

Teacher Preparation Practices in Kenya and the 21st Century Learning: A Moral Obligation

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Abstract

Teacher preparation practices are indices used to measure quality teacher besides other variables. Whereas the current teacher preparation is test scores based inclining to cognitive knowledge, a good teacher preparation practices is a holistic development in nature oriented towards character, skills and knowledge. To embed teacher preparation in the trio domains, defines the moral duties a teacher has towards the learner akin to biblical teachings that reflect the requirements for the 21st century teacher. The required skills correspond with workplace realities marked by creativity and innovativeness rather than transmission and consumption of knowledge. To change the current practice there is need to re-focus and align to both interactive teaching and the requisite skills of 21st century addressed in the following critical questions; are approaches used for teacher preparation relevant to modern teaching? What role do teachers play in instructional delivery for 21st century learners? Which modern innovations can be adopted? The article hopes to highlight the current practices versus best practices of 21st century Skills

Keywords: Teacher Preparation, Conventional Practices, Innovativeness, 21st century learner

1. Introduction

The need for refocusing the teacher preparation process is concern emanating from both local and international bodies (UNESCO, 2015). The demands are fundamentally vested in various policy documents and plans in education circles. The documents have sufficiently interrogated the current practices in teacher education in Kenya to demand for refocus. Some of the current training practices in the teacher training institutions reveal dominance in use of the conventional teaching approaches rather than the modern approaches.

On the other hand the current global demands in education require the use of approaches that are learner –centred, embracing integration of ICT and creative enough to provide quality and relevant universal primary education (UPE). The requirement is backed by a number of policies on Free and compulsory primary education (EFA) in Kenya (Republic of Kenya, 2007), and the needs of a dynamic 21st century learner as described by the partnership for 21st Century skills. A 21st century learner possesses attributes that integrate Knowledge, skills, Values and attitudes that result in learning outcome that are holistic and produce critical thinkers, problem solvers, with integrity, independence and responsible and positive self-esteem, which outweighs the current practices that target achievements in cognitive domains inclined to test score (Huitt, 2011). This article is a theoretical paper that interrogates the current teacher preparation practices, versus best practices attuned to 21st century Skills. We will first start by defining a holistic learner and the teacher's role in instilling the said attributes in their students. We will then discuss the current practise in teacher preparation, followed by 21st Century teaching and learning and integration of technology in education. A religious standpoint will be integrated in the discussion to show the moral obligation required of the teaching profession.

1.1 Holistic Learner

Physical, emotional, social, intellectual and spiritual well-being are the aspects that define a holistic learner. All the five are clearly spelt out in the National Educational Goals in Kenya that a classroom teacher is obligated to attain (Republic of Kenya, 2012). The spiritual component is usually attained through the Religious Education that is compulsory to the learners in Kenya from Early childhood development education (ECDE) to Secondary schools levels at Form II and this situation is similar across a number of African countries and some European countries such as Norway. Many countries globally encourage freedom of worship which is a way of ensuring spiritual growth of its citizens that translates into a holistic person – a moral obligation (UNCRC, 1989).

The teacher is the implementer of the curriculum that contributes to the holistic development of the learner. In this perspective it becomes paramount that the teacher's role/function in contributing to the holistic development of the learner must be interrogated based on how the teacher is trained in preparation for developing a holistic learner. Further, there exist policy documents and plans that advocate for quality and relevant education, training suitable to modern needs, and which makes the learner's relevancy felt in today's

society. The demands in these documents emanate from current issues such as the 21st century skills (P21.org, 2008), the Millennium development goals (MDGs) No.2, (UNDP, 2015) the Kenya vision 2030, the Modern goals of Education (CfBT, 2012) and the Kenya Constitution 2010 as the guiding national and international documents. These policy documents herald a new face in the teacher education preparation where the teacher is expected to embrace new teaching approaches involving reflective teaching and integrating educational technology that develop the learner holistically.

