

Review

Teacher education and training for Africa in the 21st century: What form should it take?

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No nation can develop beyond the quality of its education system, which depends on the quality of teachers. Much of what teachers need to know to be successful is invisible to lay observers leading to the view that teaching requires little formal study. On the contrary, teachers seek answers to questions to enable them help students learn. They learn about literature and appropriate technology, curriculum, pedagogy, assessment, evaluation and measurement. What they offer remains a secret and their key to success is a mystery. This paper argues that 21st century teachers requires new initiatives in their preparation to adequately meet the new challenges and that we would need stronger, all inclusive globalised teacher education, training curricula and global teachers council to strengthen the teaching profession for easy mobility of teachers in the 21st century.

Key words: Foundations of teacher education, traditional teacher education programmes, supervision, globalisation, global teachers' council, global teacher-training curricula, theoretical bases of education, practical education.

INTRODUCTION

Boaduo (1988) and Lawal (2006) concur that no nation develops beyond the quality of its educational system, which is highly dependent on the quality of its teachers. To them teachers should be given the most appropriate tools during training, including content knowledge and skills, to be able to do their work professionally. The question of professionalism of teachers and teaching leaves much to be desired. If the 20th century did not see teachers and teaching as belonging to a specific profession, this would need to change in the 21st century. The globalisation concept, if taken into account, would require that teachers and teaching should be recognised like all other professions and should require stringent training and acquisition of knowledge and skills and a global

council for unified teacher registration body to allow for easy mobility of teachers across the globe.

While this suggestion would not be easily articulated and implemented, there is need to begin from somewhere so that out of the practice we would be able to evaluate, assess, make amendments and forge ahead into the future. This means that teacher education and training should be globalised by means of common-core curricula, which would dictate the form initial and in-service teacher education and training should take. It is necessary that we come to understand and accept the fact that the globalisation scenario has come and it is here to stay forever. It would therefore worthwhile to begin to attend to its effects on teacher education and training so that we are able to deal with the nitty-gritty of specific knowledge and skills acquisition to be able to transfer teacher's services like other professionals from one region to another with ease.

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In the new teacher education and training initiative for the 21st century, teachers would be required to know and understand the characteristics of the 21st century learner including aspects of pedagogical and content knowledge of subjects that they would teach the learners. These would include the incorporation of languages, cultures and traditions in community contexts as well as technology in the broadest sense (Darling-Hammond, 2006). Furthermore, the 21st century teacher should understand learners and find a way to nurture their talents. To do this, teachers would need the knowledge and skills to construct and manage their teaching and learning activities, communicate well, use technology efficiently and reflect on their practices, learn and improve continually in order to keep them abreast in time perspective.

Professionally, powerful teaching is very important and increasing in our contemporary society as a result of the steam of dynamic initiatives of human development and evolution. Due to these developments and evolution, standards of learning would be higher in the 21st century than it has been in the 20th century. As a result, teachers would need to acquire additional knowledge and skills, both general and specific to be able to survive and be successful in the 21st century school environment.

Education has increasingly become important to the success of both individuals and nations. Growing evidence demonstrates that among all educational resources, teacher's abilities are especially critical contributors to student's learning and consequently the success of a nation to advance in its economic, social and political spheres (Darling-Hammond, 2006).

DYNAMIC TEACHER EDUCATION AND TRAINING FOR 21ST CENTURY AFRICA (GLOBALISED WORLD)

To be able to provide a dynamic teacher education and training for the 21st century, there is need to reflect on the teacher education and training in the past century by scrutinizing the dilemmas of teacher education. During the 20th century many countries set as their objective, to raise the educational attainments of their population with the hope that the attainment of this objective will contribute to the achievement of national productivity, growth and extended economic opportunities to formerly disadvantaged groups in society. The shift of the global economy and evolving nature of employment requires that a new teacher education and training curricula are introduced, especially in the 21st century (Kodrzycki, 2002). These would lead to efforts by nations to reform and innovate their educational systems to respond to the needs of the 21st century political and economic development initiatives.

In the past century, teacher education and training policy makers and practitioners, under pressure from opponents of teacher education and training and with

incentives for faster, cheaper alternatives launched weak teacher education and training programmes that under prepared teachers to adequately render professional services to their clients (Darling and Sykes, 2003). As a result, the beginning teacher attrition has continued to increase and the teaching force of most countries had increasingly become bimodal (National Commission on Teaching and America's Future, 2003).

The apparent ease of teaching to the uninitiated students is relevant to the dilemmas that teacher education and training programmes contended with in the past century. During this era, many lay people and a large part of policy makers held the view that almost anyone could teach reasonably well and that entering teaching required knowing something about a subject and the rest of the fairly simple tricks of the trade could be picked up on the job. These notions, which derived from a lack of understanding of what a trained and qualified good teacher actually does behind the scenes and from tacit standards for teaching that were far too low, led to pressure for backdoor routes into teaching. These denied teachers access to much of the knowledge base for teaching and often, the supervised clinical practice that would have provided them with models of what a professionally trained and qualified good teachers did and how they understood their work were not provided. Many of such incidents were observed across the globe. For instance, the National Academy of Education Committee's Report (Darling-Hammond and Bransford, 2005:1-2) wrote that:

"On a daily basis, teachers confront complex decisions that rely on many different kinds of knowledge and judgement and that can involve high stakes outcomes for student's future. To make good decisions, teachers must be aware of the many ways in which student learning can unfold in the context of development, learning differences, language and cultural influences, and individual temperaments, interests and approaches to learning".

In addition to foundational knowledge about the areas of learning and performance listed in the above quotation, teachers need to know how to take the steps necessary to gather additional information that will allow them to make more grounded judgements about what is going on and what strategies may be helpful. (See the section on the need for the 21st century teachers to be researchers). More importantly, teachers need to keep what is best for the student at the centre of their decision making. Even though this sounds like a simple point, it is a complex matter that has profound implications for what happens to and for many students.

Thus, for dynamic teacher education and training in the 21st century, Africa (and the globalised world) teacher education and training institutions must design programmes

that would help prospective teachers to know and understand deeply; a wide array of things about teaching and learning and in their social and cultural contexts. Furthermore, they must be able to enact these understandings in complex classroom situations serving increasingly diverse students. If the 21st century teacher is to succeed at this task, teacher education and training institutions must further design programmes that transform the kinds of settings in which both the novices and the experienced teachers teach and become competent teachers. This signifies that the enterprise of teacher education and training must venture out further and further and engage even more closely with schools in a mutual transformation agenda with all the struggles involved. Importantly, the teacher education and training institutions must take up the charge of educating policy makers and the general public about what it actually takes to teach effectively both in terms of knowledge and skills that are needed and in terms of the school contexts that must be created to allow teachers to develop and use what they know on behalf of their students (Fullan, 1993).

