The Education System: A Comparative Education perspective

HJ STEYN • CC WOLHUTER
CHAPTER 7

THE RELATIONSHIP BETWEEN EDUCATION, ECONOMY AND EMPLOYMENT: IS HIGHER EDUCATION CURRICULUM AN INGREDIENT?

GIFT MASAITI

Email: giftmasaiti@yahoo.com

INNOCENT M. MULENGA

Email: innocent.mulenga@ymail.com
7.1 INTRODUCTION

This chapter is based on a review which underscores the indispensable relationship between education, economic growth and employment. This relationship is sometimes intriguing and challenging but can never be ignored since the three are intertwined. The basic arguments are meant to provoke thinking and debate especially among students who aspire to understand the thinking of both an educationist and economist when examining the three phenomena. The review shows a positive and statistically significant relationship between education and economic growth; and then employment level and economic growth. These relationships especially in developing countries sometimes tend to have negative correlation. This chapter further argues that employability is a product of curriculum. For countries to train and educate valuable human resources needed for different sectors of its economy, higher education curriculum needs to be brought in tandem with the country’s developmental needs. There must be a linkage between higher education and industry.

7.2 EDUCATION AND ECONOMIC GROWTH

It is true that emerging markets like China, India, South Africa and most of Latin America and to some extent Zambia continue to grow in importance to the world economy; however, the academic literature especially for smaller economies in this area is highly fragmented and in some cases unavailable, but mostly lies in the finance and economic fields (Morote, 2009). Some education economists have shown that increasing the educational attainment of the population can help to increase the economic growth; however, this relationship is not always direct. There are some key variables, such as employment, that can affect this relationship (Ibid, 2009). The arguments are presented later in this chapter.

Most commentators and researchers argue strongly that there are two exceptionally fundamental reasons for expecting to find some relation between education and economic growth (Steven & Weale, 2003). First of all, at the most common level it is instinctively plausible that living standards globally have risen so much over the previous millennium and in particular since 1800 because if education (Carnoy, 1995; Steven & Weale, 2003). Secondly, at a more precise level, a wide range of econometric studies show that the earnings individuals can command depend on their level of education (Carnoy, 1995).

The target of achieving complete employment amongst other macroeconomic goals is fundamental in many developing nations where joblessness and underemployment have been main causes and outcomes of widespread poverty (World Bank, 2010). However, in spite of the high-flown electioneering promises of successive political leaders and governments in many of poor nations of the world, the accomplishment of remarkable growth and decent employment remains an illusion. Towering rates of unemployment, mediocre and unimpressive economic growth rates and poverty remain the hallmark of most of the challenges of the populace (Sodipe & Ogunninola, 2011). Most countries are now attempting to use education as the key to unlocking great potentials to the country and individuals. The human capital theory is arguably the best weapon that developing countries have used to justify government investments in its manpower (Woodhall, 1995).

Woodhall (1995) opines “the concept of human capital refers to the fact that human beings invest in themselves by means of education, training or other activities which raises their future income by increasing their life time earnings”. Here, we have to be alive to the fact that economists use the term ‘investments’ to refer to the expenditure on assets which will produce income in the future, and contrast investment expenditure with consumption, which produces immediate satisfaction or benefits but does not create future income (Mankiw, 2010). Assets which will generate income in the future are called capital. For a long time economic analysts limited their definition of investment and capital to physical capital such as machines, equipment or building which would generate income in the future by creating productive capacity (Woodhall, 1995). However, Adam Smith a classical economist was the first to argue that education helped to increase the productive capacity of workers in the same way of purchase of a new machine, or other forms of physical capital (Ibid, 1997). Henceforth, an analogy was drawn between investment in physical capital and investment in
human capital. Investment in human capital has both social and private returns at different segregated levels of education. There are several studies that have been conducted worldwide to calculate the rates of return of investment in education for different sectors, such as primary, secondary and tertiary. Psacharopoulo and Patrinos (2004) give a good summary of the results of studies done in 98 countries over the period 1960-1999 that have been conducted on a comparable basis. Some of the results are summarized below in Table 7.1.

