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Sociological Perspectives of Skills Development in Teacher Education

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Introduction

Education institutions are the principal vehicles for the transmission of what societies consider as worthwhile knowledge. Arguably, in secular societies, they are also major institutions for the promotion of what societies consider to be worthwhile values. That is why sociology, by definition, is concerned with the study of human behaviour in groups or sub-systems of the social systems, the functions that each of the groups serve in society, the inter-relationship of the sub-systems and how changes in one sub-system affect other sub-systems and the behaviour of their members. Thus, sociology studies human societies and their structure and dynamics. This is fundamentally concerned with social institutions and, as such, is ideally placed to research education. Social institutions which are the basic social structures and machinery through which human society organizes, directs and executes its activities more or less adapt to the functions they are expected to execute for the society.

Sociology therefore, applied to education, takes as its object the education-society relationship and attempts to explain one by the other. That it is concerned with the ways in which educational institutions and patterns of human behaviour affect the nature of education and educational outcomes. As such, research in the field has addressed wide-ranging issues, including the workings of educational institutions, the role of education in society, curriculum content (both formal and 'hidden'), patterns of access and outcome, and classroom interaction. It is perhaps due to this diversity and the rich theoretical perspectives that sociology of education was developed. The foregoing shows that sociologists believe that education is concerned with the way social relationships in the school are ordered and organized

to shape the personality of the individual. That is why a good educational system, in all its full substance and ramifications, is related to the level of culture, industrial development, rate of urbanization, political organization, religious climate, family structures, stratification and other institutions of the total social systems. Since education has to fulfil the individual's and society's needs, both in the present and the future, the educational system must maintain pace with other sub-systems. It was as a result of this, for example, that African countries recognized the pivotal role of education as the fountainhead of national development. That is why the Nigerian National Policy on Education (FRN 2004) in particular, provides Nigeria's philosophy of education, based on the belief that:

- Education is an instrument for national development;
- Education fosters the worth and development of the individual for the development of the society;
- There is the need for functional education for the promotion of a progressive united Nigeria; to this end, school programmes need to be relevant.

The policy further (on page 8), reiterates the importance of education to national development that:

Education shall continue to be highly rated in the national development plans because education is the most important instrument of change; any fundamental change in the intellectual and social outlook of any society has to be preceded by educational revolution.

Therefore in Nigeria, as in other African countries, there is the consciousness or belief in the tremendous importance of education as the catalyst for national development.

Education is the business of teachers and thus, if education occupies a central role in national development, then teacher education is at the epicentre of national development. Again, in most African countries, the national policies on education do not lose sight of this. They posit that no education system can rise above the quality of its teachers; and that is why, all over the world, much prominence is given to teacher education because of the peculiar role of teachers in national development. Buttressing this view, Kalusi (2000) submits that the quality of any education system depends on the availability and competence of the teaching corps. Thus, the teacher factor in any educational programme is regarded as most crucial because what teachers know can make a world of difference and what they do not know can be an irreparable loss to the development of the abilities and potentialities of the society's younger generation.

One could see from the ongoing discussion that teachers are the hubs of any educational system. They are the determinants of the quality of education. Therefore, no matter how grandiose, innovative and imaginative the plans and programmes are, the desired objectives may not be achieved without the right number of adequately educated and trained, dedicated and loyal, motivated and disciplined, committed and happy teachers, serving at all levels of the educational system. Thus, teacher education which is at the centre of preparing teachers towards enhancing educational development, equipping and educating teachers to effectively perform their roles, involves the promotion of the right attitudes, values, behaviours and methods, which would enable them to be capable of transmitting the right information effectively to learners in this digital age. It can therefore be explained that, while more is demanded of teacher educators in the digital age, obsolescence seems to glamour the existing practice. In other words, the transition of the world from one of separate units into a global-digital integrated whole requires a new vision of the teacher's role and pedagogical preparation. The question of what knowledge, attitudes, behaviours and skills teachers should possess is the subject of our discussion in this chapter.