The 21st century has in store for teacher's surprises of unimaginable proportions as a result of various kinds of development, especially technology. For this reason, many reforms and innovations would have to be made in teacher education and training, which would strengthen both the subject matter content knowledge and pedagogical preparations that join theory and practice; to effectively and efficiently equip the teacher to be able to face all the challenges that would be encountered in the teaching-learning environment of the 21st century classroom.

One of the many concerned individuals who saw the need for new directions in teacher education and training is the former president of the United States, President Clinton. In his call for action for American education in the 21st Century in 1996, he indicated succinctly:

“Every community and nation (my own words) should have a talented and dedicated teacher in every classroom. We have enormous opportunity for ensuring teacher quality well into the 21st century if we recruit promising people into teaching and giving them the highest quality of preparation and training”.

This statement by President Clinton is more important today, than it was in 1996. From the time formal education became the preoccupation of mankind, teacher education and training have been synonymous with the education enterprise and schooling has become a business. The businessmen and women have been teachers (who do not benefit from their services financially) while the main merchandise has been the student (Boaduo and Babitseng, 2007). President Clinton was concerned about the talents and dedication of teachers in American schools (which is also necessary in

other parts of the world). He was every optimistic about the mammoth opportunities that existed for teachers if they were given quality education and training. He was also worried about the type of prospective teachers who were recruited for education and training in institutions. Despite these fears that he expressed, he was hopeful and confident that opportunities still existed if teachers were given the highest quality preparation and training that would equip them with the most applicable, relevant, convertible, practical knowledge and skills to be able to do their teaching professionally. That is hopeful pronouncement.

Teacher education and training of the 20th century as indicated earlier, prepared teachers to teach and produce learners who could not use their acquired knowledge and skills to help mankind to live fulfilling lives. This dilemma is expressed by an American school principal in his letter to teachers at the beginning of each academic year (Swart, 1998) which sums up everything that had negative implications for generations of yesteryears and even today if nothing is done about teacher education and training.

“Dear Teacher, I am a survivor of a concentration camp. My eyes saw what no man should witness. Chambers designed to gas people built by learned engineers, children poisoned by educated physicians, infants killed by trained nurses, women and babies shot and burned by high school and college graduates. So I am suspicious of education. My request is help your students become more human. Your efforts must never produce learned monsters, skilled psychopaths or educated torturers. Reading, writing, arithmetic, biology, physics, chemistry and economics (my own words) are important only if they serve to make children more human”.

Teacher education and training of the 21st century should not prepare teachers to produce the kind of citizens described in the letter quoted. The ministry of education and culture in Namibia in its policy document titled ‘Towards Education for All’ (1993: 37) identifies the concern of the quoted letter thus:

“Perhaps the most important challenge in improving the quality of our educational system is to ensure that our teachers are well prepared for the major responsibilities that they carry. More than anything else, it is the teacher who structures the learning environment. It is they who can keep learning exciting and satisfying or alternatively, who make schooling a pain to be endured”

Since teacher education, whether pre-service or in-service, is the deliberate and conscious effort by states to intervene in the personal and professional development

of an individual or groups of individuals, both ethical and practical considerations require some policy statement to guide practice. It is therefore, a fundamental assumption that effective education programmes rest upon a teaching-learning process that is rooted in a consciously developed plan and that effective education programmes in turn rest upon well-developed educational policies (Swart, 1997).

STRUCTURE OF AFRICAN TEACHER EDUCATION AND TRAINING CURRICULA FOR 21ST CENTURY

Throughout the world, reform and innovation initiatives by nations have triggered much discussion about the structures of teacher education and training programmes (Hebert, 2001; Dekker and Lemmer, 1996; Akyeampong, 2003) and certification categories into which programmes presumably fit. For instance, traditional or alternative, there has been less scrutiny and discussion about what goes on within the so-called “black box” of the programmes inside the courses and clinical experiences that prospective teachers encounter and about how the programmes designed for prospective teachers cumulatively add up to a set of knowledge, skills and dispositions that determine what teachers actually do and capable of doing in the classroom environment.

Building stronger models of teacher preparation in the 21st century would require adequate and progressive knowledge content for teaching as well as knowledge content for the subjects that the teacher would be required to teach. In this respect, the “what” of teacher education and training should be the focus of the curriculum initiatives.

The “what” of globalised teacher education and training curricula for Africa

There are many ways to configure the knowledge content that teachers may need to render their services professionally; the teacher becoming the master of the specialised subjects he/she teaches (Darling-Hammond, 2006). In articulating the core concepts and skills that should be represented in a common-core curriculum for teacher education and training, there is need for a frame work to guide decisions and practice. In the United States for instance, the national academy of education committee on teacher education (NAECTE) adopted a framework that is organised on three intersecting areas of knowledge found in many statements of standards for teaching which would be applicable for consideration in the 21st century teacher education and training curricula in Africa with special consideration to local needs from the African perspective. The list that follows is represented in Figure 1.

Knowledge of learners and how they learn and develop

within social contexts include knowledge of language development. Understanding the curriculum content and goals, including the subject matter and skills to be taught in the light of disciplinary demands, student needs and the social purposes of education (understanding the skills for teaching), include content knowledge of a specific subject and the content pedagogical knowledge for teaching diverse learners. As such, these are informed by an understanding of assessment and how to construct and manage a productive classroom.

According to Darling-Hammond and Bransford (2005), these interactions between learners, content and teaching are framed by two important conditions for practice. The first is the fact that teaching is a profession with certain moral and technical expectations, especially the expectation that teachers, working collaboratively, will require, use and continue to develop shared knowledge on behalf of students. The second is the fact that, throughout the world, modern education must serve the purpose of democracy. This latter condition means that teachers assume the purpose of enabling young people to participate fully in political, civic and economic life in their societies. Furthermore, it also means that education, including teaching is intended to support equitable access to what the society has to offer to its citizens especially in the locality. In other words the teacher education and training provided should make it easier for people to work in any environment, rural or urban so that satisfaction is ensured for teachers to relax in any environment they are posted to teach.

