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Approach to Pedagogy and Scenarios Poor People Face in the Pursuit of Basic and Higher Education

Charles Enock Mulimba Ruyembe

Abstract

This chapter addresses some key issues related to pedagogical approaches and scenarios marginalised groups face in the pursuit of basic and higher education in African countries. Based on a case study carried out in Tanzania and South Africa, this chapter explores debates within the theory and practice of education and teaching environment, and elaborates what the notion pedagogy encompasses in the act of teaching and learning, inequality systems linked to opportunities offered by the new Information Technology, lack of quality teachers and infrastructure all focused to poor people entering the labour market. This chapter considers how pedagogical challenges can be diminished and overcome the growing knowledge and skills shortages. Finally, it offers recommendations towards turning both pedagogy and pedagogical challenges into a success story focused on investing in human capital for the poor in Africa.

Keywords: pedagogy, unequal systems, Information Technology, human capital

1. Introduction

Pedagogy is an increasingly important component of education now regarded as part and parcel of an academic discipline. Hence, the notion in this book chapter refers to a study of how knowledge and skills are exchanged in an educational environment. The action puts into consideration the ‘interactions between teachers, students, and the learning environment and learning tasks’ [1]. It also incorporates how teachers and students relate together and how the instructional approaches are employed in differentiated learning tasks and environment [2]. Due to recent developments in the educational context, education experts have heightened interest in examining pedagogy as an academic discipline and how the entire process influences the interactions and growth of learners during learning and thereafter. However, I argue that a major challenge with all such initiatives remains to be the scenario poor people face in the pursuit of their basic and higher education, respectively. In African countries, many poor populations due to pedagogical challenges are left behind simply because of their countries education policies do lack systematic planning and training or passionate and committed teachers thinking beyond existing pedagogical approaches, with focus to ensuring effective pedagogy that

occurs in the teaching environment aimed at preparing learners to the real-world learning relevance [3]. As Abrams [4] contends, policy makers, schools and teachers have largely assumed that schools were the key to ensuring young people got the best possible start, yet for many children, the path to failure began well before their first day to school [4, 5].

Now, what does the notion pedagogy encompass in the teaching and learning environment? This is a complex issue and hard to account for due to the fact that pedagogies vary to a great extent due to social, political, historical, duration or time and international perspectives from which they do emerge [3, 6]. Notwithstanding, far too little attention has been paid to the complex nature of pedagogy challenges facing teachers on the African continent. In fact, the case goes far beyond the pedagogical approaches employed during the teaching and learning exercise to an extent of experiencing some teachers' incompetence in their academic and teaching profession, and this result to perform their tasks below standard as it is going to be clarified in the next section. Therefore, many school children or students are badly taught [4], and the action draws a weak foundation for a child's learning [5]. Put another way, pedagogy is extended to the teachers' understanding of their role, the teaching profession and knowing how children most effectively learn, and most importantly, how teachers have to productively engage in the teaching exercise. Shulman [7] argues that in order to advance teacher reform, it is essential to develop 'codified representations of the practical pedagogical wisdom of able teachers' [7].

Numerous studies have attempted to explain about approaches to pedagogy and basic strategies to eliminate pedagogical challenges in the teaching and learning environment. For example, in [8–11], it argue that the best approach to teaching is the one based on the assumption that students learn best when they actively engage in the curriculum and when their interests forms the foundation for the curriculum's construction. Furthermore, the incorporation of innovation as a new way of applying ideas and the flow of technology and information in pedagogy has to be employed as a way of describing or employing *arts education* (education in arts or education through arts), see Bamford [12], as a way of enhancing learners' creativity and critical thinking capacity. In clarification, 'education in art' [12] implies teaching pupils or rather students for the practice and principles of different art disciplines, with a focus on stimulating their learning, critical thinking and problem-solving ability. At the same time, while enabling learners to construct their own cultural identities, 'education through art' [12] informs art as a vehicle for learning other subject contents and teaching other general educational outcomes [12–14]. Indeed, in the drastically changing technology and global competition for knowledge and skills development, pedagogy and pedagogical approaches must incorporate new ways of learning, the latest information and skills relevant to learner's survival in the real world. However, the crucial point to make here is about approaches to pedagogy and strategies to eliminate pedagogical challenges in the African context. My summative explanation for the pedagogical challenges in African countries is as follows: firstly, *the teaching and teacher education model in the African context* must focus on preparing teachers to work with students or learners from diverse cultural backgrounds [15]. Secondly, poor pedagogy or outdated teacher education and *teacher's ability or passion* (as an individual) to adapt teaching profession strategies or practices have let down young people in the pursuit of attaining quality education. Thirdly, goals or main objectives of education policy and the quality and quantity challenges facing African countries including challenges that were triggered with the implementation of, for example, an 'Education for All' (EFA) agenda have contributed to a steady deterioration of education and fuelling pedagogical challenges in Tanzania like in many developing countries since the late 1980s to present [16, 17]. Fourthly, lack of appropriate and adequate

