capital

---

- Time of interview: .....
- Date: .....
- Interviewee: .....
- Position of Interviewee: .....

The following are the questions that will guide the interview:

1. How do you see the role of education in building individual human capital?
  - What is your understanding of individual human capital?
  - Can education affect the wellbeing of individuals? If yes, how?
  - Where should educators put their focus in building human capital, including cultural, social and economical capital?
  - What should the goal of educators be when setting an educational strategy?
  - In which way do you think individuals should build their human capital (e.g., enrolling in an academic program for a higher degree, working toward an industry professional designation, taking up an education opportunity...)?
  
2. How has education contributed in building your own human capital?
  - What have you learnt at school, in university, and other institutions?
  - In which way has education affected your life, spiritually, culturally, socially, economically...?

- What do you wish you would have learned differently?
- If you are asked to give educators advice, what would that advice be?

Thank you

## Appendix B

### Research Ethics Board Clearance Letter



[www.brocku.ca](http://www.brocku.ca)

DATE: 11/17/2009

FROM: Michelle McGinn, Chair  
Research Ethics Board (REB)

TO: Xiaobin Li, Education  
Mahmoud Yousef Askari

FILE: 09-076  
Masters Thesis/Project

TITLE: Measuring Human Capital and the Value of Education

The Brock University Research Ethics Board has reviewed the above research proposal.

**DECISION:** Accepted as clarified with note

Please add the following information to your consent form and forward a copy to [reb@brocku.ca](mailto:reb@brocku.ca)

- ♦ Indicate whether you intend to audio or video tape interviews. Explain how tapes will be stored, who will have access to them and, how and when the tapes will be destroyed.
- ♦ Indicate the length of interviews

This project has received ethics clearance for the period of November 17, 2009 to December 30, 2010 subject to full REB ratification at the Research Ethics Board's next scheduled meeting. The clearance period may be extended upon request. ***The study may now proceed.***

Please note that the Research Ethics Board (REB) requires that you adhere to the protocol as last reviewed and cleared by the REB. During the course of research no deviations from, or changes to, the protocol, recruitment, or consent form may be initiated without prior written clearance from the REB. The Board must provide clearance for any modifications before they can be implemented. If you wish to modify your research project, please refer to <http://www.brocku.ca/research/policies-and-forms/forms> to complete the appropriate form Revision or Modification to an Ongoing Application.

Adverse or unexpected events must be reported to the REB as soon as possible with an indication of how these events affect, in the view of the Principal Investigator, the safety of the participants and the continuation of the protocol.

If research participants are in the care of a health facility, at a school, or other institution or community organization, it is the responsibility of the Principal Investigator to ensure that the ethical guidelines and clearance of those facilities or institutions are obtained and filed with the REB prior to the initiation of any research protocols.

The Tri-Council Policy Statement requires that ongoing research be monitored. A Final Report is required for all projects upon completion of the project. Researchers with projects lasting more than one year are required to submit a Continuing Review Report annually. The Office of Research Services will contact you when this form *Continuing Review/Final Report* is required.

Please quote your REB file number on all future correspondence.

MM/mb