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Teaching Profession and Teaching in a Digital Age in the 21st Century: Issues and Challenges

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ABSTRACT

There are ways and processes of human learning by which knowledge is imparted, valued skills are developed, humans are trained which ultimately produces citizens who guarantee sustainable development in the society. The success of the acquisition of this system of education depends on the quality of men and women who are the interpreters and transmitters of what is desirable in terms of knowledge (education). In the quest for high quality education, the single most important factor in the school system is the teacher, who prepares as a professional to deliver effective tool of training. This paper therefore looks at teaching as a profession, the concept. The development and characteristics as well as the challenges that come with it and the way forward. The national policy on education however stressed that “no education system can rise above the quality of its teachers.”

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Introduction

The 21st century is witnessing many challenging issues in almost every sector. Education is one of the sectors that is most virile benchmarks for national development. Education could be analysed as the means through which the societal values, norms, attitudes and skills are preserved, developed and consciously transmitted from generation to another generation. There are ways and processes of human learning by which knowledge is imparted, which ultimately produces well developed citizens who guarantee sustainable development in the society. There are three types of education: formal education, informal education and non-formal education. The success of the acquisition of this system depends on the quality of the teachers who are the interpreters and transmitters of what is desirable in terms of knowledge, skills and values of the society. This is why the National Policy on Education (FGN, 2004:39) stressed that “no education system can rise above the quality of its teachers”. It is based on this declaration that the concept of teaching as a profession and teaching in digital age of the 21st century will be looked into.

The Concept and Definition of Teaching as a Profession

The concept ‘teaching’ can be interpreted differently based on the approach the one adopts. This may create room for various definitions to the concept of teaching. When interpreted by many people, the truth emerges. The diverse interpretations given to this very important concept, sometimes limits the functions or effectiveness of teaching. This fact could be put straight, by looking at the concept “teaching”.

According to Read (2010) teaching is an attempt to bring about desirable changes in human learning abilities and behaviour. The key word is “desirable change.” This cannot be effected in a vacuum, something must be done for this change to take place. It is based on this, we can talk of effective teaching and learning. In order to achieve this, the teacher must identify the needs of his pupils and then prepare

the materials or learning experiences that best march their needs. The preparation strategies and medium, through which the learning experiences are communicated must also be compatible with the needs of the learners. Furthermore, learning needs can be provided through the process of assessment and evaluation and effective teaching can be determined. This is because every effective teaching process must result in assessment. This approach will enable the teacher to know whether or not the learners have learnt.

Teaching is a social service profession which is central to the business of education. Eisenhower as quoted by Thomas (2008:75), puts this in perspective when he said “... in all our efforts of education, we must never lose sight of the very heart of education, good teaching itself. Good teachers don’t just happen; they are the product of the highest personal motivation.” Moroukola as quoted by Paulley (2014) opined that ‘an effective teacher is the single most important factor in the school system in the quest for high quality education but effective teaching is not easy but achievable if the teachers to effect the teaching are well prepared for the profession. However, Fafunwa (1974:15) argued that:

“Every society whether simple or complex, has its own system of training, its youths... For good life has been one of the most persistent concerns of men throughout history. However, the goal of education, the method or approach differ from place to place, nation to nation and people to people.”

Teaching according to Ajumogobia as cited by Abimbola (2009:1) is a process of facilitating learners’ learn through a proper management by the teacher of the interrelationships among the students’ interests, the content for learning, the methods and materials he or she intends to use in the teaching and learning of the content materials. It may involve giving instruction that the person will be able to know the information or do something or act in a particular way that is compatible with the instrument.

The phrase “proper management” needs to be emphasized because it is this that makes it professional.

The Teachers Registration Council of Nigeria (NRCN) (FRN, 2002:1), brought this to the fore when it defined teaching as “a systematic, rational and organized process of transmitting knowledge, attitudes and skills in accordance with professional principles.” Implicit in the above statement is that, professionally speaking those who do not perform the act of teaching in accordance with professional principles are not in the business of teaching. This is because it is in such manner that the proper management of the entire process is assured to ensure the facilitation of learning which is the goal of every effective teaching.