As listed by Darling-Hammond (2006: 4) the implications of the above framework for teacher education and training are many. The following need inclusion here. (a) Teaching is in the service of students, which creates the expectation that teachers will be able to come to understand how students learn and what various students need if they are to learn more effectively and efficiently; and that they will incorporate this into their teaching and curriculum construction. Surprisingly, deep understanding of learning and learning differences as a basis of constructing curriculum has not, historically, been a central part of teacher education and training. These domains have been reserved for curriculum developers. However, teachers would have such knowledge and skill and to use these experiences to develop tests and texts. Unfortunately, teachers only learn teaching strategies to implement curriculum that has been designed by others. This is comparable to the approach of training doctors in the techniques of surgery without giving them a thorough knowledge of anatomy and physiology. Without knowing deeply how students learn and how different students learn differently, teachers would lack the foundation that could help them figure out what to do when a given technique, strategy or method is not effective and efficient with all students. Truly, teachers cannot achieve ambitious goals by barrelling from one lesson to the next without

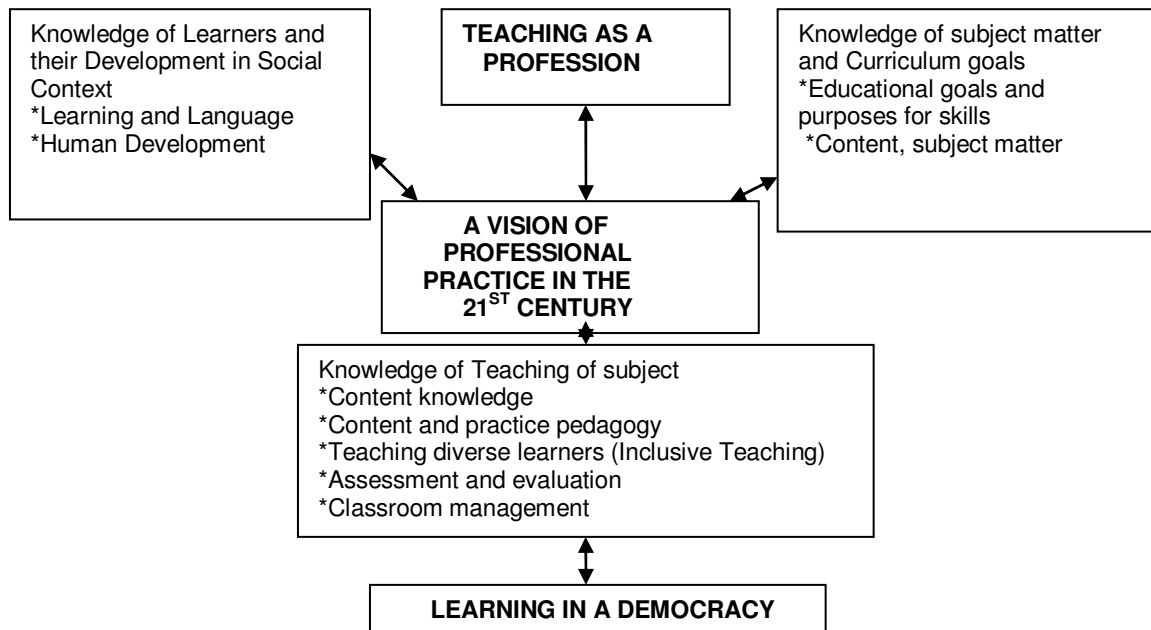


Figure 1. Preparing teachers for the 21st century. Source: Darling-Hammond and Bransford, (2005: 11) with modifications by the Author of this article.

understanding how to construct a purposeful curriculum. This requires incorporating subject matter goals, knowledge of learning and an appreciation for student's development and needs. Connecting what is to be learned to the students requires curriculum work, even when teachers have access to a range of texts and materials. (b) The work of teaching, like other professions, is viewed as non-routine and reciprocally related to learning. What teachers do must be continually evaluated and reshaped based on whether it advances learning, rather than carried out largely by curriculum packages, scripts and pacing schedules that may be required. This signifies that teachers would need highly refined knowledge and skills for assessing the student learning along with knowledge to know when to use different methods, strategies or techniques for different purposes. In fact, it may be an understatement to indicate that teachers need to know how and when to use a wide range of practices to accomplish their goals with different students in different contexts. Given the wide range of learning situations posed by contemporary students, who may represent distinct language, cultural and learning approaches, techniques or methods; teachers would need much deeper knowledge base about teaching for diverse students than ever before and more highly developed diagnostic abilities to guide their decisions. (c) Teachers must be able to learn and address the problems of practice they encounter and to meet the unpredictable learning needs of all of their students. They must take responsibility for contributing what they learn. This means that programmes must help teachers develop

the disposition to continue to seek answers to difficult problems of teaching and learning and the skills to learn from practice and for practice.

It is important to indicate further, that these expectations for teacher's deep knowledge of curriculum means that programmes devised for teacher education and training in the 21st century need not only to provide teachers access to more knowledge for the sake of it but also to help teachers learn how to continuously access knowledge and inquire into their work. The skills of classroom inquiry that may be researched and broadened would include careful observation and reasoned analysis as well as dispositions towards an open and searching mind and a sense of responsibility and commitment to student's learning (Zeichner and Liston, 1996).

Preparing teachers as classroom researchers and expert collaborators who can learn from one another, would be paramountly essential in the 21st century when the range of knowledge for teaching would be grown so expansively that it cannot be mastered and managed by any individual and when students diverse ways of learning are recognized as requiring continual adaptations in teaching. The structure of the African teacher education and training for the 21st century would require new curricula founded on the globalisation scenario. It is necessary to build strong models of preparation by providing adequate, reflective and applicable knowledge for teaching by considering the "what" and "how" of teacher education and training, programme design and pedagogy. The new direction that teacher education and

training should take in the 21st century should be the consideration to usher in a globalised teacher education and training curricula. The form these curricula should take should be the preoccupation of a constituted globalised teacher education and training council comprising renowned teacher educators from around the world. The curricula should take cognisance of the ever-changing needs of the society, the globalisation scenario, the advancement and proliferation of technology and the way traditional classroom teaching is losing grounds for distance-virtual learning (Allen and Thomas, 2000; Kantrowitz et al., 1987).

The content of the curricula should take account of the 21st century classroom. Teachers should be trained on the state of the art hard and soft ware that will become common in the 21st century classroom. Training in technology should encompass telecommunications, satellite access, networking, the internet, video-conferencing and digital components as well as optical technology. These technologies will permit the 21st century teacher in the 21st century classroom feel comfortable and teach effectively and efficiently (http://educ.southern.edu/classroom/21_class.htm. Accessed 20/9/2007).

Another scenario is the changing pattern of world employment. There are so many professions in our modern world and this will multiply in the 21st century. The new directions in teacher education and training should take cognisance of this so that teachers are prepared to play multiple roles and take their rightful positions in the teaching-learning environment to face these challenges confidently. We can only improve the quality of education worldwide for our students if we provide our teachers with the required skills, knowledge and experiences that put them in a comfortable position to discharge their professional duties without inhibitions. One which deserves mention is the ability of the 21st century teacher to control disruptive behaviour of students in the classroom which makes it impossible for the teacher to work efficiently and effectively and even in some instances puts the security of both students and teachers at risk. Problems of such nature may multiply in magnitude in schools in the 21st century and for this reason, teacher education and training institutions should equip teachers with knowledge and skills in management to be able to address such problems effectively and efficiently. Teacher education curricula should be inclusive and emphasize on life long learning, development in technology and its applications and strategies for planning viable alternatives to benefit students. Emphasis should be on democratic principles and practices. The institutionalization of democracy will make teachers see the role of schools and their contribution to the development of democratic values, skills and behaviour from the global perspective.

