

## An analysis of Uganda's vocational education: Assessing human capital and human development approaches

**Jiin Kim**

*Seoul National University, South Korea*

The *Sustainable Development Goals* (SDGs) have signalled a new era for the vocational education agenda which had almost disappeared since the 1990s with the rise of universal primary education (UPE). However, there are voices of concern from academia pointing out the lack of alternative theoretical frameworks in current vocational education that is strongly rooted in the human capital approach. This study is an attempt to suggest the human development approach to vocational education by examining vocational education in Uganda. This paper analyses Uganda's vocational education from two theoretical approaches: human capital and human development. The findings reveal that Uganda's government has implemented vocational education based on the human capital approach, although it turns out that vocational education better fits the human development approach. The human capital approach has marginalised early school leavers and provided little support through counselling for their acquisition of life skills. Yet psychological support and life skills education are considered beneficial for the youths from the human development approach. These findings call for a shift in the theoretical framework from the human capital to the human development approach, which can help create a new and improved era of vocational education.

### Introduction

Vocational education was set on the global agenda in 2015 when the United Nations' Sustainable Development Goal (SDGs) 4.3 stated that by 2030, there should be "equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university" (UN, 2015, p. 19). This is a modification of the previous global agenda embodied in the Millennium Development Goals (MDGs) and Education for All (EFA), which focused on primary education. The SDGs also put emphasis on sustainable economic growth and decent work, highlighting the necessity to inculcate suitable skills across goals, hence the growing importance of vocational education (McGrath, Alla-Mensah & Langthaler, 2018).

However, the lack of a coherent theoretical perspective on vocational education has raised concerns (Oketch, 2007; McGrath, 2012; Blaak, Openjuru & Zeelen, 2013; McGrath et al., 2018). Vocational education programs — both actively offered as aid projects in many developing countries from the 1960s to the 1980s as well as instituted in the SDGs era — have been grounded only on human capital theory (Oketch, 2007; McGrath et al., 2018). This has led to attempts to offer a new theoretical framework for vocational education, and many studies have adopted the human development approach suggested by Amartya Sen (Sen, 1999; McGrath, 2012; Blaak et al., 2013; Tikly, 2013; McGrath et al., 2018).

In Uganda, vocational education policy has faced a new era as in 2003 the country achieved universal primary education (UPE) (Bategeka & Okurut, 2006). In the quest to fulfil its international commitment for primary education, Uganda conducted its UPE

policy in 1997, thereby abolishing all tuition fees and extra expenses paid by parents for teachers during primary education. The government increased budgetary allocations for education from 2.1% of gross domestic product (GDP) in 1995 to 4.8% of GDP in 2000, while the Ministry of Education and Sports (MoES) created guidelines to accomplish UPE. As a result, the gross enrolment ratio for primary school reached 127% in 2003. Over 100% gross enrolment ratio means that there were early or late entrants, or grade repetition, since gross enrolment ratio is calculated by definition: the number of enrolled school pupils over total number of official school age population (UN, 2007). However, the UPE policy was plagued by an increasingly high dropout rate. Seven years after the introduction of UPE, only 23% of the students who enrolled in the first year of primary school finished their final year (Bategeka & Okurut, 2006).

After establishing UPE, the Ugandan government began to shift its policy attention from primary to secondary and vocational education. This change can be clearly seen in the *Business, Technical, Vocational Education and Training (BT/VET) Act* of 2008, which provided the first Ugandan legal framework for vocational education at secondary and tertiary level (Okinyal, 2012). In addition, the government intended to provide non-formal vocational training for youths who had dropped out of school (Okinyal, 2012; Tukundane et al., 2015). Vocational education was supposed to benefit early school leavers without any skills or preparation for employment. Nevertheless, vocational education faced certain hurdles rooted in most Ugandans' general preference for academic education over vocational education. Historically, vocational education had been perceived as being for students who are academically inferior, and it is believed that higher level skills are provided in the academic track rather than in the vocational track (Okou, 2002; Blaak et al., 2013; Tukundane & Zeelen, 2015).

Many studies have examined the practice of vocational education conducted in Uganda (Blaak et al., 2013; Tukundane & Zeelen, 2015; Tukundane et al., 2015; Jjuuko et al., 2019). Prior research has tended to focus on case studies or a specific sector of vocational education such as agriculture, omitting the national policy dimension. While Okumu and Bbaale (2018) undertook a review of the TVET sub-sector to evaluate national vocational education policy and implementation, this was limited to a diagnostic summary without theoretical analysis.