Goals of Teacher Education

Teacher education is an aspect of formal education that deals with the systematic training, planned preparation and professional development of eligible and willing students for teaching positions, especially in the pre-primary, primary and secondary levels of education (Onah 2005). It is also that component of any educational system charged with the education and training of teachers to acquire the competences and skills of teaching for improvement in the quality of teachers for the school system (Afe 1995). It is often properly planned and systematically tailored and applied for the cultivation of those who teach or will teach, particularly but not exclusively, in primary and post-primary schools (Okafor 1988).

Teacher education therefore refers to the policies and procedures designed to equip teachers with the knowledge, attitudes, behaviours and skills they require to perform their tasks effectively in the school and classroom. The question that may be asked is: Can the objectives of teacher education be achieved if teacher education is not geared towards producing teachers who are globalization or digital-friendly? As earlier pointed out, to achieve these goals, teachers are the main determinant of the quality in education. If they are apathetic, uncommitted, uninspired, lazy, unmotivated, immoral, anti-social and, most especially, uninformed, the whole nation is doomed. If they are ignorant in their disciplines and thereby impart wrong information, they are not only useless but also dangerous. In other words, there is the need for teacher education to be reviewed, taking cognizance of the demanding competition posed by the digital world.

Sociological Perspectives of Teachers' Role

According to Bamisaiye (1999), two schools of thought are relevant in discussing the social roles of teachers. One school holds that teachers are political weapons of oppression in a social institution which is designed to impress social inequalities as a natural arrangement among young learners in their formative years. Sociologically, teachers perform this role of maintaining a reproductive function in the society, since the school is an agent of cultural transmission. A second theory is the production theory, which holds that teachers are agents of social and cultural transformation. Both theories put the teacher educator in a conflict situation because they make paradoxical demands on him, both as a professional and as a member of the society.

From the structural functionalist perspectives, Carlson (1987) sees the teacher as part of a skilled labour force which helps to maintain capitalist appropriation of profit by preparing learners for unequal social stratification. The social stratification is seen as a mechanism which ensures that the most talented and able members of the society are allocated to those positions which are functionally most important to the society. This view presents the teacher in a conflict situation because it presupposes that curricular practices in the school are imposed on the teachers and therefore on learners by the *status quo* and not a product of consensus among the different segments of the society that have a stake in education. The teacher's conflict role is further aggravated by the fact that he or she is also on the receiving end of coercion by the *status quo*. Like their learners,

They have been (therefore) bureaucratically subordinated, rigidly boxed in by a predetermined curriculum and held account-able for attaining instructional 'productivity' goals (Carlson 1987: 290).

Education has therefore become a major growth industry; and when anything becomes a commodity, the classical demand and supply theory does come into the picture. The same has happened with education in the contemporary era. Since education is a priced commodity, its consumers are those who can pay for it. The teacher is therefore seen as another agent of production for satisfying capitalist profit-making goals. This view of the teacher presents him as an object or factor of production rather than an autonomous individual or a member of a group performing a worthwhile social role. Bamisaiye (1999), summarizes the view of this theory of teaching and the teacher's role:

If all that they (teachers) are doing is directly reproducing pupils as units to be slotted into the labour market, their job seems hardly worth doing (Carlson 1987:292).

Would the teacher educator work with this concept of the teacher, he would be producing uncritical apprentices; and if education has any significant impact on the society, as Carlson believes it has, the society would sooner than later retrogress rather than progress, for change and innovation are parts of social wellbeing.

The second theory which is called the 'productive theory' sees the teacher as an apostle of social change, particularly of human intellect and conscience. We have many teachers like this in the history of educational thought and practice. These are Socrates, Plato and Jean Jacques Rousseau (father of the French Revolution). Productive teachers are not only thinkers; they stimulate learners to think. They know and can equip learners to build up knowledge for themselves. They are not only technical experts, they are morally committed to social good, and therefore, the goal of their teaching is not only to equip for measurable outcomes of learning, but the immeasurable outcomes of personality and social improvement. It is such teachers that can be committed for both mental and moral autonomy with regard to preparing African citizens for the digital era.

But again, this teacher is in a conflict situation. For one, intellectual and moral autonomy is attained by successive but successful resolution of conflict both in learning and in the application of learning. Such teachers are usually in conflict with the status quo because they would not be able to accommodate coercion and oppression but would question, rather than uphold inequalities and injustice.