Table 7.1: Rates of return of investment in education

<table>
<thead>
<tr>
<th>Region</th>
<th>Social</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary</td>
<td>Secondary</td>
</tr>
<tr>
<td>Asia</td>
<td>16.2</td>
<td>11.1</td>
</tr>
<tr>
<td>Europe/Middle East/North Africa</td>
<td>15.6</td>
<td>9.7</td>
</tr>
<tr>
<td>Latin America</td>
<td>17.4</td>
<td>12.9</td>
</tr>
<tr>
<td>OCED</td>
<td>8.5</td>
<td>9.4</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>25.4</td>
<td>18.4</td>
</tr>
<tr>
<td>World</td>
<td>18.9</td>
<td>13.1</td>
</tr>
</tbody>
</table>

Source: Psacharopoulo and Patrinos (2004: 114)

Clearly, Table 7.1 shows that to begin with, the private rate of return is higher than the societal rate of return for every area and all levels of education. On average for the global private rate of return for primary education is approximately 7.7 percentage points higher than the social rate of return and the matching figure for secondary education is about 3.9 percentage points. On average the private rate of return or benefits for higher education is at least not more than 8.2 percentage points greater than the social rate of return. The rates of return or benefits in developing countries are normally higher for all levels of education than the rates in developed countries. Examining the Sub-Saharan Africa region (of which Zambia forms part) it is evident that these rates of return are the uppermost of all regions in the world for all levels of education. Especially the private rate of return on higher education is high. This is a clear motivation to invest continuously in education for both governments and individuals. Governments mostly argue that education can trigger the much needed development.

Individuals in Zambia, South Africa and the world over, are eager to take additional years of education partly because they can be paid more and get better jobs, on average, with more schooling. For many, more training can also be a source of social mobility (Cipollone, 1995). Similarly, countries are paying attention to raising the average intensity of schooling in their populace, in part, because they think that doing so will develop productivity, lift the quality of jobs in the economy, and augment economic growth (Economic Returns to Investment in Education, 2002). The relationship between education and economic growth in some of the early work on the economics of education was based on the postulation that a major effect of more education is that an enhanced labour force has an amplified capacity to produce. Because better-educated workers are more read and numerate, they should be easier to train. It ought to be easier for them to become skilled at more complex tasks (Hicks, 1995). It is further supposed that they had better work lifestyle, particularly related to alertness to time and dependability. There are questions which generally are still challenging up to date, such as: How does education increases productivity? How important is it? In what ways is it important? All these have no explicit answers.

A scarcity of educated persons may limit economic growth, but at the same time it is unclear that a more educated labour force will increase economic growth. Accordingly, it is also blurred what brand of education contributes largely to growth, general schooling, technical recognized formal training, or on-the-job training and what level of education contributes most to growth, could it be primary, secondary or higher education (Hicks, 1995). For instance when the
World Bank recommended restructuring in the Zambian Education system in the late 80s and 90s they recommended that basic education had higher returns than higher education. Higher education was neglected as most donors concentrated on basic education provisions. Recent research has shown that higher education has a more direct link to economic development (Masaiti, 2013).

One of the clues mainly in support of the well supported conclusion that education does add or contribute to growth is that countries with higher levels of economic growth have labour forces with superior levels of formal schooling (Carney, 1995). This has been the case of fast growing economies such as China, South Korea, Brazil and Malaysia who have invested massively in education, especially at tertiary level. Economic growth is directly proportional to educational attainments, especially quality education (education linked to industry). In Zambia and probably most of Africa, it might be difficult to relate education to industry (Masaiti, 2013). Beyond such a general macroeconomic approach which highlights the relation sandwiched between education and economic development, the new growth theories assert that developing nations have a healthier chance of catching up with more advanced economies when they have a accumulation of labour with the necessary skills to develop novel technologies themselves which can, without difficulty, be used to adopt and use foreign technology (Carney, 1995). In such models, more education in the labour force or employees increases productivity in two ways: education adds skills to labour, increasing the capacity of labour to produce more output and it increases the worker’s competence to innovate (learn new ways of using existing technology and creating innovative technology) in ways that increase his or her own productivity and the productivity of other workers (Ibid, 1995).