learning resources and infrastructure and external factors is in relation to the teaching profession. Fifthly, there are strategic ways related to how to meet students' needs as opposed to learner-centred theories of learning as it is believed that a learner possesses some qualities, potentials and resources embodied in a person which stand as a portion of economic value of that particular person in its totality [18]. These resources, qualities and potentials sometimes regarded as human capital embodied in a person can be realised and invested through education and training, or interactions between teachers and students within the learning environment and learning tasks. Indeed, the pedagogy and its forms can motivate learners to meet their dreams in life, and can help in designing, paving way and strengthening of career pathways for students and overcoming the growing need of skills in Africa, likewise in other developing countries.

In that context, the current book chapter has been organised in the following ways: firstly, it gives a brief overview on approach to pedagogy, and what the notion pedagogy encompasses in the teaching and learning context; secondly, it reviews scenarios poor people face in observing their right to attainment of basic and higher education on the African continent (reference is made to a case study carried out in Tanzania and South Africa); thirdly, this book chapter discusses on infrastructure, learning resources and a pedagogy of teacher education in Africa; fourthly, it discusses pedagogy and inequality systems linked to new Information Technology (IT) opportunities in Africa; fifthly, the chapter identifies the marginalised population, their learning experiences and labour market challenges; and sixthly, it informs on the growing need of knowledge and skills and puts forth a need to invest in human capital. This chapter draws a conclusion by analysing some basic answers related to key research questions on a case study carried out in Tanzania and South Africa and puts forward some recommendations. In brief, this book chapter assesses how effective pedagogy as a broad method and practice within the teaching and learning environment can be characterised to real-world learning, and how pedagogical challenges can be eliminated so as to overcome the growing knowledge and skills shortages in Africa. Finally, the chapter gives recommendations towards turning both pedagogy and pedagogical challenges into a success story focused on investing in human capital with a vision to meet poor people's needs academically, socially, economically, culturally and emotionally.

2. Poor people in the pursuit of basic and higher education

Despite a fact that the right to education is a global issue and does not allow any room for exclusion or discrimination, many marginalised populations in African countries face diverse challenges. Scenarios poor people face in the pursuit of basic and higher education in African countries can never be isolated from challenges to effective interactions between teachers, students and the learning environment.

Prior studies have noted some key stumbling blocks poor people face towards modern education attainment in Tanzania and South Africa like in many African countries. These include low school enrolment and high dropout rates due to poverty, distance from school, and cultural and geographical barriers which in totality contribute to low academic achievement [19]. Unwanted pregnancies of teenage students delineate as one of the prevailing issues, which has left many primary and secondary school going students without relevant skills to thrive in society [5, 20, 21]. The case of HIV/AIDs and sexual abuse in young people is high due to poverty. Nevertheless, it can be argued that pedagogy in both basic and higher educational context (in African countries) has rarely been given room to prepare learners for a more connected, more technological future with a focus of helping them to gain critical life

skills, thus making education improves learner's transition from birth, the world they live in, and from school to work in a short term [13, 22]. Other challenges as outlined before, it include the lack of adequate resources, infrastructure and active pedagogical approaches that can be used as tools to enable learners to realise their potentials and develop their capacities [5, 23].