To raise the quality of teacher education, there is need to consider the changing cultural patterns in teacher

education and training by sensitizing teacher education curricula to a universal cultural programme, which will help to empower teachers and transform them into global teachers. The curricula should take into account the global and local perspectives. According to Hargreaves and Fullan, (1992: 22-23), "The social transformation we are witnessing on the cusp of the millennium extends far beyond the corporate world alone. Extensive changes in economic and organisational life are being accompanied by and also interrelated with equally profound changes in the organisation and impact of knowledge and information".

The socio-economic and political changes of the millennium have inevitably put a mammoth pressure on the world education systems and consequently, on the role of teachers. This pressure will increase in the 21st century because education is the biggest and most rapidly growing industry in the world (Swart, 1997). To Fullan (1991), educational change depends on what teachers do and think. In support of this statement, Hargreaves quoted by Swart (1997:14) indicates that "...we have come to realise ... that the teacher is the ultimate key to educational change and school improvement".

No matter what reform and innovation are made to any degree in an educational system, such restructuring will come to nothing if teachers are not brought into it. The teachers who would be brought into it should be progressively and dynamically informed in their view about education. Swart (1997) and the ministry of education of Namibia (1993) believe that the most important challenge in improving the quality of an educational system is to ensure that teachers are well prepared for the major responsibilities that they carry.

A very important issue worth mentioning is rural schools. More often than not, teacher education and training institutions provide teachers knowledge and skills during training to function in urban societies. This anomaly was identified by World Health Organization team assigned to provide innovative tracks at established institutions for the education of health personnel. One of the participants observed that:

"Doctors find themselves unaccustomed to assess and evaluate the health care needs and priorities of their own country and its people. They are incapable of providing or implementing preventive programs. They are unprepared to work in the slums of the cities or to manage a rural health care team" (Bollag et al., 1982).

The thrust of the quoted observation for the new teacher education and training for the 21st century is that the institutions should provide training which would prepare the teachers to be able to work in any environment without remorse. The 20th century teacher education alienated teachers from their community who never liked

to go back to the rural areas after their training. In the light of this observation, even though made in the health sector, the scenario is comparable in all professions. Therefore, the morals of sacrifice and dedication should be incorporated in teacher education and training in the 21st century.

The “how” of African teacher education and training curricula for 21st century

The programme designs and pedagogies should attend specifically to the how of teacher education and training. It is important to have well-chosen courses that include core content knowledge for teaching and advanced research background. It is equally important to organize prospective teacher's experiences so that they are able to integrate and use their acquired knowledge in a skilful manner in the classroom, especially incorporating research in whatever is taught so that the 21st century teacher becomes teacher-researcher at heart. Often times, this becomes the most difficult aspect of constructing a teacher education and training programme. The onus of the issue is that teacher education and training should attend to both the what and how so that knowledge for teaching, in reality, shapes the teacher's practice and enables them to become adaptive experts who are versatile and capable of operating effectively and efficiently in a variety of teaching and learning environments using the tools that have been provided to them during their training.

Lortie (1975) is of the view that accomplishing what has been indicated above requires addressing special challenges in learning to teach. Three interrelated issues were mentioned, that learning to teach requires that the 21st century teachers: (a) Come to understand teaching in ways quite different from their own experiences as students. This, Lortie refers to as the apprenticeship of observation which refers to the learning that takes place by virtue of being a student in traditional classroom setting. (b) Learn not only to think like a teacher but also to “act as a teacher”. This is termed by Kennedy (1999) as the problem of enactment. Professionally, teachers need to understand and be able to do a wide variety of things simultaneously. (c) Be able to understand and respond to the dense and multifaceted nature of the classroom environment, juggling multiple academic and social goals requiring trade-offs from time to time and day to day (Jackson, 1974). In short, the 21st century teacher should learn to deal with the problem of complexity that is made more intense by the changing nature of teaching and learning in the teaching-learning environment.

A question that needs explicit answers in relation to the topic under discussion is “How can programmes of teacher education and training prepare the 21st century teacher to confront the identified problems of learning to teach and others unanticipated? Studies (Ober, 2001;

Hebert, 2001; Glickman, 2001, Weiner, 2001; McCall, 2001) examining seven exemplary teacher education and training programmes find that despite outward differences, the programmes had seven things in common namely: (1) A common clear vision of good teaching that permeates all course work and clinical experiences, creating a coherent set of learning experiences. (2) Well-defined standards of professional practice and performance that are used to guide and evaluate course and clinical works. (3) A strong core curriculum taught in the context of practice and grounded in knowledge of the child and adolescent development and learning, an understanding of social and cultural contexts, curriculum design, reform and innovation, evaluation and assessment and subject matter content and pedagogy knowledge and skills. (4) Extended clinical experience, at least 24 to 36 weeks of supervised practicum and student teaching opportunities in each programme are carefully chosen to support the ideas presented in simultaneous, closely monitored and interwoven course work. (5) Extensive use of a variety of case methods, teacher research, performance assessment and portfolio evaluation that apply learning to real problems of practice. (6) Explicit strategies to help students to confront their own deep-seated beliefs and assumptions about learning and students and to learn about the experiences of people different from themselves. (7) Strong relationship, common knowledge and shared belief among school-based and university-based faculty jointly engaged in transforming teaching, schooling and teacher education and training. (Darling-Hammond in Press 2006).

The features listed above confront many of the core-curricula dilemmas of teacher education and training and these would have to be critically examined and considered in the planning and implementation of global core-curricula for teacher education and training. What would require particular attention are coherence and integration, extensive-well-supervised clinical experience linked to course work using dynamic pedagogies that practically link theory and practice (Ball et al., 2000; Ball et al., 1999; Baumgartner et al., 2002; Fullan, 1993; Gallego, 2001) and finally new relationships that must be established with schools, especially community-parents involvement in the governance of schools (Bryk et al., 1998; Delamont, 1992; Henry, 1996, Fullan, 2001; Steinberg, 1996). The thrust of the matter is that new teachers from the 21st century teacher education and training institutions would be placed in schools with large, culturally diverse student population, many of such schools do not provide the kind of contact with communities needed to overcome negative attitudes towards culturally different students and their families and communities (Zeichner, 1992). Without connections between the classroom, school and the local communities, classroom field experiences may work to strengthen pre-service teacher's stereotypes of children rather than stimulate

their examination which may compromise effectiveness in the classroom (Zeichner, 1996).