Romer (1990) first of all emphasizes the human capital part of education (with the intention of showing, that education improves the value of labour as a factor of production and permits technological development); and secondly he places human capital at the heart of economic growth and asserts/argues that the externalities generated by human capital are the foundation of self-sustaining economic growth (which implies that human capital not only does it produces higher productivity for further educated workers but for most other labour as well). This model additionally views innovation and ‘learning-by-doing’ as an endogenous variable to the production process, with the increases in output being a self generating procedure inside firms and economies (Lucas, 1988). Such knowledge by doing and innovation as part of the work process are facilitated in firms and societies that promote superior participation and decision-making by workers, since these are the firms and societies in which more knowledgeable workers have the greatest clear opportunities to express their creative capacity (Spenner, 1997).

The relationship between earnings and schooling has been widely studied at both theoretical and empirical levels worldwide. This relation is simple to state: more educated people enjoy a higher level of earnings than people with a lower level of education (Cipollone, 1997; Knight & Sabort, 1990). However, it is also true that people with the same level of education do have different earnings depending on their race, gender, ethnicity, ability and social background (Cipollone, 1997). This characteristic earning structure seems to hold regardless of the level development of the economy and institutional setting, for instance, educated people in Zambia will earn more just like their British counterparts (Ibid, 1997). The frequent scrutiny that individuals with more education have top earnings is another signal that education contributes to growth. The higher education earnings connection reflects a microeconomic approach to the link between education and economic growth. Greater earnings for the more educated represent higher productivity, hence an increase in educated labour in the economy is coupled with increased economic output and higher growth rates (Economic Returns to Investment in Education, 2002). This has inwardly received its fair share of criticism. There are clear instances where higher earnings for the more educated may merely and largely represent a political reward that elites (favoured) give their members a payoff for being part of the dominant social class that is more common in developing societies especially Sub-Saharan Africa. It is increasingly difficult to maintain an economic system for long if persons who actually produce extra are not remunerated for their
higher productivity, and if those who simply have political authority get all the rewards. One of the reasons that socialist systems in Eastern Europe were not capable of sustaining economic growth was almost without doubt due in part to an reluctance to reward persons economically on the base of their productivity and, instead, to reward the politically powerful with economic privilege (Knight & Sabort, 1990).

In commenting about education, globalization and the knowledge economy in Britain, Diamond (2008) argued that Britain advocated the formation of a high-skilled, high-waged technological economy by promoting the education and skills of its workforce. The establishment or creation of world-class skills was thought to be a way to economic opulence, reduced earnings inequalities and social unity. The emphasis of this policy strategy prescription rested on the thought of a knowledge economy where inventive ideas and technical expertise hold the key to the innovative global competitive challenge. While UK’s workforce could no longer rely on low skilled manufacturing jobs to provide a living wage, since these jobs slowly migrated to low-cost economies in Eastern Europe and also mostly Asia (Diamond, 2008). He further argued that initially Britain was well placed to become a ‘magnet’ economy, supplying the global economy with high skilled, high waged workers. The OECD recently recognized that rising economies including China and India were stirring up the value chain to battle with Western companies for high-tech goods and Research and Development (R&D) investment (Ibid, 2008). Diamond is making a case to concentrate on education that will make its graduates prepared for high skilled jobs. In other words Britain should compete with other high industrialized countries in production of world class skills.

Gordon (2007) challenged developing countries on the nature of education they should offer so that they become valuable for economic growth. What is currently happening is that formal education institutions are being asked to rethink and shape the way they assume education and training. Issues such as the ‘massification’ of education, skills and generally gap (mismatch) and continuous or lifelong learning have received national attention by governments in most developing countries, including the Caribbean (Ibid, 2007). They have also been discussed at various educational and instructive conferences hosted by international bodies such as UNESCO (1995 & 1998) and the World Bank (1995). Education institutions are being asked to instil their ‘educational outcomes’ (graduates) with diverse kinds of skills. Such skills are a necessity in what is now commonly referred to as a ‘Knowledge-Based Economy’ (KBE) or ‘New Economy’. This refers to the growing use of knowledge and other scientific skills in the various production processes (Gordon, 2007).