2. Current Teacher Preparation Practices in Training Institutions

The quality of education depends largely upon the quality of the teacher. A superior education produces a superior teacher. The current trends in teacher preparation practices in Kenya are dominated by the Behaviourist approach which is teacher centred. Behaviourism focuses on behaviour modification through stimulus and response, with learning seen more as a passive process with a focus on the role of the teacher. This analysis of learning was primarily developed by Skinner. The learning platform is dominated by the competencies, knowledge and skills of the teacher ignoring the input of the learner. Various factors influence this practise namely: inaccessibility and lack of exposure to the modern resources, inadequate innovation skills, large classrooms and student/teacher ratios, as well as societal demands controlled by test/examination oriented thinking. For example any time summative examination results like the Kenya Certificate of Primary Education (KCPE) or Kenya Certificate of Secondary Education (KCSE) are released in Kenya, the public's interest is always focused on 'who' led with 'how many' marks but not! 'What is the nature' or kind of product of the learner we have attained after the full cycle of either the primary or secondary education. The two questions are very different such that the first question is focusing on the noun (he or she?), and probably the school the person went through and the score of marks attained? While the second question is basically addressing the nature of that learner in terms of the character and his/her value addition to the society after the full cycle of an education system. The former question exerts much pressure that leads to dominance in embracing unreflective teaching and perpetuates lack of innovations. This could be caused by factors such as ignorance to modern technology and education goals (CfBT, 2012).

The UNESCO 2015 quality agenda on education advocates the incorporation of relevance, consistency, Practicality and sustainability in ensuring quality of the curriculum process and as such teacher preparation should strive to embrace these attributes (UNESCO, 2015). These will ensure teachers have the requisite skills to teach the 21st century learners. However, living beyond today in teacher preparation practices is a great challenge to many teacher training institutions and universities given the strides in digital technology. This affects the personal liberty of the teacher and learner with consequences for 21st century teaching and learning

The conventional approaches currently used focus on the teacher as the custodian of knowledge, skills, values and experiences. The practice prevails within the restricted context of limited resources, inadequate innovation, un-conducive learning environment, and the assumption of producing 'A' material type of learners – which in essence is examination oriented thinking! This has time and again been lamented upon through various forums, individuals, institutions, and the education stakeholders on the basis of what ought to be and what there is in relations to education products (graduates) in Kenya and other parts of the world. Such dissatisfaction is declared in glaring headings such as 'the education system is not preparing the youth enough (Muthoni, 2008). The scrutiny of such lamination reveals the weakness in the preparation processes that should focus on a teacher as the sole implementer of the curriculum. The outcome of such curriculum determines the type of product produced - a holistic learner who can fit and be useful to the society or 'A' grade type of learner with disconnect to life reality! However the issue does not just end with the teacher implementing curriculum but rather interrogates further the approaches used to train the teacher, skills exposure of the teacher, attitude change in the teacher, and the overall conceptualization of 'learning achievements'

Contrary to the conventional approaches currently used in teacher training and adapted in our schools' classrooms, the religious life and the overall biblical teaching by JESUS especially in New Testament embraced the learner centred strategy. In this approach JESUS used experiential approach to pass the message of the eternal life to the disciples. There was no time at all throughout the New Testament where Jesus was concerned with the test scores to ascertain the learning but rather it was through creative and critical thinking that was portrayed in the answers and the problem resolving situations encountered as quoted in some of the biblical verses (LK5, 27-32; Mt9, 9-13, Mk2, 3-27). The verses among others illustrate how JESUS used the cultural aspects and incidences to address raised issues and pass message of the kingdom of God to the disciples. Parables used such as the parable of the sewer, Pharisee and the tax collector, and Good Samaritan among others require the learner to think and make meaning out of parables and apply to the daily life. In the same context approaches used in training the teacher and subsequent teaching could refocus to address the individual's understanding of self, environment and ultimate value rather than cramming, drilling to reproduce content that can ascent to good grades/score. It's a moral obligation from the cited examples that a teacher has a duty to nurture and mentor the learner to fit in their current societal settings.

The current teacher preparation focuses on training a teacher who should produce ‘A’ grade learners in Kenya and those societal settings that attach a lot of value to test score rather than holistic learning. This is based on the earlier conceptualization of the term learning achievement where the society expects ‘A’ grades with less attention on the holistic nature. The lamination on inefficiency preparation of teachers and subsequent learners may be interpreted to mean poor system of education. However this conceptualization is ruled out by thorough examination of the education goals in Kenya that reveals adequacy in cognitive, affective, and psychomotor domains that contribute to a holistic learner if preparedly addressed by efficient teacher (Republic of Kenya, 2012).