In the words of Akinpelu, (1981: 190-5) teaching is:

the conscious and deliberate effort by a mature or experienced person to impact information, knowledge, skills and so on to an immature or less experienced person with the intention that the latter will learn or come to, believe what he is taught on good grounds.

This definition can be viewed to be progressive because it indicates two criteria

- a) A person who is consciously and deliberately doing the act of teaching (teacher).
- b) There is somebody being taught (learner). There is a learner which makes the process sensible and logical.
- c) Something is being taught (content i.e. knowledge, skills, information, values and attitude).
- d) There is an intention for learning even though teaching does not always produce learning (such as non willing learners).
- e) Teaching involves proceeding and methods that are more morally and pedagogically sound and acceptable. We should note that teaching referred to here is that which takes place in the educational context in which something valuable, desirable or worthwhile is involved. Moronkola (2012) believes that teaching is the art and science of using various strategies and materials at any setting to make learners learn because the business of teaching is to ensure that learners are empowered to make their world a better place. Oladosu (2009:85) further expanded and agreed to the fact that “*Teaching is an activity that brings about meaningful learning through a method that is morally and pedagogically acceptable.*”

He further stated that teaching;

involves a teacher, a learner or learners, a content in the form of knowledge, facts, instructions and a skill to be imparted. There must be willingness on the part of the teacher to teach, learner(s) to learn and a method that respects the learners’ cognitive integrity and freedom of choice while asking questions to clarify areas of ambiguity.

Abimbola (2009:3) however, noted that “all good teachers are good planners, as all teaching normally begins with some kinds of planning, whether consciously or unconsciously. The first part of the planning phase is the setting of goals for the facilitation of instruction. This is followed by the selection of appropriate instructional strategies that will match the attainment of set goals, the content and the learners involved. Second phase is the implementation of the instructional plan by the teacher to achieve the goals set. Here the learners are engaged in purposeful activities that one expects will result in learning.

The third phase in the teaching process is the evaluation. Where the teacher gathers information through tests, quizzes, examinations and learners participation in the lesson to find out if his or her teaching has been successful against set goals. It is through the process of evaluation that teachers determine the success of the lesson as well as determining if the

strategies adopted were effective, and if the teaching or part of it is not successful. This may enable the teacher to either repeat the process of instruction or go on to use new materials or establish new goals in future lessons. The phases are connected to one another with logical relationship binding them together. According to Amaele and Amaele (2003), teaching is in two different levels: the non technical level and the technical level.

The Non-Technical Concept of Teaching

Teaching in its non-technical sense means different things to different people. To some people, it involves mere passing of useful information that is worthwhile or offering of drills to the learner who is expected to reproduce same information wherever it is required. Teaching therefore in this way, regards the learner as a machine that is set to reproduce without thought, whatever that was imputed into him or her. However, teaching is used in form of training. Rather than say, “The coach is training the boys” it is expressed “the coach is teaching the boys how to play football.” Training could be a narrow component of teaching and it could not be proper to apply the concept of training in the place of a general concept of teaching (Amaele & Amaele, 2003).

The Technical Concept of Teaching

Teaching has levels as examined by Akinpelu (1981). These perspectives are:

- a) Teaching as an occupation
- b) Teaching as an activity
- c) Teaching used as present continuous tense.

Teaching as an Occupation

Teaching as an occupation is a job or profession – In Longman Dictionary of Contemporary English, it further means to earn a living or occupies the attention of somebody daily. It could also mean a job which is undertaken by someone or an individual for the purpose of earning salary for a living and also maintaining the status of a worker. Some occupations do not require special skills or years of training and so they have little orientation, apprenticeship or training could provide the know-how to produce a trader, roadside mechanic, receptionist, houseboy, store keeper, welder, etc.

Teaching therefore is more than mere occupation, it is a special kind, which is grouped under the concept of profession. This is necessary because teaching requires specialized skills, training and education. It is well guided by principles, set of rules and practices.