INITIAL ACTION FOR TEACHER EDUCATION AND TRAINING FOR 21ST CENTURY AFRICA

Policy documents are used to inform practice in any developmental planning (Hanekom et al., 2004; Hope and Somolekae, 1998). In the preparation of the strategies for the new directions in teacher education, the following list needs to be considered in its entirety. (a) The balance between theory and practice. (b) Universal teacher education curricula with programme contents and underlying epistemological concepts clearly synchronised for delivery. (c) The significance of in-depth content knowledge of subjects that teachers are prepared to teach including expected competencies and programme evaluation. (d) The consistency between the stated goals and principles of the programme, their structures and implementation including training systems and process assessment. (e) Uniformity of professional certification is required both locally and globally. (f) The scope and organisation of school practice should be universal. (g) There should be adequate programme resources including appropriate institutional environment for effective and efficient take off of all programmes. (h) Global and national recognition of teaching as a profession that require certification before professional teachers can practice. (i) A rigorous entry requirement procedure to select those who really want to be teachers and should be encouraged to be teachers. (j) There should be specific entry and exit competencies. (k) Like any recognised profession, the length of training should be rigorous with protracted practical practice component that will prepare the teacher to face the real challenges of the teaching-learning environment.

The list provided above adheres to rigorous policy documentation that would be needed to guide actions required to be undertaken in the institutions that would have to train teachers. Swart (1997) is of the opinion that this design rests on the premise that deliberate and conscious intervention are made in the new directions in the teacher education programme. Swart (1998) quotes by indicating that Holly and Mcloughlin feel that:

“Teacher education, whether pre-service or in-service is the deliberate and conscious effort to intervene in the personal and professional development of an individual and that both ethical and practical considerations require some policy statement to guide practice and that effective teacher education programmes in turn, rest upon well-developed educational policies”.

There must be rigorous policies to guide practice and this must be backed up by adequate implementation plans

where resources of all categories should and must be made available to the institutions that would be responsible for teacher education and training.

MODELS OF TEACHER EDUCATION AND TRAINING FOR 21ST CENTURY AFRICA

The new directions will have to grapple with models of teacher education. The current models need reform and innovation and new models would have to be developed that would enable teachers to adapt comfortably to the changing times (Avalos, 1991; Monnathoko, 1995; Popkewitz, 1987, Ginsberg, 1988; Nagel, 1992; Al-Salmi, 1994; Shaeffer, 1990). The new models should emphasize learning to do and learning to think so that we do not produce learned monsters but learned thinkers.

In this paper, the proposition is participatory teacher education and training. There is absolute need for participatory teacher education and training. In this model, teachers in training should play active role in the training process. They should become participants in decisions regarding the needs to which their training must respond; what problems must be resolved in the day-to-day work environment and what specific knowledge and skills must be transmitted to them. In this participatory model teachers must be self-directed and self-taught. This is in line with the concept of “deep learning”. Every aspect of the training must be based on reflection, circumspection and introspection. The needs, problems, statuses and roles must be clearly defined, examined and analysed by the providers and the trainees. The actual concrete experiences of working with students should be emphasized and dramatized in various dimensions. This means that a longer period for practical teaching practice should be ushered in at every stage of the preparation. Teachers must be able to collectively examine and analyse their consequences, assisted by the trainers in solving real classroom and the school environment problems (Akinpelu, 1998; Akyeampong, 2003). In the new directions, there should be what I would like to term as “better teaching” model. The new model should equip teachers to be able to: (1) Author and publish experiences and researches conducted. (2) Be central and key participants of curriculum development, reform and innovation. (3) Encourage learners to work together in a cooperative spirit, help each other with their work as well as be able to evaluate themselves. (4) Help learners publish their own work online portfolios. This has never been considered in any teacher education and training programme. It must be considered this time around. (5) Write a bank of learning activities for learners to access at their own pace. Such bank of learning activities should be data-based and shared in a networking spirit world wide. (6) Give learners a wider choice of learning activities according to their own interests and capabilities and be allowed to attend to them at their own free time thereby

creating responsible attitude in learners to take charge of their own learning.(7) Build up a personal portfolio of their best teaching plans so as to share among other teachers.(8) Create exciting learning environment of active knowledge creation and sharing through the organization of workshops and conferences for teachers.

Furthermore, the new teacher education and training should not lose sight of the power of technology for both teachers and students learning. The real power of technology will come when teachers have been trained well in them and have captured the potential of technology themselves. In this way, teachers would be able to contribute to model the behaviour that the students are expected to learn thereby making them to grow up not to be learned monsters but more human, creative and productive (Burke, 2000; Holmes Group, 1986).

NEED FOR IN-DEPTH CONTENT AND PRACTICAL KNOWLEDGE OF RESEARCH FOR TEACHERS

Research must be a major priority in teacher education and preparation in the 21st century. Professional teachers naturally seek answers to questions and solutions to problems that enable them to help their students to learn. They are decision makers; make thousands of choices on hourly basis regarding the choice of texts, literature, appropriate and relevant technology integration, curriculum pedagogy, assessment and measurement. They are highly reflective and sensitive to the needs of their students. They encounter failures and successes. However, much of what teachers have to offer remains a secret. Their key to success is a mystery. Teachers seek multiple means of looking at their world of teaching and learning and that of their students by unlocking the secrets within the classrooms. Research is one of such potent keys to help unlock these secrets.

This section of the paper will provide detailed empirical evidence together with scholarly argument to address the issue of the need for teacher education and training institutions to provide teachers with in-depth research content as well as practical knowledge to enable practising teachers to meet the challenges of the twenty-first century school teaching. The following perspectives will also be given elaborate attention, that is, the need to provide teachers with the tools, the application of a variety of research paradigms and the necessity to make their actions substantive for the solution of day-to-day classroom problems that would arise in the 21st century school environment.

Currently, most institutions for teacher education and training provide just rudimentary courses in educational research. These courses, in reality, do not prepare the teachers to become researchers per se and apply their research content as well as their practical knowledge and skills acquired while in training to solve the daily

problems they would encounter in the classroom environment. Research courses provided to initial teachers in training do not actually equip them with the skills and tools that they will need to conduct in depth research, especially those regular pertinent problems they encounter in their day-to-day school environment. Generally, the aim of such courses has been “to help the teacher trainee produce a research document as partial fulfilment of the degree or diploma being sought after” (Boaduo and Babitseng, 2006). In other words, once student teachers have prepared a short research report to augment their marks and get through with their studies and awarded their qualifications, the educational research knowledge and skills they acquired is entirely forgotten and it is never applied in the teaching-learning environment.

The 21st century teacher should be effective and efficient in educational research activities. They would need to become exceptional educational researchers and should engage in regular research to increase their knowledge and skills in the classroom and improve the quality of education for their students (Kincheloe, 1991). In addition, the 21st century teachers would have to engage in the debate about educational research by understanding meaningful research themselves and should be engaged in complex critical educational research to be able to make worthwhile contribution in the teaching-learning environment.

I, wholeheartedly, believe that 21st century teachers should be encouraged to explore their own voices and begin to renew the enthusiasm for the process of sharing their own work within a growing teacher-educational-researcher movement that will help to expose them to a multiplicity of research activities professionally.