In the report of education task force on re-alignment of education to the Kenya Constitution (Republic of Kenya, *ibid*) the task force singled out a crucial question ‘Is the Kenyan Education System and its institutions and programmes fit for the purpose? Specific issues identified in this question include relevance with regard to content and delivery; sufficient flexibility to adapt to the changing socio-economic needs requisite quality to match global competitiveness, and to address challenges of the 21st century. This particular committee raised pertinent questions but none challenged the overall objectives that can contribute to the holistic learner since the education objectives in Kenya possess the overall variables of cognitive, affective and psychomotor that constitutes a good purpose/goal for any education system.

Contrary to the variables of the purposes is the relevancy of the content, delivery, and responsiveness to the global demands as revealed in the crucial question raised by the task force? The three aspects constitute issues pointing to the major problem in the education system in Kenya. Unfortunately the pointers focus on the nature of the teacher in terms of the ability to approach the teaching in manner that contributes to holistic development of the learner and the depth/scope of the content exposed for the development of the learner. Hence it questions the level of learning in terms of how deep or shallow is the knowledge in respect to different levels of cognitive domain and the intention of such knowledge in the development of the learner. Is the scope of knowledge intended to give more opportunity to the learner to score ‘A’ grades or develop the ability to being passionate, critical thinker, have moral courage, being a risk - taker or become a lifelong learner thus having a holistic individual?(ICWE, 2012).

The question on content is specifically addressing the scope of knowledge in terms of Blooms taxonomy of cognitive domain that constitutes: knowledge/remembering, comprehension/understanding, application/applying, analysis/analyzing, synthesis/evaluating and evaluation/creating (Bloom et al., 1956; Anderson & Krathwohl, 2001; Krathwohl, 2002)). According to Blooms taxonomy the first two levels relate to lower order thinking, the next two are the middle order and the last two are the higher order thinking. Therefore depending on the intention of the teacher and most times as dictated upon by the expectation of the society (that provide the learner as the input to school and classroom), and the training the teacher has undergone influence the level of knowledge. For example if the society concerns itself with ‘A’ brand of products then shallow knowledge characterized by examination drilling and cramming will dominate the learning arena for the sake of good test/examine results. On the other hand if the expectation is for ‘a holistic product’ then the content will be drawn from the deeper ends of knowledge/higher levels of learning. Whichever the case, a professional teacher has a moral obligation to produce a holistic learner for the society. The essential issues in developing a holistic learner for the modern society must be addressed through teacher training to empower the teacher with high level professionalism domains that can assist in developing a holistic learner (Mwaka, et al, 2014).

Teachers have been accused in some quarters as being responsible for producing ill prepared learners who lack “soft skills” such as communication, critical thinking and problem solving. The ability to be a reflective, innovative, creative, role model and dynamic teacher with positive attitudes to change, equips him/her with delivery approaches that utilize the education content to develop a learner who is all round – has cognitive ability as well as positive values, skills and attitude to make a significant contribution to society and the workplace. More essential, the learner must be able to make correct decisions and adapt to the changing situations she/he comes across (Muthoni, 2008).

To make this bold move there is need for multi-sectorial support and overall change of attitude on what entails learning achievements/outcomes of the education system. Such support must have religious backing since morality is at the centre of all religious teachings. Religious organizations, leaders and other religious institutions always have a role in supporting the truth and could form a basis for great reforms in teacher education, delivery systems and the holistic development of the learner. The teachings of JESUS in the New Testament show that HE is the light to the world, true way and life. Further the biblical teachings throughout the HOLY Bible support the holistic development of a human person and that is more the reason man has a chance to use the conscience to choose between right and wrong and is made in the image of God (United Bible Societies, 2003).

Through the behaviourist approach in training that trainee teachers undergo, teacher trainees come to the field without the requisite knowledge to develop a holistic learner as it is believed one teaches the way she/he was trained. Their main focus is on the test scores and so the teaching approaches are geared towards drilling and producing ‘A’ grades at the expense of all else. The gospel of Mk7, 14-15, 20-21 concurs in this perspective by

emphasizing that ‘there is nothing outside a man which by going into him can defile him... what comes out of a man is what defiles man - for from within, out of the heart of man come evil thoughts’. This is a clear indicator of character formation which the classroom teacher is expected to guide and nurture to benefit the learner and position these learners to be useful to the society.