This paper addresses this lacuna by examining Uganda's vocational education policies and practices with two contrasting theoretical approaches: human capital and human development. As increasing human productivity is the primary aim of the human capital approach, vocational education has put much focus on economic values, while ignoring human-centred values (Oketch, 2007; McGrath, 2012; Blaak et al., 2013; McGrath et al., 2018). The human capital approach to vocational education is criticised as focusing on immediate employability, which is only a short-term prescription (McGrath, 2012). Against this dominant approach, there is an urgent need for a new pedagogical and human-centred approach to re-conceptualise vocational education (Watson, 1994; Oketch, 2007; McGrath, 2012; Tikly, 2013). Vocational education through the human development approach aims to extend human freedom and capability rather than economic returns (Sen, 1999; McGrath, 2012; Powell, 2012).

Therefore, this study investigates Ugandan national policy and practices of vocational education with two different theoretical approaches: human capital and human development. This study will answer which approach is relevant in the Ugandan context where the national government has actively promoted vocational education for an increasing number of early school leavers after achieving UPE. This study will further discuss which theoretical approach on vocational education is most relevant in the context of developing countries.

## **Literature review**

### **History of vocational education policy in the global context**

Vocational education has been perceived as a crucial tool to develop the national economy in many countries (Holt, 1987; Price, 1991; Birdsall et al., 1993; Tilak, 2003; Comyn & Barnaart, 2010; Rolleston & Krutikova, 2014). Investment in the education sector has been empirically proven as an effective policy in developing the economy; countries known as the East Asian “tigers” are often cited to demonstrate the relationship between education and economic development (Birdsall et al., 1993; Tilak, 2003). Furthermore, implementing vocational education policy has been proven effective and efficient in directly improving employment (Holt, 1987; Price, 1991; Tilak, 2003; MEST & KEDI, 2009). For example, vocational education was implemented alongside general education in Britain in the late 1970s as a cure for the economic crisis and high youth unemployment rate (Holt, 1987). In Australia, vocational education was implemented because of the lack of skilled labour in the manufacturing sector between the mid-1970s and the early 1980s (Price, 1991). South Korea is also a case in which the flourishing vocational education at secondary level was the main cause of economic development in the 1980s (MEST & KEDI, 2009).

Many developing countries have also been encouraged to implement vocational education from the mid-1960s to the 1980s for national development and reduction of unemployment. Vocational education was typically assumed to reduce “youth unemployment”, impart “technology and knowledge”, help “academically less able students”, compensate for the “lack of middle level technicians”, reduce “poverty among urban dwellers”, and foster “economic globalization” (Middleton et al., 1993; Psacharopoulos, 1997, pp. 4-5; Powell, 2001; Tilak, 2003; MEST & KEDI, 2009). Based on these premises, much multilateral aid through the World Bank was invested to set up vocational education projects in developing countries. Between 1965 and 1976, the World Bank approved 40% of all its education loans for vocational education (World Bank, 1991). This trend lasted until the mid-1980s, with approximately 25% of the education sector lending allocated to vocational education between 1984 and 1985, although the education sector accounted for less than 4% of the total lending amount at that time (Bennell & Segerstrom, 1998).

However, in the 1990s there was a turning point on aid in the education sector, as clearly shown in the funding ratio. First, the education sector became a crucial part of aid around the world, with the World Bank's education loans rising to 10% of its total lending in

1996. However, this increase was not targeted at vocational education. Instead, the ratio for vocational education funding fell to 3% in 1996 (Bennell & Segerstrom, 1998). This side-lining of vocational education in developing countries by aid agencies continued even after the 1990s by the EFA agenda and the MDGs, both of which only promoted basic or primary education (McGrath, 2012). Instead, with the wave of neo-liberalism that minimised state intervention, vocational education is now mostly funded by the private sector (Bennell & Segerstrom, 1998). The radical reduction of attention to vocational education was driven by the rate of return analyses based on human capital theory conducted in late 1980s and into the 1990s. It was concluded that academic education pays back much more in economic returns than vocational education (Middleton et al., 1993; Psacharopoulos, 1997).