The question, therefore, is how can the teacher of the digital age be a self-directing professional who knows the substance of what to teach, the reason for teaching it and how to teach it to awaken in the learners the attainment of intellectual and moral autonomy for social good? Do teachers have the contemporary relevant skills that they need to be able to analyze, synthesize and evaluate data and situations to immediately improve low student performance? As Carlson (1987) quotes from the Carnegie Forum Report:

Teachers must think for themselves if they are to help others think for themselves, be able to act independently and collaborate with others and render critical judgment.... Only by critically reflecting on their own roles in the schooling process, theorizing about what could be, and working to promote specific changes consistent with a broad vision of a just society, can teachers expand and realize their capacity to challenge the *status quo* in ways that are transformative rather than merely reformist (Carlson 1987:307).

It is only this teacher who can wield any political influence and make meaningful contribution to change society. As practitioners in a social process that directly influences the lives of most citizens and indirectly that of everybody, teachers have to be educated to care not only about themselves but also about the welfare of everyone else. What then are the required skills that will make teachers relevant in these social processes in the digital age?

Teacher Education and the Challenge of Skills Development in the Digital Era

We have argued above that the quality of teacher education has been identified as a pillar of quality education and that any national policy, reforms and implementation of any education system is pivoted by the quality of teachers and teacher education of that system. It is the products of teachers and education that handle every economy of any nation. Models and frames of teachers' professional development, school management board, education for all and even the millennium development goals revolve round the frames of teacher education.

Most African nations' policies on education, with their emphasis on science, technical, vocational education and self-reliance, were aimed at satisfying the philosophical, economic, sociological and psychological needs of the citizens. The wealth of a society, according to Bagudo (2002) determines, to a large extent, the development of the society; and for individuals and teacher educators in particular to meet up with the demands of their society, they need some skills.

To survive in the digital age, all Africans, particularly the teachers that produce the work force of the continent, need some basic survival skills, which include the ability to reason, the ability to readjust one's own terms to cultural flux and the ability to control and utilize one's uniqueness while participating harmoniously in the society. Africans therefore need the mastery of specific and identifiable skills in order to participate effectively and bargain boldly at world summits and conferences. Without appreciable skills in science and technology, agriculture and specific economic sectors, a country is poor and powerless, has no voice and may continue to look unto other nations for survival. Consequently, most African nations have adopted education as an instrument for achieving development, as education is seen as the most important change agent in the intellectual and social outlook of any society. To this end, the teacher is a builder of a nation, responsible for training the minds of the young ones in the society. It is believed therefore that a functional teacher education in Africa, like any other developing continent, can help its citizens explore the networking of our global village. This is achievable through systematic mobilization of Africa's resources, through a modernized cadre of scientific and technological manpower.

Africa is currently described paradoxically as a continent experiencing downward decay – from developing to under-developing – and rated as among the poorest regions of the world, despite her abundant human and material resources. In reality, the continent has all it takes to be a great continent. Thus, Africa's system of teacher education, especially, should be able to make prospective engineers and technicians' creative and innovative, and who will change our disadvantaged position in the digital age. After all, the West and Japan used their own background resources and environments through liberalizing education to reach their present enviable levels of development.

To make teacher education more relevant in this digital age, it must equip our teachers at all levels to be capable of self-study. This will make them not only consumers of information but also creators, originators and inventors. The belief is that the more we are able to reflect on prescribed goals, the more we are not likely to be exploited and manipulated economically, socially and even culturally. Teacher education at this level serves as a link between the unpredictable world in which man lives and the tools to cope with the numerous challenges created by globalization.

In addition, teacher education has a vital role of protecting local studies and local cultures that are inevitably threatened by mega culture in the digital age. Through self-knowledge, they (teachers) will be able to evaluate and assess critically what to teach and how to teach it. It has also been observed that education has become globalized. No nation is an island. Through technology, the world has come together. Nations are inter-connected with ease. Education is now international or inter-cultural. The teacher now stands as the midwife between the new digital age and the people. So, for teachers to deliver the expected global or digital baby in any given society, they must be equipped effectively to do so.