According to the Old Testament scriptures, the true justice is listening to the law which presupposes faith in God who heard the cry of his people and came down to deliver them out of the hand of the Egyptians (Ex3, 8). God is attentive to the cry of the poor and in return asks to be listened to. HE asks for justice towards the poor, stranger (Ex 22, 20), and the slaves (Dt 15 12-18). To practice justice requires denying the illusions of self-sufficiency, the profound state of closure which is the very origin of injustice. Instead there is need for deeper exodus in liberation of the hearts. The teacher’s conventional approaches in teacher preparations is equivalent to state of closure and illusions of self-sufficiency that critically and drastically needs liberation to prevail justice to the needs of the trainees, society and modern learners. Seeking deeper knowledge, character formation and hands on problem solving is work of higher levels of cognitive domains of learning. The integration of affective and psychomotor domains brings about practical orientation in life and contributes to full life in an individual that dignifies one as a proper human being where justice is enlivened by love.

A holistic learner has moral obligation that makes education a tool for services not just for self but also for the community, nation and the world. Moral character must anchor educational achievements. Teachers, thus have a big responsibility in nurturing this variable in the learner through: creating self-awareness, helping them to manage their feelings, creating empathy, motivating and developing social skills. The problem in teacher preparation- a contingent of teaching/learning in schools/colleges/universities is perceived as a pathway to acquire good grades, wealth and material possession. The broader goal of nurturing learners to become useful in society, respectful, dignified, and self-reliant to stand up to challenges in life is secondary. The education system therefore stands to be accused of not doing enough to help the country produce good citizen basically by the nature of the training teachers and subsequent delivery by the same teachers in molding the learners into good citizens (Muthoni, 2008).

The 21st century’s learners outpace their teachers in technological innovation and creativity and thus tend to get bored quickly with the curriculum delivery system embracing teacher-centred strategies and have no room for innovation and creativity. The outcome has been student unrest & protests, exams cheating, and emergence of increasing dissatisfied youth hence need, for alternative approaches that are relevant (Laurillard, 2012). Nurturing this kind of concerns, one is likely to ask a question ‘what role is played by the teacher in teaching/ learning in view of any learning situation that must be revolutionised and for tomorrow’s success/change?(ICWE, 2012).

2.1 Role of the Teacher in Teaching

The proper understanding of the role of the teacher shades light on the qualities that describes an effective teacher hence good teaching. The discussed qualities show the gaps that exist in the current teacher preparation and the nature of the teacher product that has a responsibility to transform the learner into a product relevant to the society. Teaching as understood in the perspective of guiding, directing, and invoking intellectual awakening in learners, has several responsibilities for teacher, learner and learning institutions. The discussion focuses on the teacher who is perceived to mean someone involved in guiding, persuading, mentoring, nurturing, encouraging, directing, focusing and invoking intellectual thinking in the learner. As an element of teaching, the teacher is expected to possess qualities that enable him to play these important roles.

Creative and inspirational teacher motivates his/her learners to learn by using their personal qualities, positive experiences and excellent communication skills. The teacher knows that knowledge is important in life and therefore the acquisition process should be practical and meeting the needs of the learner in order to be relevant. The scriptures in the Bible highlight some qualities of the effective teacher. JESUS in the New Testament is an inspiring, creative and motivating teacher. The crowds were always on track of HIM and never did His own disciples ever got bored with His teachings. Instead the motivated crowds sought Him even when He needed privacy (Mk 6 30-35; Mt14 13-13; Lk 9 10-17, Jn 6, 1-14). Fr. Paul (2009) in his pocket prayer book illustrates a teacher’s prayer that goes like this ‘help me Lord, to understand each child, help me to see in every one a precious soul, most dear, and may I lead each child through paths of wonder, not fear. Dear Father, as they look to me for true Christian guidance, I look to you and humbly ask that YOU to teach me too Amen’. This prayer is an understanding of a learner as a soul, an individual that carries image of God and has potentials that must be nurtured to realise the proper dignity that makes him/her human. Over and above a teacher is perceived in the prayer as a moulder who must use the Christian guidance to nurture the learner to the full potentials through God’s grace of which he/she must seek from HIM. Is indicator that a teacher has an obligation that he/she will stand before the Creator to make account? That is the more reason why the teacher should embrace approaches that nurture holistic learner but not just drilling and conditioning to cram for exam. Hence the need to scrutinise the role of the teacher as addressed in the following three domains (Nabwire, 2014).