In order to understand the contribution of education to economic growth, education economists use the process of ‘growth accounting’ in which they look at the output (Q) which is assumed to be a function of stock of capital (K), the labour force (L) and level of technical progress (A). This implies that Q=f (K, L, A). Then different differentials are worked out to deduce the derivative of A (Hicks, 1997). Another approach which attempts to measure the impact of education on productivity consists of recasting education as an investment in human capital. This approach is called ‘returns on human capital’ (Ibid, 1997). The last but not least approach is using ‘cross national comparison’ which also supports the idea of human capital development and education as an important element in explaining variation in growth rates and levels of per capita income (Camoy, 1995).

What then are theoretical assumptions behind the link of Education and Economy? Fidel (2007) argues the bond between economic growth and education has been one of the inner threads of economic investigation. Two prominent early advocates Adam Smith in the 18th century and Alfred Marshall in the 19th century, two important figures in the economics profession, gave attention to the question of how individual investments in “education” influence the wealth of nations. Throughout the 20th century, as Krueger and Lindahl (2001) point out in their survey of these issues, modern professional economists have been attempting to develop empirical estimates of the relationship between education and economic growth. Some of the most famous names in late 20th century economics made their reputations studying the question of individual
returns to investment in education (Fidel, 2007). Jacob Mincer (1974), Gary Becker (1964) and a long list of researchers inspired by their work have produced hundreds of books and papers in justification and critique of the two variables.

7.3 THEORETICAL UNDERPINNINGS OF EDUCATION AND ECONOMY

Morote (2009) observes that the interrelation between education and economic development has been discussed since ancient Greece. Adam Smith (1776, 1776) and the classical economists put emphasis on the importance of investment in human skills. Early attempts to measure the contribution of education to economic development were based either on the growth accounting approach underpinnings or on the rate of return to human capital approach (Ibid, 2009).

It was not, however, until late in the twentieth century that most academics undertook formal and scientific analysis of this relationship (Morote, 2009). Several research studies have investigated the relationship between economic growth and education such as Psacharopoulos, 1988; Pencavel, 1993; De Meulmester and Rochet, 1995; Jorgenson and Fraumeni, 1998, to mention but a few. Their starting point was always to question the root of the ‘economic growth itself’. The pioneer theorists hypothesized that economic development was depended on the increase of capital and the labour factor in the productive processes. A fundamental reason for economic growth was found to be the increase of productivity in the identified factors of production. Researchers such as Pencavel (1993) affirmed the existence of correlations across countries between economic growth rates and schooling enrolment rates of different segmentation. This included enrolment in tertiary education. De Meulmester and Rochet (1995), using more sophisticated econometric techniques, found that this relationship between education and economy is not always a direct one.

Many education economists consider Psacharopoulos’ data and research as having been considered a starting point by several researchers as indicated in Table 7.2.

| Table 7.2: Percent of the Economic Growth Rate (by Country) Explained by Education |
|---|---|---|
| Country | Growth Rate Explained (Until 1970s) | Country | Growth Rate Explained (Until 1970s) |
| Europe | | North America | |
| Belgium | 14 | Canada | 25 |
| Denmark | 4 | United States | 15 |
| United Kingdom | 12 | | |
| Germany | 2 | Latin America | |
| Argentina | 16.5 | Japan | 3.3 |
| Brazil | 3.3 | Malaysia | 14.7 |
| Chile | 4.5 | South Korea | 15.9 |
| Colombia | 4.1 | | |
| Ecuador | 4.9 | Africa | |
| Honduras | 6.5 | Ghana | 23.2 |
| Peru | 2.5 | Kenya | 12.4 |
| Mexico | 0.8 | Nigeria | 16.0 |
| Venezuela | 2.4 | | |


From results in Table 7.2, it can be concluded that education is one of the factors that explains economic growth, but the explanation varies depending upon the level of development of a country. For instance, in the table above, except for the United States’ case, there seems to be an inverse relationship
between per capita production and education. In other words, there is an inverse relationship between education and economic growth. The higher the economic level of the country, the smaller the contribution of education to economic development (no wonder some researchers are always sceptical of the relationship).