Although the success of primary education may be measured through the efforts of EFA and the MDGs in most developing countries, these improvements are limited to enrolment rates. Not only did high proportions of students drop out during schooling, but the quality of education also declined even as the enrolment rate increased (Alexander, 2008). Besides, the success of UPE has not significantly reduced unemployment rates nor provided the educated with access to currently emerging jobs (King, 2005, 2009). Therefore, the global community has been under pressure to address the issue of early school leavers and to create a new educational policy to solve these problems.

In sum, vocational education was promoted as the main educational policy from the 1960s to the 1980s for developing countries as a way to economic development. However, with the emergence of UPE agenda through EFA in the 1990s and the MDGs in the 2000s, vocational education policy faded to the background. Although the accomplishment of UPE is commendable, other problems such as high dropout rates and the low quality of education remain. Therefore, the vocational education sector has also been included in SDG 4.3 as the next educational goal after the accomplishment of UPE (UN, 2015).

## **Two theoretical approaches to vocational education**

### *Human capital approach*

According to the human capital theory, education is an investment to accumulate human capital and increase personal productivity, which will eventually increase wages in the labour market (Becker, 1994). Therefore, Becker's work suggested that states should encourage investment on education to raise human capital and ultimately accomplish economic development. From the human capital approach, many researchers have tried to explore which kinds of education would increase productivity if given the same amount of investment, or provide a higher rate of return after attaining education (Zymelman, 1976; Psacharopoulos, 1987; Tilak, 1988; Middleton et al., 1993; Bennell, 1996). The studies on rates of return attempted to compare "the societal costs of providing various types and levels of education with the resulting benefits in future years" (Middleton et al., 1993, p. 41). Supposedly, the rate of return on vocational education is much less than academic education because vocational education needs more infrastructure for occupational training. This hypothesis has been confirmed by empirical studies conducted by Zymelman, Psacharopoulos, and Tilak (Zymelman, 1976; Psacharopoulos, 1987; Tilak,

1988; Middleton et al., 1993). The rate of return theory supports the downgrading of vocational education and has resulted in the current trend of global aid agencies shifting their funding from vocational education to academic education since the mid-1980s (Bennell, 1996).

However, the rate of return theory has defects. Allegedly, the methodology used to support academic education over vocational education was designed to oppose vocational education (Bennell, 1996). In addition, the data used in these studies are now too outdated for evaluating current vocational education (McGrath, 2012). Notably, a recent study has shown a greater rate of return on secondary vocational education compared to academic secondary education (McGrath, 2012). Unfortunately, the World Bank report relies only on Psacharopoulos's study, which is "out-of-date and methodologically flawed" and is not even used by Psacharopoulos himself anymore (Bennell, 1996, p. 241). Therefore, the rate of return theory is not a sound basis to reject vocational education.

Middleton et al. (1993) have also argued that vocational education provides a high economic return only for countries where there are sufficient jobs and a stable economy. Therefore, in low-income countries that have few available jobs, vocational training cannot be suggested as a technique for increasing employment. Vocational education cannot solve youth unemployment and urban poverty because these outcomes are consequences of economic underdevelopment, not educational problems (Psacharopoulos, 1997). For example, sub-Saharan African countries show that investments in vocational education can fail if the economic situation is unstable (Middleton & Demsky, 1989).

Nevertheless, the extent to which economic recession affects the outcome of vocational education is unclear. There are countries with low economic growth that have nonetheless gained advantages from vocational education. For example, Botswana demonstrated the success of vocational education even when the country ranked as a low-income economy, because of significant growth in the industrial sector. In addition, despite experiencing a high unemployment rate, Malawi's vocational education was evaluated as successful because of the country's flexible and varied programs for students (Middleton et al., 1993). These examples show that it is difficult to decide on a criterion for determining whether countries are suitable for vocational education or not.

The rate of return theory, supported by empirical evidence, holds that academic education contributes more to economic development than vocational education. The World Bank's policy since the late-1980s has emphasised academic education, especially primary education, based on rate of return studies (Birdsall et al., 1993). However, a single variable cannot be a magic bullet for economic development. The process of development is complex, embodying diverse factors such as the international economic situation and national policy. This means that education is also not a silver bullet for development, yet such has been the argument propounded by the World Bank (World Bank, 1971). For example, East Asian countries have been cited as exemplary countries to encourage academic education for economic development (Birdsall et al., 1993), yet these countries had actively adopted vocational education during their developing period (Bennell &

Segerstrom, 1998; MEST & KEDI, 2009). Therefore, the linkage between economic development and academic education is ambiguous and the evidence supporting academic education over vocational education needs to be further investigated.