2.1.1 Visibility of Leadership Skills

A teacher cannot demand respect from learners but instead must earn it. As any other effective leader placed in charge of people, a teacher must possess good qualities and relevant to earn respect. He/she must be knowledgeable and empathetic, decisive, open minded, Pro-active in problem solving, and hold right attitude.

These qualities are a pointer to the need for the refocus in teacher preparation to equip the teacher with qualities that will assist them to nurture the learner into the product of a significant value to the society. Lacks of these qualities, impacts negatively to the learners because the teacher guides, directs, mentor and moulds. A mentor can only rise to the occasion if she/he possesses the attributes mentorship or any other specified role. Further the teacher is always modelling either intentionally or unintentionally, and is perceived as a role model to be imitated by the learners. Modelling requires display of desirable values, attitudes, as well as intellectual processes. As a role model, the teacher is expected to display good qualities that can be imitated by the learners. The qualities of empathy, respect, and inspirational has to be self-explicit in the professional behaviour of the teacher to impact positively on the learner. However the current teacher preparation practices has left the teacher orphaned of such skills due to many challenges facing the process. The challenges have been identified in terms of large classes due to over enrolment, constrained resources and pressure for the 'A' grade product of learners.

2.1.2 Practice of Professionalism

Professionalism is an essential aspect in teaching. A trained teacher who adheres and practices the principles of his profession results into an inspiring teacher. Professionalism in teaching involves planning, implementation and evaluation.

In planning, there is need for preparation of schemes of work indicating the scope of work to be covered within a given timeframe. The time is narrowed down in terms of months, weeks and days. Implementation comprises of developing lesson plans, identifying the entry behaviours of learners, selection of appropriate instructional method, materials, and evaluation mode. The process of planning is effective when creative and innovative collaborative design is involved (laurillard, 2012). The process contextualises different situations in real world and relate to classroom process and content. This process exposes the teacher to approaches relevant to the learner's needs in terms of skills, character and knowledge akin to holistic development.

The emphasis on the teacher preparation process accounts for the relevance and value the teacher transfers to the real classroom. The behaviour of the youth in the modern society is an indicator that little social value is inculcated into the youths through the teachers as their role models. In order for the teachers to live up to the skills they have a challenge to embrace Paul's letter (Phil 2, 5) illustrated by Salvatore in the homily of "Jesus as Friend". Salvatore (1998, pg 32) directs that followers of Christ must have in their hearts the very sentiments of Christ Jesus. 'For Jesus' sentiments are full of purity and understanding, full of love for souls and compassion for those who have strayed from path, and patrimony those who have been transformed in Christ'. This phrase articulates the true state of a quality teacher who must patiently nurture the interior of the learner to bring out a holistic being in the nature of God.

2.1.3 Effective Communication

Communication is central to teaching and learning. It involves the decoding and encoding the message/content from the teacher to the learner and vice versa. In this context, communication should be interactive and could be verbal, visual or non-verbal that must be effectively utilized to impact positively to the learner. The dialogue for example between teacher and learners should invoke thinking and the teacher in his/her capacity must be effective communicator. In an interactive communication feedback is used to improve communication unlike in monologue communication where the teacher is perceived to be the authority and dominates communication through transmission of content- that is not interactive. An effective teacher communicates decisions clearly and unambiguously and articulates objectives and expectations of the learners in clearest form that sets the conditions and achievement of instructional objectives. In the process the teacher involves learners in the active dialogue. This means the learner must be actively be part of the activities in communication.

However the current practices in the teacher training institutions does not empower a teacher with what is to reciprocate to classroom teaching. It is time therefore the teacher preparation institutions in Kenya to seek and embrace the prerequisite skills to benefits the 21 century learner. The reconciliation will enable the teacher to bridge the gap between the world of training and the actual practice of tomorrow's world. The tomorrow's teacher has to adapt qualities and practice to fit into new generation characterised by the changing lifestyles, flexible working environments and global challenges relevant to holistic youth rather than semi oriented one. To reconciliation the current practice and the tomorrow's world two issues are worthy to be addressed. Teacher's preparation for continued adaption and educational technologies for the 21st century learners as discussed in the following.