- Teichler (1999) argues that the query of the connections between higher education and the employment market are yet again among the key issues of argument whenever challenges for improvement in higher education are at stake. The World Bank (1994) cited the tensions stuck between higher education and employment as one of the key rudiments of the higher education crisis related to mismatch of supply and demand of graduates and lack of contact with the market. The Organisation for Economic Co-operation and Development (OECD) supports this assertion, and attempted to address the transition from higher education to employment in one of its largest projects in the early 1990s. Further, the United Nations Educational Scientific, and Cultural Organisation’s (UNESCO) World Conference on Higher Education argued that the demands of the labour market are changing dramatically. Indeed, the patterns of employment are also changing. College courses which once met national needs are now irrelevant since they are no longer responsive the current needs.

- It now appears that education and especially higher education are being challenged to reconsider their fundamental objectives. There is need to strike a balance between supply and demand of graduates, between responding to the demands directly expressed by the employment structure (system) and influencing the labour market and further between its relationship with business and industry and government. Most definitively there will be need for an adjustment between relevant tertiary education policies and the ever changing employment sector. What has been challenged in the underpinnings are government policies toward unemployment. Unemployment can be discussed as the match between supply and demand of graduates to the market; and the level of the economy and economic policies toward unemployment and education (Carnoy, 1995). Clearly, there are three important stakeholders in this scenario: the higher education institutions, the private economic sector (business and industry) and governments. These actors interrelate and affect important variables which include: education, employment and economic growth as illustrated in Figure 7.1.

Figure 7.1: Higher education, economic growth and employment.

Figure 7.1 shows an illustration that most of the higher education enrolment is affected by the incentives to attend college by the governments, higher education institutions and business and industry. In the same way, economic growth and employment is affected by the interaction of the three variables. Employment is an influential factor. For instance, Maski and Wise (1972) in their analysis of almost 23,000 seniors from the national longitudinal study of the high school classes of the USA in 1972 found that students are very responsive to tuition, scholarship and alternative employment opportunities in deciding which college to attend. Salaries given by industry are also highly related. This
CHAPTER 7: The relationship between Education, Economy and Employment

sensitivity to the issue of monetary considerations is crucial: Willis and Rosen (1979) estimated that a 10% increase in starting salaries induced almost a 20% increase in college enrollments. In general, college enrollments respond to the pecuniary net returns from investing in tertiary education. We now attempt to examine in detail the relationship between economic growth and employment.

7.4 THE RELATION BETWEEN ECONOMIC GROWTH AND EMPLOYMENT

Generally studies (Kapos, 2005; Dopke, 2001) have shown that between economic growth and employment there is an affirmative and strong relationship, implying that economic growth creates new jobs, but of diverse intensity from one stage to another and from one country to another. This clearly reflects the unlike reaction of the labour market to the economic growth progression. Schmid (2008) posits that the economic growth (GDP growth aggregate production) should be treated as reaction to the aggregate demand growth, and can be achieved in different ways. This could be through quantity of inputs (labour force, capital, etc.) when they increase and then it is easier to talk about widespread growth, or the output of production factors escalating (intensive growth), or a mixture of the two possibilities (Ibid, 2008). Combining employment (the wide-ranging side of economic augmentation) with labour output (the concentrated side of economic growth) has been and will remain for the most part difficult problems of economic growth (Ibid, 2008). The relationship of inverse proportionality, which is set between output and employment in the economic activity, has the most unlike shapes expressing the character of economic growth. In developing economies like Zambia, the relationship is even more troubling in that the bureaucratic political system often announces economic growth which does not translate into job creation.

In general, it appears that research carried out on the effect of the economic growth process on employment starts from the theory which tests a direct relationship between employment and economic growth, but of different intensity from one period to another and from one country to another. For example, the positive relationship between economic growth and employment is tainted by the EU specialists (E.C., 1993) who demonstrated that, at the European Community level, the level of employment strength suffered profound changes in at least the last 15-20 years, having had expansion tendencies under the conditions of a decrease in the employment threshold. In supporting this, Mourre (2004) presented estimative data on employment positive elasticities in the Euro area and the United States; he covered the periods 1986 to 1990 and 1997 to 2000. Basically he considered that employment elasticity in the Euro area augmented from 0.4 to 0.6, whereas it fell from 0.6 to 0.4, in the US, between the first and second analysed periods. The writer also presented results on job intensity of growth in dissimilar economic sectors and noted that the Euro-area’s market-related service sector exhibited very high employment elasticity between 1997 and 2001, which probably contributed to the rise in the region’s large employment elasticity. Earlier on, Walterskirchen (1999) succinctly showed that there was a close correlation between GDP growth and employment in EU in the 1988-1998 periods under the circumstances in which employment elasticity, compared to GDP growth, was at 0.8. As already alluded to in this chapter, this relationship of economic growth and employment is still challenging to most researchers in education and economics. For instance, Akan (2008) observes that when the affiliation between economic growth and employment is examined, the contribution of economic growth to employment in many nations is slower and some cases difficult to compute. The contribution of economic growth to solution of employment-unemployment problems has been relatively delicate.