#### *Human development approach*

Theoretical debates on vocational education ceased for twenty years, so there is a paucity of theories on vocational education (Watson, 1994; Oketch, 2007; McGrath, 2012; Tikly, 2013). By concentrating on the human capital approach, alternative ways of approaching vocational education are rarely discussed. However, some scholars have raised their concerns against the traditional human capital approach that had flourished since the 1960s to argue for the need to de-link the theory from vocational education (Watson, 1994; Oketch, 2007). The human development approach has instead been suggested to re-conceptualise vocational education (McGrath, 2012; Tikly, 2013).

The human development approach has been firstly posited by Sen (1999), who argued for a switch in focus from economic growth to expanding human capability. Sen's approach to development is "a process of expanding the real freedoms that people enjoy" rather than "the growth of gross national product, or with the rise in personal incomes, or with industrialization, or with technological advancement, or with social modernization" (Sen, 1999, p. 3). This concept of human development is further elaborated through the *Human Development Report*, which lists the three components of human development as justice, well-being, and empowerment and agency (UNDP, 2010). In contrast to the human capital approach, the human development approach posits that development can be achieved by expanding human capability. To expand human capability, social opportunity is a necessity and basic education is an important component (Sen, 1999).

However, vocational education has not been specifically identified as an important component in the human development approach, with only academic schooling being highlighted. McGrath (2012) pointed out that vocational education was not reviewed in the 2010 *Human Development Report* as a part of the capability component or in the *Multidimensional Poverty Index*. The only page related to vocational education or skills was the *Gender Equality Index* for female labour force participation. This contrasts with the trend in which higher education is now considered an important factor in human development (Powell, 2012).

Nonetheless, there has been some theoretical development with respect to vocational education (Oketch, 2007). For instance, McGrath (2012) argued that different lenses are needed for vocational education since the orthodox view holds that vocational education is only an economic tool. He suggests a human-centred approach for vocational education based on the human development and capability approach to de-link from the dominant human capital approach.

Despite this relatively new application of the human development approach, there are already some case studies that support the effectiveness of vocational education for human development. For example, it has been found that youths are empowered through vocational education in Cambodia (Cheng, 2010). This study emphasises the pedagogical

approach to vocational education, making a distinction between “vocational education” and “vocational training.” Vocational education is a broader concept than training, and includes a pedagogical dimension rather than only specific skills training.

Similarly, Powell's study (2012) conducted in South Africa found that vocational education improves the well-being of learners beyond increasing productivity. In the research, many of the students studying in vocational colleges were found to be socially and economically disadvantaged. They chose vocational institutions because the fees are lower than those of universities and it was easy for them to commute. The findings of this study further revealed that vocational education not only contributed to empowering students economically, but it also helped improve their psychological health by enhancing their self-esteem. This was not limited to the particular students; their families were also proud of them because they were transforming into educated members of society. In addition, the learners' hope for a brighter future was also restored (Powell, 2012). These case studies show that vocational education can contribute to diverse capabilities beyond the economic.

## **Ugandan education system and vocational education**

Uganda's education system has been defined by the numbers 7-4-2 since 1992. After seven years of compulsory primary education, students choose between four years of lower secondary school or three years of technical school. Students who finish the academic track in lower secondary may advance to upper secondary, whereas technical school graduates can only advance into technical training institutions. These tracks continue to tertiary education because the tertiary educational system is also divided into vocational and academic institutions (Figure 1) (UNESCO-IBE, 2012).

Although vocational education in Uganda has a long history since national independence in 1962, policy makers have only recently been concerned with this education sector (Okou, 2002). Since 1997 the Ugandan government has focused on UPE, placing primary education as top priority and leaving vocational education aside (Bategeka & Okurut, 2006). After accomplishing UPE in 2003, the Uganda government started to promote vocational education as a cure for early school leavers and high unemployment (Okou, 2002). The BTVET Act was enacted in 2008 for comprehensive vocational education, which is the most important policy for current vocational education in Uganda (MoFPED, 2004). Uganda has diverted a large amount of investment in vocational education since the early-2000s. The percentage of budget on skills development rose substantially from 16% in 2013 to 45% in 2018 (MoFPED, 2019).