Building on the principle of 'leaving no one behind' [24], the United Nations General Assembly in September 2015 adopted the 2030 Agenda for sustainable development that includes 17 Sustainable Development Goals. Envision 2030 (SDGs), goal number 4 on 'Quality Education' argues for ensuring inclusive and equitable quality education that promotes life-long learning opportunities for all [24]. However, research reports show that making young people in poor countries to learn new information and skills that can sustain their needs in work and life remains to be a big challenge [14], and what happens is simply recruiting learners on passing examinations 'exam treadmill' until the day they exist from the education system [25]. Incidentally, many marginalised learners on their way towards attaining basic and higher education remain to be victims of external anti-social behaviour. These include: teenage pregnancies for female students; use of marijuana; homelessness; HIV/AIDs victims; orphans; high dropout rates; and those who lag behind others in terms of academic achievement [26]. All these outside forces in the learning environment paint the real lives of many poor young people on the African continent and, unfortunately, lead many of them to failure in education, work and life. As His Excellency, the late First President of Tanzania Mwalimu Nyerere said:

'...Tanzania cannot be created if some people are very highly educated and others are completely illiterate. The illiterate ones will never be able to play their full part in the development of our country or of themselves, and they will always be in danger of being exploited by the great knowledge of others. Therefore, we should plan to overcome the existing high level of illiteracy' [27].

In interpreting the above statement, study reports show that the proportion of illiterate women is increasing in Sub-Saharan Africa and in countries such as India and China. Hence, this is a stumbling block towards sustainable development [13]. Based on the situation, Baregu [28] and Twaweza [29] both argue for the worrying trends of education and pedagogy challenges in Tanzania by revealing that there is now a rising number of not only women but also young people completing both primary and secondary school education without the ability to read, write and have at least basic arithmetic skills. Commenting on education in South Africa, Carroll [30] argues that illiteracy rates to women are on the decline. However, the situation does not mean to have a satisfactory education system, an equitable employment environment and an adequate primary and secondary education in place. As a matter of fact, the scenario of education system in many African countries has been influenced by systems established in foreign and rich countries. Thus, in adopting such systems, difficulties and confusions have erupted in the use and applications, with specific in pedagogy and its forms [31]. The extracts from the respondents' comments and unit of analysis illustrate the above stipulated findings clearly:

-I say, the current education system in Tanzania must change and include theory and practical. I mean work-based learning from primary schools to University level (...) arts education must be given priority, and be examinable so as to help in promoting youth employment (interview, respondent 4: in Mwanza Tanzania).

-I see the system encouraging learners to cram what teachers say! aimed to pass examinations! (...) the teaching and learning system has very much adopted the 'banking concept of education' as mentioned by Paul Freire! This is a challenge! My opinion is that education must stimulate talents/ activate and nurture the creative capital embedded in students (Interview, respondent 2: in Dar-Es-Salaam Tanzania).

-Yeah, my feeling is that our challenge lies at the education system. This does not nurture creative talents of poor young people with a vision for their future sustainable lives (Focus group 3: in Bagamoyo, Tanzania).

The above extracts identify a strong relationship between poor people and the pursuit of their attainment of basic and higher education. However, a change in the basic and higher education system, including a thorough elimination of outside forces or obstacles in the teaching and learning environment, was a feature of many respondents' views.

2.1 Infrastructure, learning resources and pedagogy of teacher education

Lack of adequate and conducive teaching and learning environment (infrastructure) includes buildings or enough classrooms, desks, libraries, relevant and enough books and laboratories for science subjects which are just a few examples of challenges observed in many African education system. As a result, Africa has in place a vast number of children being badly taught or utterly untaught [32]. The implication is that there are too few schools and too many bad schools [33]. To illustrate, this study produced results that corroborate the findings of a great deal of previous work in the field [14] as follows:

-Yeah! I say, we still have a long way to go! The challenges in our education lies at poor infrastructure, lack of adequate learning resources and competent teachers. Hence, a change of the current education policy is essential for the positive impact (Focus group 2: in Mwanza, Tanzania).

-Aaa (.) our education system lacks the development of creativity and innovation within the learning environment. Education must go with practice not only theory (...) and other subjects as the learners go must be infused into arts education with no exception of social, cultural and economic issues (Focus group 1: Lindi, Tanzania).