The desire to expand honest and productive employment is at the heart of any nations’ bigger macroeconomic policies geared in the direction of poverty reduction (Akan, 2008; World Bank, 2010). In spite of its importance, the execution of policies on employment creation in many developing nations like Zambia and South Africa, for example, has not generated much impact as there is a broad gap between the jobs accessible and the number of job seekers aggressively seeking work in most of these nations. In these developing nations,
not only is the level of decent and meaningful jobs waning, the difficulties associated with globalisation and economic liberalisation has brought about fresh realities having indecisive implications for employment creation in many developing nations (Ogunrinola and Osabuohien, 2010). The soaring rate of labour force growth especially the low and diminishing rate of formal sector job growth has made the labour market in developing nations exhibit some peculiar characteristics (Ibid, 2010).

First is the widening of the informal sector where many who would have remained in open unemployment take up low-wage jobs or even self-employment while still hoping to pick up formal sector job when available. Secondly, the unemployed in the labour market in poor nations do not enjoy any form of unemployment insurance or any social benefit from the government. Thirdly, the reported unemployment rates in official documents are usually low due to the high rate of disguised employment and underemployment in the informal sector. Fourthly, self-employment, part-time employment, and unpaid employment in family enterprises have a disproportionate share in total employment (Ogunrinola and Osabuohien, 2010 p. 3).

Several experimental studies have been carried out to examine the nature and quality of employment, Ogunrinola (1991) studied the issue of employment and income of the urban informal sector of Ibadan in Nigeria. He found that the city informal sector of Ibadan has contributed considerably to employment creation, aptitude development and commercial development (entrepreneurship). For instance, at least about 90% of the entrepreneurs were trained under the apprenticeship systems that were also occupied in capacity development of others. Onwioduokit (2006) closely examined the linkage between unemployment and several major macroeconomic variables in Nigeria and concluded that the shift in the composition of unemployment in Nigeria since 2000 is edifying as it has brought to the fore the inadequacies of the theories towards amplification the unemployment occurrence in the country.

A number of empirical studies have been conducted in a number of diverse nations assessing the level of growth rate of the economic bustle of the nation and employment creation. Swane and Vistrand (2006) examined the GDP against employment growth bond in Sweden. Using the employment-population relation as a determinant of the extent of employment generation, the exploration established a momentous and positive relationship between GDP and employment growth. This result supports the strand of theory signifying that the positive relationship between GDP and employment is ordinary and that any observed unemployed growth could just be a temporary departure. The researchers made useful propositions for further research on the fundamental relationship between employment and GDP. Yogo (2008) argued strongly that the employment subject in Sub-Saharan Africa is mostly a substance of quality rather than quantity. He is of the opinion that the reason for the observed feeble employment performances could not be found in labour market rigidities; but that the observed increase of working poor could be explained by the weakness of economic growth over time. Walterskirchen (1999) empirically examined the link between economic growth and the labour market which focused on employment and unemployment in the European Union. He found a connection between GDP growth and change in unemployment and divided it into two components which are: changes in employment and unemployment rates governed by economic factors as well as those governed by demographic influences and labour market policies. He dynamically relied on time series analysis for individual EU countries, while for all the countries he engaged the use of panel data. The major finding of the study showed a strong positive correlation between GDP growth and change in the level of employment.