We could also observe the political democratization process sweeping through the world, which has resulted in both economic and educational change, and which has posed a tremendous challenge to teacher education, particularly in the developing world. It is now accepted that education, particularly for the developing countries of the world, is not just the prerequisite but also the prime determinant of economic and technological development as well as political stability and national survival. It is also known that if education unlocks the door to modernization, it is the teachers who sharpen our intellectual and technical abilities to build the foundations and pillars of this modernization. Therefore, it is a nationally suicidal for any developing nation, in this digital era, to have its best brains design and build its roads and bridges, cure its sick, formulate and interpret its laws, while its poorest brains teach its youth. The results, as we are witnessing in parts of Africa, are roads that wash away after the first rains, bridges that collapse after few years of use, taps without water, electricity that is most erratic, telephones that are perpetually out of order, hospitals that kill as much as they cure, incongruous laws, purchased and tele-guided justice. Clearly, these results are not true of all African nations but their elements exist in several African countries and other underdeveloped nations.

Indeed, we cannot have effective environment engineers without good teachers. We cannot have efficient, dedicated and humane doctors without effective, dedicated, responsible and humane teachers. We cannot have incorruptible judges without upright and dependable teachers. We cannot even have a strong, effective, efficient and loyal army to defend and protect our territorial integrity without

loyal and patriotic teachers. Given this scenario, teacher education curriculum in the digital era should be revised and enriched with appropriate and current ICT training skills, capable of enabling teachers knowledgeable enough to teach relevant ideas that will make their students skillful, productive and equipped to cater for the needs of the society.

Similarly, it can be argued that of all advances in the digital age, information and communication technology has had the most serious impact on how we see the world and how we live in it. It has permeated virtually all aspects of human endeavour. Thus, according to Ojo (2006), we now have e-governance, e-library, e-education, etc. ICT is revolutionizing the world of scholarship. In the developed world, for instance, you cannot access books in the library without being computer literate; you become seriously impaired if you are not computer compliant. The term 'literate', according to Ojo (2006), is assuming a new meaning in the context of information and communication technology. A literate person, it should be noted, is a person who can demonstrate some knowledge and competence. This used to be the ability to 'read and write', but it has long been replaced by a more demanding requirement. It is in this context that it can be explained that any individual who cannot use the computer at the basic level – for instance, to browse and check mail or to browse for relevant information – is a twenty-first century illiterate. Thus, teacher educators in the digital age need to be digitally empowered. This implies the abilities of teachers to be trained in the use of information technology and the internet to improve their life skills and strengthen their capabilities in the information society. This empowerment can happen when teachers improve their skills and knowledge, learn to share information, create new and diverse information flows, and increase their interaction and ways of participation in information highways. Teachers are digitally empowered when they have in-depth awareness, competence, utilization and knowledge to participate in computer operating systems, internet, mailing lists, web logs, online publishing systems, WikiWikiWeb–techniques or common www-publishing formats, digital cameras, cell-phones, digital television and interactive audios, among others.

With digital empowerment, teacher educators in this jet age will gain new abilities and ways to participate and express themselves in a networked information technology-driven society (Webster 2000; Norris 2001). Being digitally empowered or skillful is likely to influence a teacher's future pathways since it is generally considered an essential requirement for access to the desirable labour market (Legris, Ingham and Collette 2003). In addition, it is a stepping stone for lifelong learning (Blair 2002; Ikediugwu 2008). Not only does digital empowerment or skill affect the ability of teacher educators to compete in the labour market; it also affects the types of knowledge they impart, the status they attain and the wages they receive. Without digital skill empowerment for teachers, Africa would remain very short of future personnel who can manage modern competitive enterprises and run sophisticated technologies.

Conclusion

It has been argued in this chapter that the destiny of a nation is shaped in its classrooms and it is the teachers who are the very important instruments in moulding that destiny. To be able to discharge such a big responsibility in this digital age, it is very important and necessary that teachers must become conscious of their role in the society. Their behaviour indicates their efforts at doing their job properly. Their personality must reflect characteristics of good citizenship. Teachers themselves must be exposed to the concepts of freedom, equality, dignity of the individual, rights and duties, etc., so that they may transmit the same to the younger generation.