## **Method**

This study employs content-analysis to examine the Ugandan vocational education from two different approaches: human capital and human development. The literature used in this study can be divided into two categories: (1) government white papers; and (2) journals and reports about Ugandan youth and practices in vocational education in Uganda. Papers published by both the Ugandan government and international agencies

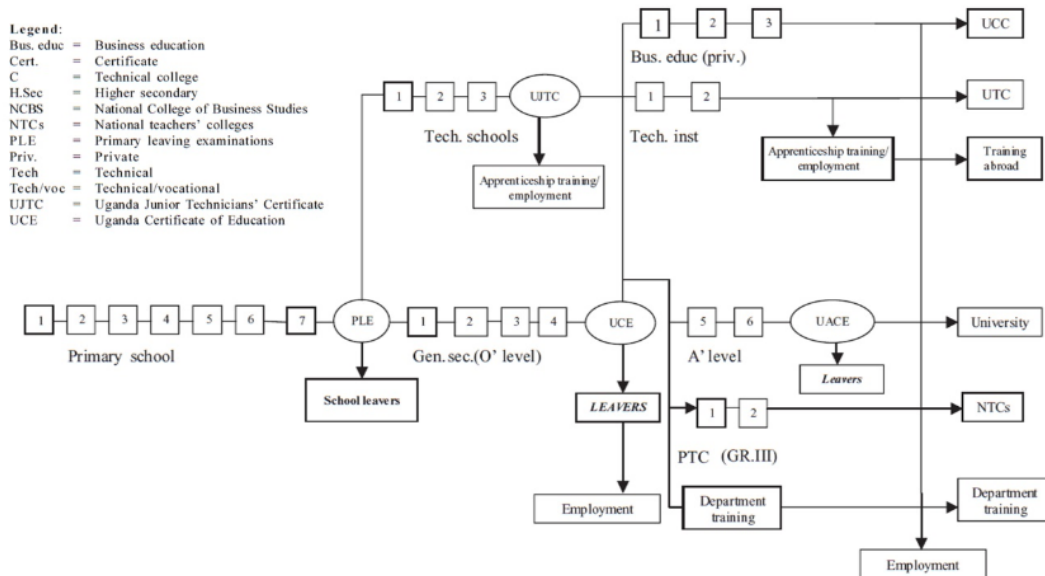


Figure 1: Ugandan education system structure (UNESCO-IBE, 2012).  
 [use 'zoom in' function on PDF reader for legibility, or view in UNESCO-IBE (2012)]

are used as secondary sources to explain Uganda's education system. Some of the white papers used are those published by the MoES and the Ministry of Finance, Planning and Economic Development (MoFPED), and they include policy directives about vocational education. Journal articles and reports published by non-government organisations also act as sources of information on the implementation of vocational education in Uganda. In addition, education reports on the youth provide more information about this discourse.

## Findings

### Government policies on vocational education

The results of the content analysis of government papers reveal that the Ugandan government has actively promoted vocational education since 2004 (MoFPED, 2004). The cornerstone for vocational education in Uganda can be found in the second version of the *Poverty Eradication Action Plan* (PEAP) paper published in 2004, which placed significant emphasis on vocational education for the first time in Uganda. The PEAP was first drafted in 1997 by the Ugandan government for budgetary coordination of aid and debt relief under the control of the *Highly Indebted Poor Countries* (HIPC) initiative, aiming to tackle poverty in Uganda (MoFPED, 2000, 2004). The second PEAP paper suggested five main pillars for eradicating poverty in Uganda, and the human development pillar covers education, health, water supply and social development. The part on education lists two main components of academic education and skills development (MoFPED, 2004).



Vocational education is placed on the human development pillar in the second PEAP paper. But unlike the title of the pillar — human development — the human capital approach and not the human development approach to vocational education is more relevant in the report. For example, the chapter on education starts with the sentence, “investment in education contributes to the accumulation of human capital, which is essential for higher incomes and sustained economic growth” (MoFPED, 2004, p. 153). The words “manpower” and “human resource development” are repeated throughout (MoFPED, 2004, p. 154). An examination into the vocational education policy shows that the second PEAP report takes the human capital approach.

The BTVET Act of 2008 and the *Uganda Vocational Qualification Framework* (UVQF) signalled a new era for Ugandan vocational education, providing a legal framework for it. The BTVET was first suggested in the second PEAP paper while the details were shaped by the MoES white paper *Skilling Uganda* (MoFPED, 2004; MoES, 2011). The publication suggested the BTVET strategic plan to be implemented during 2011 to 2020, along with concrete vocational education policies. In line with the second PEAP report, the BTVET Act was based on the human capital approach — making BTVET “relevant to productivity development and economic growth” is one of its five objectives (MoES, 2011, p. 3).