Baytelle’s (2007) investigation approximated and compared elasticities in each of fourteen manufacturing sectors of the US with respect to changes in actual GDP during the ten year period of 1991-2001. The study further approximated that for each business sector and the aggregate economy there were two models of employment determination. One of the models interrelated employment to real GDP while the other related employment to numerous other macroeconomic variables affecting employment together with the real GDP. Since the demand for labour is a derived demand, the increase of real GDP for instance generates augmented derived demand for workers. The findings of
Sawtelle (2007) are in line with those of Pandalino and Vivarelli (1997). Generally, studies have engaged econometric study to estimate the elasticity of employment with respect to real GDP as well as to inspect gender differences in employment cyclically.

We now explain why the higher education curriculum is crucial for economic growth and employability.

7.5 ECONOMY GROWTH AND EMPLOYABILITY AS CURRICULUM PROCESS

Employability refers to a person's competence of getting hold of initial employment, maintaining employment, and obtaining new employment if necessary (Hillage & Pollard, 1998). In simple terms, employability is about being competent of getting and keeping fulfilling work. More exhaustively, employability is the capability to move self-sufficiently inside the labour market to realise potential through sustainable employment (Hind & Moss, 2011). For persons, employability depends on the knowledge, skills and abilities they have, the way they use those assets and present them to employers, and the context (for example, personal circumstances and labour market environment) mostly within which they search for employment (Ibid, 2011).

In order to achieve the required competent level of education which will translate into labour or employees who will add value to the economy, there is need to have a well-crafted curriculum. The curriculum should not be static but rather reviewed, revised and in some cases overhauled to meet the ever changing education and economic dynamics. Yorke (2003) argues that it is a mistake to assume that provision of experience, whether within higher education or without, is a sufficient condition for enhanced employability. To have work experience does not, of itself, ensure that the student develops (further) the various prerequisites (cognitive, social, practical, etc.) for success in employment (Ibid, 2003). The same argument applies to whole curricula. The curricula process may facilitate the development of prerequisites appropriate to employment, but does not guarantee it. Hence it is inappropriate to assume that students are highly employable on the basis of curricula provision alone: it may be a good harbinger but it is not an assurance of employability, he argues. Employability derives from the ways in which the student learns from his or her experiences (Yorke, 2003). One important factor that needs to be considered critically at this point is the Higher Education curriculum. Mulenga (2011:15) defined a curriculum as "all the selected, organised, integrative, innovative and evaluative educational experiences that are provided to the learner which can lead to the acquisition of desirable knowledge, skills, values and attitudes which can be best utilized for life in a changing society". The key words here are "best utilization for life in a changing society".

At this time of rapid technological and social change, the curriculum of institutions of higher learning should be driven less by internal customs and more by external awareness. Higher education curriculum developers should track labour markets rigorously and respond to market changes quickly though the programmes that they offer. Institutions of higher learning should also focus on outcomes like employment patterns and regional economic competitiveness and not only on outputs like students' enrolment growth and completion of educational programmes. Sparks and Waits (2011) explain that governments and business leaders have to recognize that the production of college and university degrees and diplomas is not enough; instead these credentials must match the needs of the marketplace. Thus, higher education scholars, curriculum developers and policymakers should begin to move beyond having students getting more "degrees" to asking "Degrees for what Job?" Kim and Kim (2000) reported that most economies in the world are facing gale-like market forces of rapid globalization, accelerating innovation and relentless competition. Thus if higher education is truly going to help drive economic growth, students' academic success should be tied to the needs of the marketplace and not only to ensure that students get certificates, but to design their curriculum according to the needs of the society. Thus questions that would beg answers are that;

**How do we know that the type of higher education that students are pursuing is the one that they will be able to use in new jobs?**
• Are we producing degrees that provide the greatest chance to yielding the most benefit for individuals, industry and the economy?

The answer to these questions lies in the curriculum development process that various institutions of higher learning follow. Given the longstanding independence and autonomy of higher education programmes the academic freedom that colleges and universities may enjoy, there is a danger in higher institutions of learning to provide a curriculum to learners that is alienated from the realities of the economic market. However, principles of curriculum development provide a safe road map that can help curriculum developers in higher education to design relevant curriculum. Print (1993) recommended that the first step in curriculum development of any level of education is situational analysis. Situational analysis is a process of examining the factors that exist in the environment where the curriculum will be implemented. Thus if an institution of higher learning was to design a curriculum for medical doctors for instance, the situational analysis would demand that the curriculum developer first analyses the knowledge, skills, attitudes, activities and values that a prospective medical doctor will need in order to work effectively in the contemporary and wider society. This analysis will then be the basis for the determination of programme objectives, selection and sequencing of content, learning activities and evaluation procedures. In this way higher education is likely to design more responsive curricula.