3. Teacher Preparation for 21st Century

The research findings have shown that the learner's needs are changing and the culture of how we learn is

continuously shifting and developing (ICWE, 2012). There is need to refocus on an alternative teacher preparation practices that will address reflective teaching approaches and strategies amidst existing challenge in the current teacher preparation institutions. The concern here is approaches in developing teachers for a brighter, better and inclusive future in which technology brings improvement in enriching self and the society – which in essence is a Paradigm Shift (ICWE, 2012). The shift is explained from collaborative and creativity perspective. The emblematic paradigm shift direct the course of this education reform agenda as illustrated in the forthcoming sections.

3.1 Approaches in Finding the Path to 21st Century Learning

The preparation approaches and Strategies for teaching of tomorrow's teacher must be based on the needs of the 21st century learner. The 21st century learner is democratic and critical in ICT, and the education is perceived to prepare the child for life. The schools have to equip the learner with skills, knowledge and attitudes that enables the learner to have integrity and self respect, moral courage, use the world around them, speak, write, read well, and enjoy their life and work.(CfBT, 2012).

Globally these are the 21st century skills that are also outlined in the partnership of 21st Century skills, (2008) by providing guidelines towards realising these skills. The most crucial of these skills also termed the 4Cs are Critical thinking and problem solving, Creativity and Innovation, Communication skills and Collaboration all this are enhanced by technological integration. The Teacher training therefore needs to prepare teachers who are able to enable student acquire these skills. A constructivist/ learner centred approach to learning facilitates reflective learning as it places the learner at the centre of the learning experience and all activities are planned around them.

The learner centred approach expects the learner to undertake the highest percentage of learning activities unlike the teacher. Compared to the conventional approaches - teacher centred where the teacher is perceived to be the authority in the learning of the learner and dominates in trying to expose information to learner. This approach is overtaken by event in view of the needs of a 21st century learner. Unlike the teacher centred, the learner centred approach is modern, flexible and leads to high retention of the learnt skills, knowledge and values as well as provides opportunities for innovation in learning than the conventional approach. It is imperative that tomorrow's teacher will be better off equipped with learner centred approach, that embraces creativity, innovativeness and democracy of the teacher trainee to fit into the discussed good qualities of teaching and meet the identified modern education goals.

The modern education goals are a paradigm shift to a world of 21st century learning as founded in a set of Modern goals for all learners. However earlier discussion on the purpose of education system in Kenya had a clear indication that the major problem in education lays with the content and delivery. To trace the path to 21 century, the two aspects must be reconsidered in the teacher preparation process and subsequent transfer into classrooms in the school set ups. The content has to address the modern goals that give the framework of paradigm shifts that must equip the learner in teaching/learning situations for the 21st century. The goals of modern education according to Centre for British Teachers (CfBT, 2012) addresses aspects of skills needed to succeed, tailored instruction, connecting learners to their communities digitally and competently use ICT in schools, lifelong learning, creating in learner abilities to analysis, think critically, solve problems and accept different perspectives, encourage independent thought, tenacity and ability to use the world around them to progress and provide for the society, and develop in the learners the sense of personal and communal responsibility, passionate and risk takers. To achieve these goals, a transformation needs to take place in the following four interconnected core areas

3.1.1 21st Century Skills

Technology has been touted as enabling student engagement and collaboration and fostering communication, creativity and critical thinking, (P21.org 2008) However studies by Amory, (2010) indicate that ideology and not technology should be the driving force in any educational change. Amory (2014) advocates for a “learning with” as opposed to a “learning from” stance the latter uses technology as the teacher whereas the former has technology as a tool that enhances the content the teacher intends to deliver. Creativity, critical thinking and innovation can be addresses through enhanced student engagement using technology as well as through face to face interaction. The ideology behind this should involve authentic learning activities that are drawn from the learners' day to day lives and the global arena and technology mediates this interaction as learners can get access of information from contexts outside their own spheres via the internet. These revolves around core skills covered by the existing curriculum in most countries—language, mathematics, science, and arts—combined with 21st century themes such as environmental awareness and the impacts of globalization.