The statements above are in sympathy with those of [15–17] focused on the interactions between a teacher, as a guide who must enable learner's academic growth, and a learner, as a person who possesses some level of qualities and potentials which can be realised. Finally, there is a need of a conducive learning environment and appropriate learning tasks. Based on the interpretation above, this section relatively refers to a case study of Gauteng's province (in South Africa) education system. The case study of Gauteng's education system provides valuable lessons based on two students in the same schooling system, in the same country and with the same curriculum but from schools with different learning resources. The end results were that one student from a well-resourced school passed with flying colours, while the other one from a poorly resourced school failed. Hence, this is what we termed as 'unequal education system' or 'levels of inequality' [34]. However, since 1994, Gauteng education department has been launched several

interventions, so as to eliminate these levels of inequality, including an equal distribution of teaching and learning resources. The levels of inequality in pedagogy and its forms well identified above depict the real situation in many African countries education systems. The two distinctive outcomes as stipulated are compared to a four-legged table made up of unequal-sized legs. Admittedly, the table will not stand in its up-right position instead it will topple [35]. The implication provides another valuable lesson related to the effects that a learner can experience in his future job prospects.

In the same manner, pedagogical challenges and implications of having too few schools and too many bad schools have been provided by a case study carried out in Tanzania. The study identifies short-falls and provides meaningful lessons related to the Tanzania's education system. These include, but are not restricted to, the lack of enough teachers in schools and inability to recruit quality or competent teachers and its effects to learners and the entire education outcomes. To illustrate, the incompetence of some teachers is now widely seen as a general gap in teacher education. The previous study reports that there is a weak foundation for children's learning and mastering of both English and Kiswahili languages in Tanzania. Hence, the main feature of the Tanzania's education system is that it is bilingual (English and Kiswahili). In examining children's competence in reading Kiswahili and English languages, the research found that by standard seven, five in 10 students leaving school have not acquired a basic English reading skill, which is equivalent to 53% of standard seven students. One out of 10 standard seven pupils was unable to read a Kiswahili language paragraph [29].

Tanzania like many African countries is experiencing many of its young people lacking literacy skills. UNESCO [13] reports that across the world, there are approximately 250 million children who cannot read, write and count well, and 200 million young people leave schools without adequate skills they need to thrive. Literacy includes the learner's capacity to read, write and count, and this is a vital aspect to the broader achievement of his academic, social and economic impact. Learners who fail to gain literacy skills at their earlier stages of learning are likely to fail in catching-up studies at latter stages and are significantly more likely to fail in their future lives. Unfortunately, in Tanzania, some teachers' incompetence has resulted in some defects to learners in phonological awareness (in both English and Kiswahili languages), how letters combinations correspond to speech sounds. I argue that the lack of having in place a good number of quality and qualified Kiswahili and English language teachers is due to the missing foundation in teacher education. Therefore, to eliminate the spoken and written Kiswahili language structure challenges to children, there is a need of improving teacher education, pedagogical approaches and teacher's knowledge, skills and ability to understand, use and appreciate various forms of communication so as to remove the failure to communicate fluently.

I argue that teachers cannot naturally acquire the outlined kind of expertise in Kiswahili language structure that is required of them for remediating and preventing literacy problems, unless we provide them with necessary training. The case study conducted in Tanzania [14] emphasises that having in place teachers who have adequate knowledge in sound-symbol correspondences in spoken and written Kiswahili language and appropriate methods will help to eliminate defects to learners in, for example, Kiswahili words such as 'Habari' (news) which most utter and write it as 'abari' (omitting H), and 'Hakuna' (nothing) many say 'akuna'. The word 'Rafiki' (friend) utter and write it as 'Lafiki' use 'L' instead of 'R' and in 'Karibu' (welcome), they say 'Kalibu'. Likewise, in a word 'dharau' (disrespect), some omit 'dh' and say 'Zarau'. As said previously, a vast number of children are badly taught [4]. Therefore, enhancing teacher's phonological awareness

and making them be well versed on how letter combinations correspond to speech sounds, and building their capacity in Kiswahili language structure will at last help children to enhance their capability in creative thinking and understanding challenging concepts more easily.

2.2 Pedagogy and inequality systems linked to new Information Technology opportunities

In giving answers related to Question number 4, *‘To what extent has the education policy and system inspired students to discover and improve their human capital in Tanzania/South Africa?’* Most respondents expressed their feelings as follows:

-Aaaa (.) to me I can say, Pedagogy and pedagogical approaches in the learning environment most lack the inclusion of new IT opportunities focused on nurturing individual potentials, development of creativity and innovation so as to meet the 21st technological advancement (Focus group no 1: Dodoma Tanzania).

-Poverty in our African countries contributes to the out-dated pedagogies we do experience in many of our rural and urban public schools. Hence, both teachers and students are never exposed to opportunities offered by the new Information Technology aimed at making them experience the real-world learning relevancy (Focus group 2: Mwanza Tanzania).