In the indigenous African society for instance Bishop (1985) explained that the purpose of education was clear. Functionalism was the main principle of education in which the African society regarded education as a means to an end and not as an end itself. Education was generally for an immediate inculcation into the society and a preparation for adulthood. It combined physical training with character building and manual activity with intellectual training. The curriculum was relevant to the needs of the society. Unemployment, if it existed at all, was minimal and very few young men roamed the villages and towns. However, the skills that workers must have to thrive in the 21st century economy are different from the skills that workers had to have in the past. To participate in the 21st century knowledge-based economy, students must be comfortable with critical thinking and problem solving, communication, collaboration, and creativity and innovation which is related to the needs and challenges that the labour market needs.

It is essential for one to get a good job for living and education. However, higher education should also be viewed in the context of its role in advancement of human civilization. Human civilization is supported by research. Where is research without higher education? When we talk about research, we are not just referring to engineering and science but liberal arts and other disciplines affecting socio-political advances in our society. By cutting off research in higher education, we are going to stop human civilization from advancing to the next level. Thus, research skills should be an integral part of the higher education curriculum so that institutions of higher learning should not only offer routine programmes but give solutions to societal challenges through research conducted by staff and students. In this way higher education becomes the birth place of new ideas which might lead to economic growth.

7.6 IMPLICATIONS FROM THE REVIEWS

What is the focus and implication of the above review?

Education economists have long believed that an investment in education, or “human capital," produces employable personnel who are an important source of economic growth. Whatever the contribution of education to growth in the past, it appears investments in human capital may rise in importance relative to investments in other forms of capital as we transit to a post-industrial, knowledge-based economy.

It has been argued that a more highly-educated work force increases economic growth. This is on the assumption that a more educated labour force is more mobile and adaptable, can learn new tasks and new skills more easily, can use a wider range of technologies and sophisticated equipment and above all, is more creative in thinking about how to improve the management of work.
Just as a firm with better educated employees can perform better in these dimensions, so too can an economy with a better educated workforce. The benefits of having a more educated workforce accrue to everyone, not just to the institutions or organisations where these individuals happen to work or be employed. These kinds of indirect or spill-over effects for the firm or the economy as a whole may be especially important in an increasingly competitive national or global marketplace.

Over the last two decades (the 1990s and 2000s) more attention has been paid to the theory of how education might affect economic growth and this has had implications for how we might model the impact of increased educational attainment to economic growth and employability. The "neoclassical" or "exogenous growth" studies assume that the immediate impact of increasing the amount of education per worker by 10 percent would be to increase GDP by only about 4 to 5 percent (Brookings, 2006).

It also appears that, despite the rapid expansion in the supply of highly qualified workers especially through higher education, the markets or the economies are still looking for a highly specialized and educated labour force. In other words, there is a 'war for talent' in the market as competition strategy to improve productivity. The importance of education, training and re-training needs to be emphasized as it is now crucial in economic growth. This paper brings into play another important and often hidden underlying factor of the value and importance of relevant curriculum which should be responsive to the needs of the economy.

7.7 CONCLUSION

The chapter has argued that education, economic growth and employment are closely linked. The need for crafting a more relevant and responsive curriculum has also been emphasized. Human capital attained through education has been emphasized as a critical determinant of economic progress. A greater amount of educational attainment indicates more skilled and more productive workers (employed), who in turn increase an economy's output of goods and services. An abundance of well-educated human resources can easily facilitate the absorption of advanced technology from both developing and developed countries. Suffice also to mention that the level and distribution of educational attainment has a strong impact on social outcomes related to areas such as child mortality, fertility, education of children, and income distribution, among others. In this paper, we have looked closely at the relationship between education and economic growth, education and employment, key theories guiding the underpinnings of these relationships and the importance of responsive curriculum.

7.8 REFERENCES