The foresaid content areas are complemented by innovation skills, information media and technology skills, and life and career skills. Each of these content areas can be addressed against the appropriate levels of cognitive domain that can develop the learner holistically though the focus should be on the upper three tiers of the hierarchy which are analysing, evaluating and creating. These three levels belong to the higher order thinking

and are most appropriate as they facilitate a learner- centred learning environment. The individual learner should have the capacity for: Problem solving and decision making, creative and critical thinking, collaboration, communicative, and negotiation, intellectual curiosity and the ability to - find, select, structure, and evaluate information, and the motivation to be - an independent self-starter who is responsible, persevering, self-regulating, reflective, self-evaluating, self-correcting, and a lifelong learner who is flexible and able to adapt to change.

3.1.2 21st Century Pedagogy

Huitt, (2011) explain that, in the most general sense, the contemporary view of learning is that people construct new knowledge and understandings based on what they already know and believe. In practice, this means that teachers must know their learners well and build on existing knowledge and abilities. More specifically, a greater range of teaching styles is required to ensure that each and every learner receives the attention and support needed to acquire deeper levels of knowledge and understanding, and develop a broader array of skills. As teachers add to their repertoire of teaching techniques, they are better positioned to adopt different strategies to ensure that each learner's personal learning needs can be met.

Another scholar (Nabwire, 2014) affirms that policy makers turn to instructional approaches that reflect a constructivist understanding of how learners learn; it becomes increasingly clear that pedagogy for the 21st century comprise four main interwoven factors namely: the learner centred learning, the teachers' use of strategies and skills nurturing creativity and collaborative learning, the use of interdisciplinary and project-based approaches conducive for team work, and need for authentic learning that engage learners by appealing to their existing passions and interests in terms of the technology usage as illustrated in the next section.

3.1.3 Technology Integration

The 21st century has seen the permeation of digital technology in all spheres. There are now e-banking, e-commerce, e-marketing, e-ticketing, education too has not been left behind and where there are computers being introduced in schools and colleges. At University level there are e-learning platforms that enable learners to access their education electronically. Though the integration of technology in teaching and learning has been slower than most sectors it is slowly gaining root and has led to significant improvements in the efficiency of school administrative processes such as scheduling classes, managing budgets, tracking students, and monitoring security, which have all been automated and immeasurably strengthened; though there is still more to be done. This type of technology is the one that must seriously be adopted in delivery to equip the teacher trainee with relevant skills in pedagogy. Though technology has not greatly impacted actual classroom teaching and learning to the extent that it should, it has certainly facilitated improved practices by bringing better teachers to more students, creating virtual communities practise, and providing real-time assessment. This thinking should be embraced in preparation of teachers where proper exposure to the skills and use of technology in teaching is adopted contrary to current practise at teacher training institutions (Mwaka, et al 2014).

The same technologies that have spurred the development of the Internet as a tool for creating and sharing knowledge could now help learners build critical 21st century skills, supported by the key elements of 21st century pedagogy. Further, these technologies could respond to the concerns and aspirations of teacher preparation, practising teacher, and learner by providing: a safe online environments, a vibrant virtual community of teachers and learners willing and ready to share their ideas and views; A window for parents to participate in the learning of their children ,monitor their children's moral development and performance and communicate with teachers; ability for teachers to be "ever present" in their learners educational journey - providing personalized feedback and, timely intervention for learners that transforms the learner holistically. For technology to be effectively utilized there is need to ensure broadband access, teachers need to be guided and capacitated to use the technology with the correct awareness so as to reap maximum benefit from the use of the said technology in the curriculum, and proper alignment of the content and technology as well as teaching strategies. Educators must deploy technology in a way that addresses fundamental education objectives and encourages the active participation of each learner in the learning process through proper preparation of teachers in this field.

4. Conclusion

The discussion in this article strongly advocates the transformation of teacher preparation practices to move away from a teacher centered approach and incorporate a learner centered approach with learning outcomes as the focus. This departure is similar to the Bologna declaration that established a common European higher education area (Kennedy, Hyland and Ryan, 2012). The attributes any graduate should possess should include knowledge skills, attitudes and values that make a holistic individual ready to adapt to the 21st century needs with requisite digital technological skills coupled with authentic learning (Bozalek et al 2013).