It is also important to note that, in considering what might comprise the pedagogy of teacher education, it seems wise to encourage self-study as a meaningful way for uncovering important facets of the knowledge of practice. In so doing, teacher educators might then begin to capture, unpack and portray the complexities of teaching and learning about teaching in ways that might lead to deeper understandings of practice. Importantly, and as well noted by others (e.g., Clandinnin 1995; Korthagen et al. 2001; Russell and Korthagen 1995), the learning of teaching about teaching needs to extend beyond personal knowledge construction in order that shared knowledge of teacher education practices might begin to be articulated and developed.

Korthagen and Lunenberg (2004) describe what they see as important gains in teacher education through connections to self-study: personal, institutional and collective. They note that personal gains include the professional development of individual teacher educators, institutional gains are clear in relation to re-shaping teacher education curricula and programmes, and collective gains are evident in growing professional (international) community of teacher educators, which benefits from the ongoing interaction and sharing of insights. Overall, they conclude that 'self-study research contributes to a process of growing professionalism and empowerment of the teacher educator community as a whole' (p. 446). This collective gain certainly accords with what Cochran-Smith and Lytle (2004) recognized as important when they noted that self-study can be 'a way to re-invent teacher education by continuously interrogating one's own practice and all of its underlying assumptions' (p. 607).

The challenge of self-study is for teacher educators to look into their practice with new eyes so that their understanding of teaching and learning about teaching become more meaningful and applicable in practice. The promise of self-study is that, through such endeavours, the articulation of a pedagogy of teacher education might emerge and be both meaningful and applicable in the practice of others in the teacher education professional community.

Evidence in Knowledge as a Skill

Man is an intelligent being and is therefore, a problem solver. This means that, in behaviour and verbal expression, man is able to solve problems in order to make living easier for himself and others. He sometimes creates a problem in order to solve another or get in the process of doing so. An innocent healthy baby, for example, is immunized against a deadly disease by being inoculated with the germs of that disease, thereby making the child sick for a short while. What Louis Pasteur accidentally found out with chickens is today used world-wide to save lives before modern living is threatened by preventable diseases of various types (Bamisaiye 1998:34).

In this digital age, therefore, teachers need to be conscious at all times that their learners are basically intelligent, and so, are able to learn new ideas and put them into practice. Not only that, teachers' main professional responsibility is not only to encounter their learners as intelligent beings. They are expected to use available educational strategies at their disposal to further develop the learners' intelligence. This development is expected to be for learning at the theoretical level and facilitate the application of theory to practical living. In order to succeed in these levels of professional practice, teachers do not only need to assume their learners as actual or potential thinkers; they also need to complement this assumption with practical educational tools or resources. This also has quality implications. Resources then have to be relevant to the human and cognitive development of the learner.

Evidence in Morality, Technology as a Skill

While educators need to be concerned with the content of knowledge to be taught, educational technology becomes significant because it is most relevant to ensure effective learning in the school. The process of education becomes morally significant in this context because how a learner is made to learn can make a learning experience educative or miseducating. If my tool (*tekhne*) of ensuring that my pre-school children learn poetry is to threaten them with a wild dog standing nearby or subject them to some other fearful experience, my attempt at educating them in poetry would be morally questionable. Whatever teachers choose to teach learners, it is educationally imperative that they operate on the assumption that the tool is only a means in the education of the learner. The learner is the end.

The interplay of human and material resources on human intellect in an educational environment is therefore expected to be intellectually developed in teachers for them to master the particular level of heritage of learning their areas of specialization. But more importantly, teacher educators are expected to be critical thinkers, inventors and improvisers of material resources around them to foster learning.

Teacher educators are expected to develop a moral value system, i.e. principles of life which they hold sufficiently dear to them as to live by them (Hill 1989:78). Only when teachers live by these values can they also stimulate the development of such values in learners. Education is in the final analysis, a moral value word. Students are also expected to develop a positive attitude to life and, more especially, to their professions because they can only attain life fulfilment when they are favourably disposed to their professions.

A positive attitude to the profession is also important for teaching to be seen as a life mission. Where students come to education because they cannot be employed otherwise or they are waiting for other employment to come through, commitment, dedication and a sense of mission are lacking. A favourable attitude cannot be developed and therefore students of such teachers become victims of miseducation rather than beneficiaries of education.