-Well, I see the education system with unequal distribution of resources. Unfortunately, that can never inspire students to discover and improve their skills and knowledge. Therefore, we can-not match with the drastic 21st Century technological development (Interview, respondent 7: in Pretoria South Africa).

Based on the statements above, an implication of this is the possibility that many African countries are more likely not to attain ‘Envision 2030’ or SDGs numbers 4 and 10. As well stipulated, Goal 4 on quality education seeks to ensure inclusive and equitable quality education and promote life-long learning opportunities for all, while Goal 10 insists on ensuring of reduced in-equality within and among countries [24].

Digital literacy or new Information Technology (IT) offers opportunities and enhances pedagogy, literacy and skills in the modern education system. The use of new solution to existing challenges so as to benefit a good number of people including the poor and marginalised population is what can be characterised as innovation. The world is changing quickly, and the uses of new Information Technology do prepare students for a more connected interaction within the learning environment and teaching profession. However, I argue that an added value to effective pedagogy in the new learning environment can be observed by, for example, appropriate use of computers, Web 2.0 and use of cyber space, virtual exhibits, study tours, digital networking, video games and digital story telling that captures the elements of real-world learning. Such instructional interventions can make students to learn and understand challenging concepts easily, have the ability to enhance learner’s awareness and can support students to reach their full potential, academically, socially and emotionally as well.

Indeed, technology and digital revolution have opened a new window for teachers as educators to go digital. However, the current study conducted in Tanzania and South Africa rationalises that using new Information Technology opportunities in pedagogy has brought about some education excellence inequalities between well-resourced schools mainly in urban areas as opposed to under-resourced schools

[34], usually found in rural settings in Africa. In clarification, passionate and committed teachers can enhance the capacity and status of the teaching profession by giving room to children to construct their own knowledge, needs and thinking skills [5]. Likewise, Pohl [36] contends that literacy, learning and employment need to get people to think creatively in the arts, think hypothetically in mathematics and think literally in social science. In that context, teachers stand as facilitators who guide learners throughout the entire process while providing them with real-world experiences beyond the classroom or training environment. The inequality systems linked to new Information Technology opportunities corroborate the findings of a case study based on three different learners from Gauteng Province in South Africa, namely 'Thandi, Sipho and Hennie'. The scenario was as follows:

'Thandi has passed matriculation with flying colours. She has been accepted at the University of Cape Town but has no laptop. At least is tech-savvy... Sipho on the other hand is from a rural school and has performed well but is anxious about his course because it requires prior knowledge of information communication technology (ICT)...Hennie has no anxieties. He has it all' [34].

The extract above paints out the inequalities in the teaching and learning environment which were brought about by poverty and the lack of exposure to new Information Technology (IT) opportunities specifically in African countries context. It highlights technological advancement and challenges faced by both teachers and learners in a process of transformation towards experiencing a generation of innovators in a drastic changing world. This chapter argues that the new Information Technology opportunity challenges teachers face in the context of pedagogy have neglected both teachers and learners in basic and higher education to explore and navigate on their own, meet their needs, and reach their full potential professionally, academically, socially and emotionally.

2.3 Marginalised populations, learning experiences and labour market challenges

One major challenge that has dominated the primary educational paradigm in Tanzania and it has effects to marginalised population's learning experiences is a focus on what students know, rather than how they use the information in the real-world settings [37]. Hence, the most valuable feature in the learners' expertise is how learners can apply what they have learnt in a new and creative way. As Sweeney [38] contends:

'real-world learning connects students to career pathways, it empowers them to be effective decision makers, designers, inventors and communicators...it allows them to see and know how a chemical formula would assist him in his post-secondary life...role of chemistry in farming or trigonometry and geometry in the construction trades...and how are important to their future career and to their communities... if we want to prepare all our students for the careers of their future, the educators, community leaders and local companies must come together to help students experience academic concepts in culturally relevant, real-world ways' [38].