The concept educational research and its significance to teacher education and training

There is need to look at the concept educational research and how it applies to the teaching-learning environment, especially in the 21st century school environment. This would make the professional teacher to identify with the fact that educational research is a major part of the professional practice. For this reason, educational research in this discussion would be taken to mean a: “...Systematic study of a phenomenon (problem) with the aim of finding explanations or solutions or understanding and finding patterns among what is studied so that action could be taken to arrest or improve the situation” (Boaduo, 2001:4).

Problems of different kinds and magnitudes abound in the teaching-learning environment and these would quadruple in the 21st century school environment. Whenever such problems surface and pose threat to the progressive work of the teacher and the survival of the students and their progress, a critical study would have to

be conducted to find solutions to resolve the threat and improve the situation. This is the essence of educational research and its application to solve pertinent problems.

From ancient times to date, the main approach for finding solutions to problems has been research, research and nothing but research where scientists, social scientists, economists and all categories of professionals get to their fields, environments and laboratories to undertake studies to find solutions to the posing problems. These professionals are able to make meaningful contribution to resolve problems in their specific fields because they have the knowledge, skills and the appropriate tools to use in this respect.

Furthermore, mankind has not given up hope when confronted with problems until a solution is found through protracted research. The teaching profession has not made significant use of research to improve practice especially in the 20th century and the only reason that could be advanced is that teachers in training were not given in-depth knowledge and skills in research.

Teaching is a unique profession and requires more study through progressive research to be able to identify strategies, approaches, methods and plans to improve practice. The object of the teaching profession are students who weird various characteristics which the practising teacher should be able to identify, isolate and classify into groups to be able to provide guidance required for the benefit of the students. Research is a potential tool for professional teachers to use to achieve their professional aims. Here lies the significance of the need for teachers to be researchers at heart (Boaduo, 2005; Boaduo and Babitseng, 2006).

Need to provide 21st century teachers with solid foundation in research methods

If the 21st century teachers are to consider themselves as researchers and use research to improve their practice, then the following conditions would need to be fulfilled in their entirety by teacher education and training institutions (Boaduo and Babitseng, 2006). (a) All categories of teachers: Pre-school, primary, secondary and tertiary should have as part of their training a concise detailed course in research methods that would conceptualise and concentrate on the work that teachers do in their day to day practice and not just as a course to fulfil a condition for a degree or diploma certificate. (b)

When equipped with the required content, practical knowledge and skills in research, teachers must be the first people to initiate research in the teaching-learning environment that has significant bearing on their professional practice because they have the knowledge, skills and experiences about the needs of their students and situations that confront them as well as the lives of the education institutions that they are located and operate daily. (c) Decisions taken about research in their

operative environment which affect their condition and progress of their practice as professionals in the educative sphere must be theirs to make and implement (d) Educational researches that are related to teaching be it in the classroom or for the general improvement of the overall school environment (physical infrastructure, institutional materials or methods, strategies and approaches) can be effective with the agreement of teachers (UNESCO, 1979). This can only be successfully accomplished if they are given in-depth training by the institutions.

It is also pertinent to indicate that it would be necessary to introduce the 21st century teachers to the various research paradigms as well as approaches while in training with more emphasis on their application. The various approaches like qualitative and quantitative, action, participatory, empirical and historical as well as the situations in which teacher-researchers would be able to couch their research activities must be provided as tools to equip teachers. There should be regular in-service training or development programmes to update them in new developments in the teacher-researcher environment as a result of the rapid flux of change in the scientific-technological world which would be part of the 21st century global environment.

Kinds of research tools teacher-researchers should use in the 21st century?

Generally, research has undergone massive metamorphosis over the years, and the changes, as expressed by Allen and Shockley (1996) are not as concise and neatly defined as it once was. The old formulae do not fit new questions, especially in the technologically advanced 21st century. For instance, quantitative experimental research renders images of controlled procedures resulting in statistical practices, but classrooms as the play grounds where teachers regularly interact are dynamic, complex and always evolving. This situation would even be more complex in the 21st century school environment. The rate of flux in the 21st century classrooms would place teachers on their toes to live up to the expectations of their students. Therefore, the 21st century research process should be dynamic and flexible enough to meet classroom contexts and the complexities of the teaching-learning environment. According to Atwell (1993: 13), any research that the teacher engages in, in the 21st century school environment, should allow for inquiry "...conducted in the full, messy context of the life of a classroom; providing rich descriptions of people in action". This approach would help the 21st century teachers to unlock secrets within classrooms that often defy the rigour of traditional experimental conditions. The 21st century teachers, as researchers, should be able to seek multiple means of looking at their world of teaching and learning and that of their students and in-depth knowledge in

research can be the most instant panacea.

Professionally, the 21st century teachers should be groomed in a variety of research approaches during and after their training. There must be absolute diversity in the research activities that teachers would be engaged in. However, all researching teachers would need to share common process of reflecting on their practice, inquiring about it and taking action at the most appropriate time (Patterson and Shannon, 1993). Generally, the 21st century teacher-researchers would be required to seek to understand individuals, actions, policies and events that would make up their work and working environment in order to make professional decisions. According to Patterson and Shannon (1993:7) "...they (would need to) engage in moments of reflection and inquiry in order to take action that will help their students learn better".

What is excellent about this description is that it recognizes all good teachers as participants in teacher research. In this process, the key elements are that teachers ask questions, reflect on their own and student's learning, use multiple data sources which include observation, analysis of artefacts, conferences and seminars and then taking action on the new information that they have come across (Newman, 2002). The new information discovered opens up new vistas for further research and improvement of practice. Furthermore, the 21st century teachers must be forerunners of protracted action and participatory action research in order to improve and advance practice. The website http://www.ed.gov/databases/ERIC_Digests/ed355205.html (Accessed 20/9/2007) explains that

"...action research is deliberate, solution-oriented investigation that is group or personally owned and conducted. It is characterised by spiralling cycles of problem identification, systematic data collection, reflection, analysis, data-driven, action taken and finally problem redefinition".

This does not necessarily indicate that solution has been found for the problem being researched. It just helps to identify with the procedure to follow to be able to conduct and complete the study being undertaken. This is where the teacher-researcher is at liberty to apply the most appropriate research paradigm that will help to address the research problem. The following paragraphs will discuss the various research paradigms that the 21st century teacher-researchers should be familiar with if they are to make valid contribution to knowledge and the practice of teaching.

Some methodological paradigms relevant to 21st century teacher-researchers

The significance of methodological paradigms in a research study is the ability to understand and decide on

the most appropriate research paradigm that will suit a particular assignment so that the researcher is able to conduct the study to a successful end. Mouton (1996) is of the view that methodological paradigms for instance those related to quantitative, qualitative, action and participatory action are not merely collections of research methods with their applicable techniques. According to Boaduo (2005), methodological paradigms should always include certain assumptions and values regarding their use under specific circumstances. From the perspective indicated above, the teacher-researcher should be able to make a choice concerning applicable methods, techniques and the underlying philosophy regarding their use in a particular study. In such respect, the philosophy should include the theory of when and why to apply either of the paradigms or approaches and the awareness of the limitations of equally applicable and relevant various methods that could have equally been chosen for the study. In respect of the research being conducted by the teacher-researcher the complete understanding and application of the following are required for introspection. (a) Every research paradigm, method or technique is task specific and the task is often defined by the research goal. (b) Different research studies use different research paradigms, methods or techniques because they have different objectives. (c) In all studies the research paradigm, method or technique must be appropriate and relevant for the task at hand. (d) The research paradigm, method or technique should apply to all the aspects of the research study sampling, questionnaire design, interview schedule, data treatment, analysis, interpretation, findings and recommendations.