Consequently, the UVQF was established. The UVQF is aimed at increasing flexibility, accessibility, attractiveness, affordability and relevance both to trainees and employers (MoFPED, 2004). The UVQF helps to regulate apprenticeship schemes, accredit vocational institutions, run the technical certification examination, and standardise occupational skills. The UVQF has five levels, ranging from basic skills to high diploma levels. Based on the UVQF, *Assessment and Training Packages* (ATPs) that show occupational profiles and provide detailed curricula for each job were developed by the MoES (Okinyal, 2012).

Overall, active implementation of vocational education in Uganda kicked off with the second PEAP publication in 2004 with the aim of eradicating poverty. As the objective of vocational education was very much based on achieving economic goals, the national policy on vocational education was correspondingly based on the human capital approach. The BTVET system, the UVQF, and ATP were also organised to systemically cultivate human capital.

### **Early school leavers**

In the second PEAP paper providing an over-arching framework for current Ugandan development, school leavers are only mentioned once, in the section on the rising incomes of the poor, but not in the section on education (MoFPED, 2004). School leavers are identified as future labour, but the connection between them and vocational education is not drawn in the first blueprint of Ugandan vocational education. Instead, senior secondary BTVET institutes are promoted to increase the number of BTVET students and institutes (MoFPED, 2004). Tertiary BTVET is also emphasised to provide skills for

employment in jobs such as ICT, hospitality, construction, technology, machine operators, mechanics, and oil and gas technologies (MoFPED, 2004).

Meanwhile in Uganda many students leave school at the primary level. In 2016, 55% of primary school students dropped out before graduation, and only 59% of graduates transitioned from primary to secondary level (UNESCO-UIS, 2021). This means the group that would most benefit from vocational education may be the students leaving school before finishing primary school. Since the commencement of the Universal Secondary Education agenda in 2007, government policy has promoted academic junior secondary schools (Kayongo et al., 2019), whilst planning to reduce the number of vocational junior secondary schools such that only 10% of primary school graduates can enter a BTVET institution (MoFPED, 2004).

Primary school leavers can access the junior secondary level of vocational education without a certificate of graduation from primary school. Once they succeed in the formal national exam at junior secondary level of vocational school, students will be awarded the *Uganda Junior Technical Certificate* (UJTC) which is compulsory for senior secondary vocational education (UNESCO-UNEVOC, 2014). Therefore, the junior secondary level of vocational education acts as a stepping stone for early school leavers by providing an opportunity to continue their studies (Tukundane & Zeelen, 2015). However, this stepping stone is downsized by the Uganda government (MoFPED, 2004).

This mismatched policy between early school leavers and vocational education was pointed out by a MoES paper in 2011 (MoES, 2011). Note that school leavers at primary level were not addressed at all in the PEAP paper (MoES, 2011). Therefore, the Ugandan government implemented non-formal vocational education called the *Non-Formal Training Program* (NFTP), for primary school leavers starting in 2010. The NFTP allows learners to access vocational education with flexible course periods and free of graduation certificates. 8% of the total vocational education funding has been allocated to the NFTP from 2011 to 2020 (MoES, 2011). Although the NFPT has been successful in providing easy access to vocational education, it has its shortcomings: inadequate programs to meet the various needs of students, lack of progress records and marketing, and the much too short duration for students to pass occupational testing and acquire certification (Okumu & Bbaale, 2018).

Non-formal vocational educational is very popularly conducted in Uganda not only by the BTVET institutions but also by non-government organisations. There are no available government statistics that show how many young people are taking non-formal vocational education, but according to non-government organisation reports, one third of Ugandan youth indicated that they had skills training, which shows how widespread non-formal vocational education is in Uganda. In the same survey, 46% of the respondents indicated that they had completed primary education and 34% and 7% had finished junior and upper secondary education (Banks & Sulaiman, 2012).

In a previous study, many of the young people not finishing primary school have reported that they experienced a negative event during their schooling period, which influenced

their decision to quit school at either the primary or secondary level (Blaak et al., 2013). Therefore, the more flexible and accessible non-formal vocational education is the only option for these early school leavers. Non-formal vocational education is distinguished from private BTVET institutions by the pursuit of practical training rather than the focus on theory and certification (Blaak et al., 2013). It is still doubtful whether the policy promoting the NFETP by government contributes to non-formal vocational education, as NFETP has also been enhanced to ensure that it is in line with the UVQF (MoES, 2011). This can be regarded as a formalisation of non-formal education (Hoppers, 2006).