Because our learners are also teachers, the use of material resources in the process of educating them should make the learner receptive to knowledge. On the other hand, our teachers are expected to be innovative, i.e. find new ways of teaching a well-known idea, critical, be stimulated to find alternative teaching strategies and stimulate their learners to be critical. They should also be adaptive, i.e. be able to use a material resource for many learning purposes, and effectively so.

One can therefore conclude that a teacher educator should use *tekhne*, i.e. technology, to enhance the skills of learning in students. This is important for the latter to be effective, receptive thinkers who could be entrusted with the heritage of learning, which is available in our educational institutions. But more importantly, *tekhne* should be used to stimulate critical thinking in our student-teachers. This is because a critical mind is innovative and creative. This quality dimension is essential to bring about dynamism and change, which are so vital to education and to human life generally.

Teacher education programmes should therefore stress the development of classroom management skills before and during pre-service teachers' field experiences. Research on interpersonal communication, as related to the role of the teacher and the teaching situation, has identified a need for increased effectiveness in facilitative interpersonal functioning and classroom dynamics. These traits can be taught to pre-service teachers. Components of a comprehensive classroom management curriculum for pre-service teacher education should concentrate on strengthening communication skills, building good teacher-pupil relationships, and facilitating responsible behaviour. Methods for dealing with aspects of management during student teaching are handled cooperatively between student-teachers and the university supervisor.

For teacher education to be fruitful and productive in the digital age, it should include creativity, dynamism, open-mindedness and the qualities of interactive, reliable and responsible human beings with faith in their heart, based on their

moral commitments (without impositions from outside), emotional stability, and interest in others as well as concern for their affairs. With the declining role of the traditional teacher in teaching the acquisition of subject matter and facts, the education of teachers must stress the concepts and skills of leadership and management.

We have also realized that skill development in teacher education in the digital era is really complex and challenging. However, understanding them is important so that education can be adjusted according to the needs of the society. It is not therefore a matter of saying that the digital age is good or bad for the society. What really matters is that digital age has affected society as a whole and it is not different with education. Education in the digital age has to be different from what it has been for many decades. Thus, the curricula, pedagogy, practices and goals have to be re-structured, considering the necessity of preparing the students to live in these complex and diverse societies. As was previously discussed, schools have an important role in making the students develop some new skills – intercultural, communication, digital – so that they will be able to act in societies in a critical way, understanding and respecting the differences as something important and necessary. Having such a global consciousness is crucial to making them functional in this digital era.

Designers of teacher education courses therefore have to re-consider the aims and structures of the courses because they are responsible for preparing the future teachers who are going to teach students these new skills. The courses should be organized to prepare the future teachers to understand these new globalized societies and their role in the education of the children so as to teach them how to behave in these complex and diverse societies. These future teachers have to be conscious of the knowledge that should be taught. They have to be conscious of their role in citizenship education. The students also need to learn the social, cognitive and cultural relevance of the digital era, so that they can understand their role in the new modernity. Besides this, to understand this digital era, it is important to establish a collaborative and interdisciplinary discussion, which Suarez-Orozco and Sattin (2007) call 'global cooperation'. Teachers from different places can discuss the solutions for a determined situation that can be useful for other groups. These exchanges are opportunities for the people to learn other possibilities to analyze and deal with similar problems and get engaged in productive social change.

With more technology, definitely the digital age will bring more leisure to individuals and institutions. Teacher education should also, as a matter of necessity, pay more attention to the concept of time and how to manage it. Time allocated for reflection and for programmes for recreation is basic to any further progress and meaningful life. Progress in medical sciences, for example, has enabled man to improve life expectancy and prolong lifespan. Genetic engineering promises great accomplishments.

African teachers of the digital era should, as a matter of necessity, be self-directing professionals who know the substance of what to teach, the reason for teaching it and how to teach it to awaken in the learners the attainment of intellectual and moral development for social good. It is only such a teacher who can wield some political influence and make meaningful contribution to change society. As practitioners in a social process that directly influences the lives of most citizens, and indirectly that of everybody, teachers have to be educated to care not only about themselves but also about the welfare of the learners in totality.