Giving an overview on the labour market challenges to marginalised populations, the International Labour Organisation (ILO) report indicates that young people in many of the developing countries within the Sub-Saharan Africa region face labour market challenges [39]. Findings from the Integrated Labour Force Survey (ILFS) show that new entrants within the labour market in Tanzania range

from 800,000 to 1 million annually and compete for only 40,000 existing job opportunities in the formal sector [40]. As Brown [41] suggests young people must concentrate on freelancing and self-employment or 'boundary-less careers' [42]. Undoubtedly, these are the most frequent types of employment or businesses in the arts, cultural and creative industries sector. A large and growing body of literature reports many disadvantaged young people in African rural and urban areas (both out of school or drop-outs at basic and higher level of education) leave schools without relevant knowledge and skills needed for them to thrive in their societies. The main challenges learners encounter include but are not restricted to poverty, quality of education, political will linked to policy, decision and law makers priorities and lack of guidance from birth (parents, guardians and families) to school, up to their time of entering the labour market [13].

Strong evidence of how real-world learning connects students to career pathways was found when participants were giving answers related to research question 1: 'What are your feelings and comments on the current education system in relation to the growing number of primary and secondary school leavers drifting from rural to urban areas in search of jobs in Tanzania?' Many respondents expressed their feelings as follows:

-Yeah, it's true there is the drifting of these young people from rural to urban areas in search of jobs. I see that as a challenge related to our education system from primary level to secondary schools that-arts subjects are not taught and examinable (Interview, respondent 2: in Dodoma Tanzania).

-My feeling is that the education system (in Tanzania) is the one we inherited from the British... and still has the western education ideology or elements. Thus, education leaders having the white-collar job mentality (...) arts education has never been one aspect within their priority circuit. In that regard, good actors (students) have become politicians; good painters have become motor mechanics and the like! (Interview, respondent 3: In Dar-es-salaam).

-I remember previously, the late Mwalimu Nyerere (first President of Tanzania) introduced education for self-reliance. I think it is high time that has to be re-introduced. Furthermore, Vocational Schools should be strengthened so as to introduce entrepreneurship skills to learners, thus, help young people in nurturing their talents and get self-employed. Finally, deliberate initiatives have to be taken by the Ministry of Education in strengthening arts education in schools from primary level to the University (overhaul the whole system) (Interview, respondent 4: in Dar-es-salaam).

Without ignoring debates hidden in the statements above, this book chapter has provided results that do suggest pedagogy and pedagogical challenges in the teaching and learning environment. The chapter has identified key challenges faced by marginalised students in the pursuit of attainment of basic and higher education in Tanzania and South Africa (as a case study) and corroborates the findings of a great deal of other previous works in the field [11, 14, 34, 35].

3. Conclusions

This chapter has devoted itself to assessing and discussing various themes related to pedagogy and pedagogical challenges poor people face in the pursuit of basic and higher education. For the outlined purpose, this book chapter has

discussed themes related to the term and notion 'pedagogy' encompasses in a range of factors including intelligence, gender and culture. It has reviewed different scenarios marginalised people face on their way of attaining basic and higher education on the African continent with vivid examples from a case study carried out in Tanzania and South Africa. Challenges related to infrastructure in the teaching and learning environment, lack of adequate learning resources and the essence of recruiting quality teachers within the teaching profession have been outlined. Again, this chapter has discussed pedagogy and inequality systems linked to new Information Technology opportunities within African countries. Hence, the thematic area insisted on teachers or schools to prepare learners for a more connected and technological future [22] so as to succeed in their future lives. Finally, it has identified the marginalised population and their learning experiences as opposed to the labour market challenges. The section has informed on the growing need of knowledge and skills and referred to a need of investing in human capital and social relation. As a matter of fact, human capital and social relation can be regarded as carriers of knowledge that facilitate young people to learn new things, reinforce old ideas, solve problems progressively, make decisions, be creative and, finally, establish a next generation of innovators with a vast new range of opportunities [14, 43, 44].

In a summary form, the study findings mainly based on the case study carried out in Tanzania and South Africa suggest, firstly, African governments must invest heavily in their country's education systems. Education at its wide scope is an investment sector due to the fact that it deals with human capital [16] and, in every aspect, is 'as hard as building bridges and roads' [45]. Secondly, the study findings show that 'at an ultimate stage, competition among nations will be among education systems...for the most productive and richest countries will be those with the best education and training in place, and well implemented' see [46]. Thirdly, education and effective pedagogy at its broad spectrum must meet needs of poor and marginalised populations socially, economically, culturally and emotionally. Fourthly, African governments must work on key stumbling blocks to education success. These well-identified obstacles include but are not restricted to low school enrolment and high dropout rates, poverty, distance from school, pregnancies at tender age, pedagogical challenges that affect and make students to leave schools without relevant knowledge and skills to thrive in society.