### **Curriculum**

According to Ugandan government vocational education policy, formal vocational education focuses on modern technology with little attention being paid to the agricultural sector (MoFPED, 2000, 2004; NPA, 2010). Scarce interest in the agricultural sector by BTVET can be attributed to the Ugandan national development plan from 2010 to 2015 which focuses on transforming Uganda “from a peasant to a modern and prosperous country within 30 years” (NPA, 2010, p. 37). In the first PEAP paper published in 2000, vocational education is described as a way to shift away from agriculture to industrial modernisation (MoFPED, 2000). In the second PEAP report published in 2004, vocational education is described as a means for providing jobs in non-agriculture and self-employment sectors (MoFPED, 2004).

This indifference in the agricultural sector has resulted in the absence of standardised agricultural curricula in formal education. In formal vocational education, ATPs (Assessment and Training Packages) are developed based on the UVQF, and these provides detailed lesson plans for teaching. There are 80 ATPs that are developed by the Directorate of Industrial Training (DIT). ATPs provide a description of occupation, modular curriculum, and sample assessment instrument, hence standardising education. The fields of ATPs are diverse, relating to construction, health services, mechanics, tourism, and so on, but it does not cover the agriculture industry (Okinyal, 2012). This means that BTVET institutions have no standardised curricula on agriculture.

Although national development policies are not interested in the agricultural sector, one MoES paper does mention agricultural vocational education. This does not mean that the importance of industrial skills education is reduced; instead, it implies that agricultural training has also become part of the strategy. Expanding and improving vocational education in agriculture is one of the strategies mentioned for “productivity development and economic growth” in future vocational education plans from 2011 to 2020 (MoES, 2011, p. 13). In addition, developing agricultural ATPs has become a top priority, although there has been no official ATP on agriculture until 2021. The lack of agricultural curricula is quite reprehensible, since 72% of Uganda's population is currently in the agricultural sector (Trading Economics, 2020). In sharp contradistinction to education priorities, agriculture is the most popular course among Ugandan youths in non-formal vocational education, accounting for about 35% (Banks & Sulaiman, 2012). Furthermore, agriculture education is highly utilised after training, followed by business skills and brick laying (Banks & Sulaiman, 2012).

The second characteristic of the vocational curriculum is the structure bisected by gender. This was unexpected because Uganda has a low gender discrepancy in primary school enrolment (Banks & Sulaiman, 2012) and, as prior research shows, vocational education increases women's engagement in income-generating activities (Bandiera et al., 2020). Reports show that although participation in non-formal vocational education is similar between genders, females tend to participate in tailoring and hair dressing programs while most of the males choose bricklaying, carpentry and mechanics (Banks & Sulaiman, 2012). In formal vocational education, ratio differences were found by courses, with more males enrolling into technical and mechanical courses than their female counterparts, and more females enrolling into accountancy, secretarial, computer appliance, and tailoring courses than their male counterparts. This reflects deep-rooted gender stereotypes about occupations in Uganda (Tukundane et al., 2015).

### **Life skills and psychological support**

According to document analysis of previous studies regarding results of vocational education, life skills training conducted during vocational education helps enhance youths' quality of life. Life skills refers to the "set of abilities, attitudes and socio-emotional competencies that enable individuals to learn, make informed decisions and exercise rights to lead a healthy and productive life and subsequently become agents of change" (UNICEF, 2019, p. 7). Life skills are not a key focus in vocational education and are not even mentioned in government policies. However, life skills modules are one of the aspects of vocational education praised by participants (Blaak et al., 2013).

The exact number of institutions providing life skills education is not known, but various life skills courses are offered in vocational education institutions (Blaak et al., 2013; Tukundane et al., 2015; Bandiera et al., 2020). These life skills modules include HIV/AIDS, hygiene, drug abuse, theft, early marriage, decision making, legal process, self-esteem, assertiveness, and self-expression. Many youths have reported that these modules help them avoid risky behaviour and exploitation (Blaak et al., 2013; Tukundane et al., 2015; Bandiera et al., 2020). In addition, 37% of the youth agreed that life skills are the most important lessons they can learn, followed by vocational training, formal schooling, and financial literacy (Banks & Sulaiman, 2012). Providing life skills education during vocational education is crucial in the context of Uganda, since most participants in vocational education have little chance to learn life skills after leaving school early (Blaak et al., 2013).