Since the late 1980s, action research has gained the attention of researchers in many fields of study and would even gain greater attention in the 21st century (McKernan, 1991; McTaggart, 1992; Masters, 2001; Kemmis and McTaggart, 1988). The 21st century teaching profession will find solace in this paradigm. Generally; action research is a process in which groups of people (teachers) attain critical understanding and improvement of their situation through participatory plans, practices, observations and reflections. This fundamental feature of action research is part of the well-known spiral propagated by Kemmis and McTaggart (1988). It also becomes a collective reflection by participants on systematic objectifications of their efforts to change the way they work through discourse, organisation and power relations to be able to actively contribute to and improve the practice of their profession (McTaggart, 1992). According to Hughes (2004:1)

"...action research is a process for developing practical knowledge for worthwhile purposes leading to health and happiness for people and communities".

The 21st century teachers will love to make their

communities healthy and happy through the application of practical knowledge. Reason and Bradbury, quoted by Boaduo and Babitseng (2007:186) concur with the view and indicate that "...action research is about knowledge and practices that contribute to human well being and happiness".

Dick (2000) reiterates that action research is for practitioner, especially those of the 21st century, who want to improve several aspects of their professional practice or social process while generating new knowledge. For these reasons, action research can serve different purposes and provides different ways of understanding knowledge in its relationship to practice and different relationships to people and problems in their context (Bray et al., 2000). This reveals the fundamental differences in our understanding of the nature of inquiry, not simply methodological niceties as proposed by Reason and Bradbury cited by Boaduo and Babitseng (2007). The 21st century teacher-researcher would be required to engage in a careful study of identified problems by devising improved ways to assist students to master a specific subject can be a beautiful case for introspection. A project of this nature seeks to solve a practical problem for the benefit of students and at the same time add to the stock of knowledge if the findings are published (Hughes, 2004).

Action research, therefore, refers to any process with the dual aim of changing a situation and producing knowledge for consumption (Masters, 2001). For this reason, action research has great potential for professional practitioners, especially the 21st century teachers because it can make practitioners to combine research and improve their professional practice (Chandler and Torbert, 2003). They can also develop collaborative groups to observe their practice, collect and analyse data, reflect on what they have done and plan to improve both their own practice and the social, political and economic contexts in which they live and work (Hughes, 2004). Participatory action research is another paradigm that deserves mention to help advance the 21st century teacher-researchers capabilities to research.

Boaduo (2005:8) indicates that:

"Participatory action research paradigm is self reflective inquiry in social situations like the ones in which teachers find themselves (in the 21st century). It helps to improve the rationality and justice of the social and educational practices, understanding them and the situations in which they are carried out."

Boaduo (2005) further testifies that participatory action research plays a liberating role in the learning process by providing the development of critical understanding of social problems, their structural causes and possibilities

for overcoming them. It therefore, calls for democratic interaction and intervention between the researcher and those among whom the research is conducted.

Generally, the democratic interaction depends on the political participation of those involved in conducting research on the causes of the problem being investigated with the objective of finding a solution.

The 21st century teacher-researchers should know, understand and use the three main inter-related processes of participatory action research during their training. These are: (a) The collective investigation of problems and issues with the active participation of the constituency in the entire process. (b) The collective analysis in which the constituency develops a better understanding of the structural causes of the identified problem (socio-economic, political, educational, cultural or historical). (c) The collective action by the constituency aimed at long-term, as well as short-term solutions of the identified problems. The three processes listed above are inseparable and the 21st century teacher-researchers must be well schooled in them. The integration of the three processes gives participatory action research its fundamental strength and power over other research paradigms. The 21st century teacher-researcher should be able to know and understand that the processes are closely related to investigation, analysis and action. They can be identified separately in any participatory action research study and each process incorporates aspects of the others. What 21st century teacher-researchers should know in participatory action research is that the whole research process begins with people's concrete experience and situation and moves to include both theoretical analysis and action aimed at change that brings benefits to the constituency.

There are several reasons why 21st century teacher-researchers should be conversant with the principles of participatory action research. Basically, it is an educational approach that equips teachers to help to bring about social change. It is not a recipe for change but a means to help bring about appreciable change. It is a democratic approach to investigation and learning which can be taken by individuals, groups and movements as a potential tool aimed at social change. In any research study where the participatory action paradigm is applied, the following research questions must be considered in their entirety, especially during the planning and designing of the research proposal. (a) What is the problem to be investigated? (b) Who are the subjects? (c) Who are the participants? (d) How would they participate? (e) Who has to learn in the process of investigating the identified problem? (f) What has to be learned by the participants? (g) Why should the participants learn what they have to learn? (h) How would they participate in the whole learning process?

The 21st century teacher-researchers should know the strengths of participatory action research. The following authors Boaduo (2005); McNiff (1995) and Clark (1972)

agree on the following (a) A critical analysis is encouraged throughout the research process and not just at the beginning or termination. (b) The approach encourages active involvement on the part of all participants. (c) It is positive in initiating and helping to bring about change and improvement. (d) By using the classroom (for teachers) or the field as the study environment, the natural behaviour of participants is accommodated. (e) As a research framework, it is flexible, relevant, adaptable and applicable. (f) Finally, it describes relationships as they develop over time and accommodates changes in thinking which reflect mutations occurring in the context of the study being conducted. Participatory action research helps the researcher to address practical problems with theoretical and applicable practical relevance and transfers the knowledge from the research findings to the participants or the general public for rectification and application. The 21st century teacher-researchers need to be well schooled in it. Teachers of all categories: Pre-school, primary, secondary and tertiary should be socialised into a scholarly life style and be learned and exposed to the values of research tradition especially during training (Pease, 1967; Reskin, 1979). During training, the emphasis should be on various aspects of research that are relevant and would help the 21st century teacher to respond to the needs of the student. Aspects like action and participatory research should be prominent and thoroughly discussed (Blackburn and Havinghurst, 1979; Hunter and Kuh, 1987; Reskin, 1977; Reskin, 1979). The training should equip 21st century teachers with both the knowledge and skills as well as the ability to identify problems, design and conduct a progressive study, write up the findings and be able to undergo the refereeing process to get the results published (Hogan, 1981; Hunter and Kuh, 1987; Kuh and McCarthy, 1980; Zuckerman, 1977). The training should emphasise the need to conduct regular researches about impending problems that require the attention of the 21st century teacher for solution (Braxton, 1983; Cameron and Blackburn, 1981; Clark and Corcoran, 1986; Fulton and Trow, 1974; Hunter and Kuh, 1987).