The current study suggests that teaching and learning must connect students to real-world learning. In clarification, education and pedagogy must connect learners to their future career pathways. Finally, this book chapter suggests that African governments must revisit and re-work on the problem of having too few good schools and too many bad schools. This has resulted to a vast number of children being badly taught or utterly untaught [4] due to government's inability to recruit competent or quality and enough teachers to cater the need. Other related challenges to be put into consideration and practice for the success of pedagogy and the education system in the African settings include infrastructure challenges, lack of adequate teaching and learning resources and inequality systems linked to new Information Technology opportunities in schools.

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References

- [1] Murphy P. Defining pedagogy. In: Hall K, Murphy P, Soler J, editors. *Pedagogy and Practice: Culture and Identities*. London: SAGE Publications; 2008. pp. 28-39
- [2] Tomlinson CA. Learning profiles & achievement. *The School Administrator*. 2009;**66**(2):28-34
- [3] Murphy P. Defining pedagogy. In: *Equity in the Classroom*. UK: Routledge; 2003. pp. 17-30
- [4] Abrams F. *Learning to Fail: How Society Lets Young People down*. Canada: Routledge; 2009
- [5] Ruyembe CEM. *Strategies for Youth Employment in Tanzania: A Creative Industries Approach*. Germany: Lap Lambert Academic Publishing; 2017
- [6] Alexander R. *Essays on Pedagogy*. London: Routledge; 2013
- [7] Shulman L. Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*. 1987;**57**(1):1-23
- [8] Vavrus F, Bartlett L. *Pittsburgh Studies in Comparative and International Education Series, Volume 2: Teaching in Tension: International Pedagogies, National Policies, and Teachers' Practices*. Tanzania: Sense Publishers; 2013
- [9] Wangwe S, Piirainen KA, Koria M, Ngoc TC, Wennberg M, Lemola T, et al. *An Analysis of the Drivers for Emerging Sectoral Innovation Systems in Developing Economies: Cases Tanzania and Vietnam (ESIS) Final Report*. Finland, Helsinki: RMC Aalto University; 2012
- [10] Hearn G, Roodhouse S, Blakey J. *From value chain to value creating ecology: Implications for creative industries development policy*. *International Journal of Cultural Policy*. 2007;**13**(4):419-436
- [11] Ruyembe CEM. Arts education and pedagogy in the learning profile in Tanzania: Current trends. In: *The Palgrave Handbook of Global Arts Education*. Springer; 2017. pp. 109-123
- [12] Bamford A et al. *The Wow Factor: Global Research Compendium on the Impact of the Arts in Education (Second Edition)*. Berlin: Waxmann; 2009
- [13] UNESCO. *Education for all Global Monitoring Report: Youth and Skills Putting Education to Work (Second Edition)*. Paris: UNESCO; 2012
- [14] Ruyembe CEM. *Practical Linkages between Cultural Policy and Education Policy in Promoting a Creative Workforce for Youth*. Tanzania: Queensland University of Technology; 2015
- [15] Davis NaC BB. Preparing teachers to work with culturally diverse students: A teacher education model. *Journal of Teacher Education*. 1989;**40**(5):9-16
- [16] Brock-Utne B. *Whose Education for all?: The Recolonization of the African Mind*. Routledge; 2000
- [17] Rajani R. *Situational Analysis of Children in Tanzania*. UNICEF: Dar-Es-Salaam; 2001
- [18] Odden AR. *Strategic Management of Human Capital in Education: Improving Instructional Practice and Student Learning in Schools*. New York: Routledge; 2011
- [19] Zeelen J, Linden JD, Nampota D, Ngabirano M. *The Burden of Education Exclusion: Understanding and*

Challenging Early School Leaving in Africa. Rotterdam, Netherlands: Sense Publishers; 2010

[20] Fundi S. The influence of initiation culture on early school leaving amongst girls: Experience from the coastal region of Tanzania. In: Zeelen et al., editors. *The Burden of Education Exclusion: Understanding and Challenging Early School Leaving in Africa*. Rotterdam, The Netherlands: Sense Publishers; 2010

[21] Onyango-Obbo C. What others say: Handling student pregnancy in Africa. *The Citizen Newspaper*, Online edition of Thursday October 24, 2013. 2013