References

- Afe, J.O., 1995, 'Reflections on Becoming a Teacher and the Challenges of Teacher Education', Inaugural Lecture Series 64, University of Benin, Nigeria, pp. 1-22.
- Bagudo, A.A., 2002, 'Globalization: A Challenge to Nigeria's Education System', *Nigerian Journal of Educational Philosophy*, Vol. 9, No. 1, pp. 78-86.
- Bamisaiye, O., 1999, 'Autonomy in Teacher Education: Challenges for the Twenty-First Century', in A. Abimbade, ed., *Teaching and Teacher Preparation in the Twenty-First Century*, Department of Teacher Education, University of Ibadan, pp. 12- 21.
- Blair, D.C., 2002, 'Knowledge Management: Hype, Hope, or Help?', *Journal of the American Society for Information Science and Technology*, 53(12), 1019-1028.
- Carlson, C., 1987, 'Teachers as Political Actors: From Reproductive Theory to the Crisis of Schooling', *Harvard Educational Review* 53(3), pp.283-307.
- Clandinin, D.J., 1995, 'Still Learning to Teach', in T. Russell and F. Korthagen, eds., *Teacher Who Teach Teachers: Reflections on Teacher Education*, London: Falmer Press, pp. 25-32.
- Cochran-Smith, M. and Lytle, S.L., 2004, 'Practitioner Inquiry, Knowledge, and University Culture', in J.J. Loughran, M.L. Hamilton, V.K. LaBoskey and T. Russell eds., *The International Handbook of Self-study of Teaching and Teacher Education Practices*, Dordrecht: Kluwer, pp. 601-650.
- Federal Republic of Nigeria, 2004, *National Policy on Education* (3rd Edition) Abuja: NERDC, pp. 1-10.
- Harris, K., 1990, 'Empowering Teachers: Towards a Justification for Intervention', *Journal of Philosophy of Education*, 24(2), pp.12-34.
- Ikedigwu, N., 2008, 'Challenges in Information Technology', in B.G. Nworgu, ed., *Education in the Information Age: Global Challenges and Enhancement Strategies*, Nsukka: University Trust Publishers, pp. 345-349.
- Kalusi, J.I., 2001, 'Teachers' Quality in Nigeria', *Nigerian Journal of Educational Philosophy*, Volume 8, No. 2, pp. 62-72.
- Korthagen, F.A.J., in cooperation with Kessels, J., Koster, B., Lagerwerf, B. and Wubbels, T., 2001, *Linking Practices and Theory: The Pedagogy of Realistic Teacher Education*, Mahwar, NJ: Lawrence Erlbaum Associates, pp 23-27.
- Korthagen, F. and Lunenburg, M., 2004, 'Links Between Self-study and Teacher Education Reform', in J.J. Loughran, M.L. Hamilton, V.K. LaBoskey and T. Russell eds., *The*

- International Handbook of Self-study of Teaching and Teacher Education Practices*, Dordrecht: Kluwer, pp. 421-450.
- Legris, P., Ingham, J. and Colletette, P., 2003, 'Why Do People Use Information Technology? A Critical Review of the Technology Acceptance Model', *Information and Management*, 40, 191-204.
- Norris, P., 2001, *Digital Divide? Engagement, Information Poverty and the Internet Worldwide*, Cambridge University Press.
- Okafor, C.F., 1988, *Nigerian Teacher Education: A Search for New direction*, Enugu: Fourth Dimension Publishing Co. Ltd., pp. 21-44.
- Onah, D.C., 2005, 'Re-envisioning Teacher Education for Developmental Needs of the 21st Century in Nigeria', *A Multidisciplinary Journal of Knowledge Review*, 11 (8), pp. 1-6.
- Ojo, M.O., 2006, 'Repositioning Teacher Education for National Development', a lead paper presented at the 2005 Annual Conference of the Institute of Education, University of Benin, Benin City, Nigeria, pp. 1-15.
- Russell, T. and Korthagen, F., eds., 1995, *Teachers Who Teach Teachers: Reflections on Teacher Education*, London: Flamer Press., pp. 12-17.
- Suarez-Orozco, M.M. and Sattin, C., 2007, 'Learning in Global Era', in Marcelo Suarez-Orozco, ed., *Learning in Global Era: International Perspectives on Globalization and Education*, University of California Press, pp. 15-31.
- Webster, F., 2000, *Theories of the Information Society*, London and New York: Routledge.