Besides life skills education, guidance and counselling during vocational education can improve participants' psychological health. In some non-formal vocational programs, guidance and counselling are structural components for sexually abused and drug addicted youth, and mental health support is also provided depending on the situation. Students appreciate the guidance and counselling provided during skills training as they feel safe and empowered (Blaak et al., 2013). Many young people in Uganda report that their life was miserable due to the fear of the unknown, depression, and low self-esteem due to high unemployment. Especially, early school leavers show unstable mentality after they quit school, due to adverse events (Banks & Sulaiman, 2012; Tukundane & Zeelen, 2015). Therefore, guidance and counselling can support a participant's psychological health.

## Discussion

This paper examined Ugandan vocational education with two theoretical lenses: human capital and human development approaches. Analysis uncovered four features of Ugandan vocational education. First, Ugandan vocational education policies are strongly rooted in the human capital approach. Findings show that government-initiated vocational education considers youth as profitable human capital for national development. The human capital perspective of youths has been dominant in vocational education worldwide since the 1960s (Oketch, 2007), and this is also found in Ugandan vocational education policy since the mid-2000s.

Second, the government policies led by the human capital approach have resulted in marginalising early school leavers from formal vocational education, forcing these youths to rely on non-formal vocational education. If the BTVET policy reflected the human development approach, the junior secondary level of vocational education would have been promoted. The government has additionally implemented NFTP, but the program has its own shortcomings (Okumu & Bbaale, 2018). Nevertheless, non-formal vocational education, whether public or private, is popular among Ugandan youths; one-third have participated in some form of vocational education (Banks & Sulaiman, 2012).

Third, the vocational education curriculum is linked to national development policy of transitioning from agricultural to modern society. Agriculture, despite being the most popular sector in Uganda occupying more than 70% of workers, is not promoted in vocational education. Although agriculture is not favoured by young people, it is still a major income generator in sub-Saharan Africa (Swanson & Rajalahti, 2010). The MoES has tried to handle the agriculture sector, but a standard curriculum was not developed until 2021 (Okinyal, 2012). In terms of curricula, males and females enrolled into different vocational courses due to deep-rooted gender stereotypes on occupations. To some extent, vocational education has the possibility to hinder women's capability by putting them into particular occupations.

Lastly, the importance of life skills education and psychological support in vocational education requires more investigation. The human capital approach is not interested in psychological support. However, the participants responded that vocational education helps to equip them with life skills and provides them with necessary counselling. This is empirically shown in other studies. Youths who participated in vocational education were less likely to use alcohol, have risky sex, and were more likely to be satisfied with their lives (Swahn et al., 2018; Bandiera et al., 2020), and this may be related to life skills education. Many participants in non-formal education drop out of school without basic life skills, so equipping them with these skills is crucial, especially in the context of Uganda.

The findings reveal that Ugandan vocational education has been implemented from the human capital approach on the whole, but the participants in vocational education have benefitted in the human development dimension. The youths, especially the early school leavers, are marginalised in formal vocational schools that take the human capital

approach, but they benefit from non-formal vocational education and psychological support provided from the human development approach. Since vocational education for the Ugandan youths approached from the human development perspective provides benefits that exceed economic returns, more investigation on this matter is necessary.

Besides Uganda, many developing countries have conducted vocational education with the human capital approach between the 1960s and the 1980s (McGrath, 2012). But vocational education based on the human capital approach can be easily diminished by the logic of rate of return — the assumption that academic education rather than vocational education can result in higher economic return. Therefore, in the new era of vocational education shaped by the SDGs, the human development approach should be actively reflected in vocational education to establish a new paradigm of vocational education. This study is limited in that it could not explore details of how youths are empowered through vocational education in other countries, such as Cambodia and South Africa (Cheng, 2010; Powell, 2012). Despite this limitation, this study has explored a new theoretical direction on vocational education with results having implications for policies.

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**Jiin Kim** is a PhD candidate in the Global Education Cooperation Program, Seoul National University, South Korea. Her research interests include education policies and inequality in developing countries, comparative education, poverty and education, and international cooperation in education.  
 Email: [ji.kim@snu.ac.kr](mailto:ji.kim@snu.ac.kr)

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