REFERENCE

Amory, A (2014) Tool-mediated authentic learning in an educational technology course: a designed-based

- innovation, *Interactive Learning Environments*, 22:4, 497-513, DOI: 10.1080/10494820.2012.682584
- Anderson, L. W., & Krathwohl, D. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York: Longman.
- Avalos B (2011) Teacher professional development in Teaching and Teacher Education over ten years. *Teaching and Teacher Education* 27 (2011) 10 - 20
- Bloom, B., Englehart, M. Furst, E., Hill, W., & Krathwohl, D. (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain*. New York, Toronto: Longmans, Green.
- Bozalek, V., Gachago, D., Alexander, L., Watters, K., Wood, D., Ivala, E and Herrington, J (2013). The use of emerging technologies for authentic learning: A South African study in higher education. *British Journal of Educational Technology* Vol 44 No 4 (629–638)
- Brunello, Giorgio; Schlotter, Martin (2011). Non cognitive skills and personality traits: Labour market relevance and their development in education & training systems, Discussion paper series // Forschungsinstitut zur Zukunft der Arbeit, No. 5743, <http://nbn-resolving.de/urn:nbn:de:101:1-201106013933>
- CfBT - Education Trust. (2012). Whole School Improvement Service – Training Manual- unpublished.
- Darling-Hammond, L (2010) Teacher Education and the American Future. *Journal of Teacher Education* 2010; 61; 35 DOI: 10.1177/0022487109348024
- Devine word Missionaries. (2013). Never Get Tired praying for the Prayer is the Key to God's Treasury – Calender. Nairobi.SVD.
- Huitt, W. (2011). Bloom et al.'s taxonomy of the cognitive domain. *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University. Retrieved [date], from <http://www.edpsycinteractive.org/topics/cognition/bloom.html> [pdf]
- Huitt, W. (2003). A transactional Model of Teaching/Learning Process. Educational Fr. Paul SSP, M.K. (2009). A New Pocket Prayer Book with 25 Popular Novenas. Nairobi. Pauline pubs Africa.
- ICWE, (2012). ONLINE EDUCA – 18th International Conference on Technology Supported Berlin, Learning and Training - Brochure.
- Kochar, S.K. (1992). *Methods and Techniques of Teaching*. New Delhi. Sterling Publishers Pvt. Ltd
- Krathwohl, D. (2002). A revision of Bloom's taxonomy: An overview. *Theory into Practice*, 41(4), 212-218. Retrieved from http://www.unco.edu/cetl/sir/stating_outcome/documents/Krathwohl.pdf
- Krathwohl, D. Bloom, B. & Masia, B. (1956). *Taxonomy of educational objectives*. Handbook II: Affective domain. New York: David McKay.
- Laurillard, D.(2012) Teaching as a Design Science Building Pedagogical Patterns for Learning and Technology - <http://www.routledge.com/books/details/9780415803878/>
- Muthoni, T. (2008). The Standards Newspaper – The Education System is not preparing the Youth Enough- article under training
- Mwaka, M. Musamas, J. & Nabwire, V.K.(2014,eds). *Essentials of Instruction: A handbook for Teachers*. Eldoret. Moi University Press. ISBN 9966-854-94-0
- Nabwire V. K. (2014). The Nature of Teaching and Learning; In Mwaka, M. Musamas, J. & Nabwire, V.K. (eds). *Essentials of Instruction: A handbook for Teachers*. Eldoret. Moi University Press. ISBN 9966-854-94-0
- Partnership for 21st Century Skills(2008) 21st century skills Education and Competitiveness: A resource and Policy guide www.p21.org/ Psychology interactive.
- Paulines (2011). Prayer Book with New Order of Mass. Nairobi. Paulines Publications Africa
- Republic of Kenya. (2007). Kenya Vision 2030 - Ministry of Planning and National Development. Nairobi. Government Printer
- _____. (2003). Millennium Development Goals. Progress Report for Kenya. Nairobi. Government Printer
- _____. (2012). Task Force on the Re-Alignment of the Education Sector to the Constitution of Kenya 2010. Nairobi. Government Printer
- Salvatore, Canals. (1998). Jesus as Friend- Meditations. Manila, Sinag-Tala Pub.INC.<http://www.ed.gov/category/subject/teacher-quality-> 6th April 2015
- United Bible Societies (2003). Good News BIBLE. Nairobi, Africa Inter-relational Service.
- UNESCO (2015) Addressing the Quality Challenge: Reflections on the post 2015 UNESCO Education Agenda. Netherland commission for UNESCO

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