[22] Hub Spot. The Evolution of Digital Citizenship Infographic. 2019

[23] Kuleana. The State of Education in Tanzania: Crisis and Opportunity. Mwanza: Kuleana; 1999

[24] UN. Transforming our World: 2030 Agenda for Sustainable Development. New York: United Nations; 2015

[25] Carberry N. Exam treadmill not the answer to deliver world-class school system. *Information Daily*, online edition of Thursday November 21, 2013. 2013

[26] United Nations. UN General Assembly Resolution 50/81: World Programme of Action for Youth to the Year 2000 and beyond. New York: United Nations; 1996

[27] Nyerere JK. *Elimu haina mwisho*. Dar-Es-Salaam: Government Printers. 1971

[28] Baregu M. Worrying trends of education in Tanzania as illiteracy expands. 9/08/2017. *Dar_Es-salaam*: 2017 9/08/2017. Report No

[29] Twaweza. Are our Children Learning/Annual Learning Assessment Report 2012. Dar-Es-salaam, Tanzania: Uwezo Net, 2013

[30] Carroll J. Huffingtonpost [Internet]. UK. 2017. Available from: https://www.huffingtonpost.co.uk/jackie-carroll/heres-why-the-decreasing-rate-of-illiteracy-among-women-is-an-u_a_23070668/?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAADGY0YIUJoG5wgOhSOBnF22jnoYg0NHdQSRMOJ9nD53pwEpm92c_qljvYyKIDqAnJutFjM5uvTxPGvAeSW06Cy4T6b6ExpC4E7vps_9MXdfnbofqIQCguPdd-wh6Bce2pbuYwp_K22vBI7slCELlepsSEaO9_JhmC_gv_00Af4Rw [Accessed: 18-05-2019]

[31] Polat F. Inclusion in education: A step towards social justice. *International Journal of Educational Development*. 2011;**31**(1):50-58

[32] Fleming M. *Arts in Education and Creativity: A Review of the Literature*. London: Creative Partnerships; 2008

[33] McClure J. *Educational Documents England and Wales 1816 to the Present Day*. Fifth ed. First published in 1965 by. London: Methuen: Chapman and Hall; 1986

[34] Sekhonyane M. Gauteng's education inequality is being addressed. *Mail & Guardian*. 2019. Available from: <https://mg.co.za/article/2019-04-05-00-gautengs-education-inequality-is-being-addressed> [Accessed: 18-5-2019]

[35] Lefusi P. In Gauteng's education inequality is being addressed. 2019. Available from: <https://mg.co.za/article/2019-04-05-00-gautengs-education-inequality-is-being-addressed> [Accessed: 18-05-2019]

[36] Pohl M. *Thinking Skills*. St. Kilda Victoria, Australia: Insight Publications Pty, Limited; 2013

[37] Bentley T, Kimberly S. *The Creative Age: Knowledge and Skills for the New Economy*. London: Demos; 1999

[38] Sweeney E. How to help Newark students answer the question I asked in high school: "When will I ever use this?" Chalkbeat Newsletter. 2019

[39] ILO. Global employment trends for youth. A generation at risk. Geneva: International Labour Organization; 2013. p. 2013

[40] National Bureau of statistics. Unemployment estimates for year 2011: Integrated Labour Force Survey. 2011. Available from: http://www.nbs.go.tz/index.php?option=com_content&view=article&id=186:unemployment-estimates-for-the-year-2011&catid=100:labour-force-and-ees&Itemid=135 [Accessed: 16-5-2013]

[41] Brown R. Promoting entrepreneurship in arts education. In: Henry C, editor. Entrepreneurship in the Creative Industries: An International Perspective. Northampton, MA: Edward Elgar Publishing; 2007

[42] Bridgstock R. Skills for creative industries graduate success. Education and Training. 2011;53(1):9-26

[43] NESTA. A compendium of innovation methods: NESTA. 2019. Available from: <https://www.nesta.org.uk/report/compendium-innovation-methods/> [Accessed: 19-06-2019]

[44] Hearn G, Rooney D. Knowledge policy; challenges for the 21st century. 2008

[45] Burnett N, Patrinos HA. Response to critiques of priorities and strategies for education: A World Bank review. International Journal of Educational Development. Great Britain. 1996;16(3):273

[46] Kickbusch IS. Health literacy: Addressing the health and education divide. Health Promotion International. 2001;16(3):289-297