Need for the 21st century African teachers to research

From what have been discussed so far, there is no doubt about the necessity of the 21st century teachers to research regularly. In the teaching-learning environment, the 21st century teachers would encounter numerous problems everyday. There are problems that may cross the success path of the students which the 21st century teacher would like to eliminate at all cost. To do this requires strategies and approaches that would help to direct the 21st century teacher towards finding a lasting solution to those problems that may threaten the success of the student. However, the 21st century teachers would

be able to conduct regular researches if they have been given the required knowledge and skills they need to be able to indulge in regular short or long term research studies. How the 21st century African teachers should go about their research. This paragraph will provide a brief discussion about how the 21st century teacher-researchers should go about their research by touching on how to start and find time to gather data to be able to complete any chosen research study.

Once the 21st century teachers have been schooled in in-depth research studies, the starting point is to identify the research problem and place it in a simple sentence that can be read and understood without questions. There should be statement of purpose (statement of the problem) and then research questions. Indicate why the study is being conducted (rationale). There is need for a brief literature review to place the study into open sesame. This indicates that the study has been looked at by someone from a different perspective. That needs to be identified before one can put the study into proper perspective. It is necessary to identify the parameters within which the study will be confined (delimitations). State the possible problems that may hinder the completion of the study (limitations) and how these problems would be circumvented. Identify the subjects. Decide on the size of the sample population for the study. Identify a theory that will help to place the study into slot in the research fraternity. State the significance and benefits. List your data collection techniques and their validity with reference to the methodological paradigm that will be used. State how the collected data would be treated and analysed. Provide a time frame (from beginning to the end) for the study. If funds would be sought from providers, there is need to include budget statement. Give a brief description of how the final research report would be compiled (Boaduo, 2005). That is the basic format to help the 21st century teacher-researchers get started confidently.

The frequency at which the 21st century teacher-researchers be engaged in research study should be left to individual judgement. It is a known fact that teacher-researchers will always engage in frequent research if they are confronted by problems on regular bases. For this reason, there can be no prescription concerning the frequency that research activities should be engaged in and as such are at liberty to make choices about the frequency to research.

Necessity to make research substantive to educational practice

Once the study has been conducted to a successful end, there will be complete write up report that will make the findings of the study available to the members of the teaching professional fraternity. Often times, such reports are published in teacher education journals or district or

regional educational newsletters for dissemination. This concludes the essence of the 21st century teacher-researchers contribution to inform their professional practice (Weiner, 2001; Glickman, 2001; McCall, 2001).

In sum, I have made attempt to touch on the 21st century teachers as researchers scenario by discussing the concept research and indicating the significance of research to the teaching-learning environment. I have emphasised the need to provide in-depth training with solid foundation in educational research by institutions that provide education and training for teachers. Further to this, I discussed the most important research tools that teachers need to be able to indulge in regular research with confidence and carry it to a conclusion. The need for teachers to research has been briefly discussed. However, the frequency to research has been left to the professional teacher's discretion. I have indicated the need to make research findings available to the teaching professional fraternity for dissemination to all practitioners to help improve practice. That is the essence of research in professional practice.

SIGNIFICANCE OF GLOBALISING TEACHING PROFESSION VIA GLOBALISED TEACHER'S COUNCIL

Currently, every country has its own teaching council with specific objective to register professionally qualified teachers before they can practice. Every country has its own requirements that professional teachers should meet in order to be registered and certificated to teach. Even in the same country, like the USA, Australia and United Kingdom getting registered as a teacher entails delaying. In the USA every state has its own teaching council that registers professionally qualified teachers and certificated with a license to practice. A critical look at this scenario reveals that teacher transfer from one state to another in the same country becomes a burden if not delays while Teacher-shortages abound in these countries.

In order to make teaching to become a mobile profession world wide, there is need for 21st century globalised teaching council. The mandate of this council should be to collaborate with institutions and organizations responsible for teacher education and training to develop a common-core teacher education and training curricula as well as the establishment of teacher professional registration council which would be mandated to issue professional teaching licenses for practitioners that would be recognised worldwide to make teacher mobility from region to region and country to country easy and fulfilling. Hebert (2001), a Canadian educationist believes that teacher migration across provincial, regional and international boundaries can contribute immensely to social cohesion and can create greater sense of understanding among citizens of different nationalities. Glickman (2001) supports this view and indicates that we

need to understand the issues of teacher education and training such as supply and demand and teacher professional development.

The characteristics common to all professions, which are significant to the professional practice of teaching, relate to the acquisition of general and specific knowledge and skills based on long period of protracted training, autonomy in decision-making, specific professional responsibility, complete control over licensure and entry standards. Prestige and economic standards cannot be over-ruled. In most countries of the world, barriers to formal professional recognition and status of teachers are connected to lack of unity, resources, low status and fairly low calibre in-take of aspiring teacher trainees. The need to identify and cement the interaction between teachers – primary, secondary and tertiary institutions require attention.

Currently, all over the world, the cultural and historical circumstances reflect absolute apathy among teachers. Consequently, these influence their performance negatively. By placing the 21st century teacher education and training in the globalised perspective and pulling all the global expertise in this direction to make a contribution towards the professionalisation of teaching will contribute towards the enhancement of productivity to achieve the aims and objectives of schooling worldwide. The challenges and obstacles facing teaching as a fully-fledged profession should focus on official and espoused experiences of the actual positions weird by teachers.

CONCLUSION

In this paper, I have tried to open a very controversial issue for discussion and debate. The thrust of the discussion is that all nations depend on education to achieve their development objectives and that teachers are the most significant in this endeavour and as such should be given a fair recognition of professionalism that should commensurate with their professional education and training. They require registration and certification by globalised recognised teacher's council before practice. I have also argued that there would be need for globalised teaching council in the 21st century if teachers are to ply their profession worldwide. Provincial, regional, national and international teacher's councils should merge and formed a globalised teaching council with offices in each country and a headquarters in a specific country like other international organizations. The suggestions provided in this case are that (a) there should be common-core teacher education and training curricula. (b) Research must be considered the master-core subject to equip the 21st century educator with content and practical knowledge and skills in research to be able to attend to day-to-day classroom problems that may pop up. (c) The core-curricula should be the preoccupation of the academic and professional faculties of education in the

universities world wide. This can begin with the international society of teacher education (ISTE).

Further to these, it has also been argued that in the education and training of the 21st century teachers, room should be given to protracted clinical experiences, for at least 24 months, where the teacher would be equipped with the necessary relevant, practical, applicable and convertible ammunitions to fight the classroom war and win. We cannot do anything better than these for the teaching profession in the 21st century.

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