Teaching as an Activity

Teaching involves sets of activities which the teacher performs or directs to be carried out in the class, such activities include, marking the class attendance register, classroom management, classroom control, supervising students, opening of windows, putting on fan or air conditioner for proper ventilation, filling the record books, etc. These are actions grouped under teaching as activities. These are acts directed towards enhancing the success of teaching activities in and outside the classroom. Community service can be grouped as one of the teaching activities, although it may not be concluded to be teaching per se.

Teaching Used as a Present Continuous Tense

This is an actual interaction between the teacher and the learners. What the teacher is found out to be doing at that moment (legally) such as movement, demonstration, dramatization, walking, talking, questioning, answering questions, discussing, listening, experimenting, drawing on the board, singing, etc. and so many other relevant acts. Teaching therefore can be said to be a complex phenomenon. It involves

a range of acts aimed at effective communication in order for the teacher to drive his/her point home.

Teaching is classified into three parts – logical, strategic and institutional. Logical acts refer to such activities as explaining, inferring, concluding and giving evidence. This aspect of teaching is content based. The strategic act involves such skills as motivating, encouraging, praising and disciplining. The institutional acts deal with laid down activities in the school that the teacher and the learners must abide to, such as punctuality, neatness and general discipline (Amaele & Amaele, 2013:13). It therefore means teaching in its present continuous usage involves a conscious and deliberate effort on the part of the teacher, whose intention is to impart knowledge, skills and values to the learner through acceptable standard.

The National Policy on Education 1977 and the Teaching/Teacher Education

The National Policy on Education, 1977 (revised in 1981 and 2004) as a product of the 1969 National Curriculum Conference, hosted by the Nigerian Education Research Council, Lagos between 8th – 12th September 1969, Adaralegbe (1972), opened a new chapter in the development of teaching and teacher education in Nigeria as it reaffirmed that teachers and their education will continue to be given a major emphasis in all national planning. In earnest, the goals of teacher education which is the engine room in the production of good, effective and efficient teachers are listed in the National Policy on Education - Federal Republic of Nigeria (FRN, 2004:9) to include the:

- Production of highly motivated, conscientious and efficient classroom teachers for all levels of our education system.
- Further encouragement of the spirit of enquiry and creativity of teachers.
- Helping teachers to fit into the social life of the community and society at large and to enhance their commitment to national goals/objectives.
- Provision of teachers with the intellectual and professional background adequate for their assignment and make them adaptable to any changing situation (not only in the life of their country but in the wider world).
- Enhancement of teachers' commitment to the teaching profession.

In achieving the goals of teaching in the Nigeria workforce is yet to be appreciated due to the fact that, not all Nigerian teachers engage themselves in research work as most teachers do not even go for courses or workshops to upgrade their knowledge even in the era of globalization where knowledge is vital. The Nation Policy on Education (FRN, 20004:39), states that the Nigeria Certificate in Education (NCE) shall be the minimum qualification for entry into the teaching profession in the country. It then means the phasing out of both the Teachers Grade II and the Associateship Certificate in Education (ACE) in Nigeria as teaching qualifications. This cannot take place because of shortage of qualified teachers. In the registration of teachers as professionals, however, Teachers Registration Council of Nigeria (TRCN) in obedience to the above provision of the National Policy on Education stopped at the holders of the NCE as the minimum qualification for registration of teachers in the country.

The Professionalization of Teaching in Nigeria

What is Profession?

According to the Cambridge Advanced Learner's Dictionary (2005:988-9) defines a profession "as any types of

work, (occupation or calling, job) which needs special training or a particular skill often one which is respected because it involves a high level of (specialized) education, as the profession of an architect; the learned professions (i.e. divinity, law and medicine)." It could as well be defined as "a calling in which one professed to have acquired special knowledge used by either instructing, guiding or advising others or serving them in some art."

According to Cook and Cook (1960:349), opined that a profession is,

to repeat, one of many kinds of work pursuits. It is the kind on which members acquire a body of systematic knowledge in which their work with people is basde, developed an in-group feeling of belonging and responsibility, assume an attitude of moral concern toward clients, and joint together in association to advance the profession, to control members ethics, and so on.

Akabue cited by Kpangban (1997:85), and cited in Poulley (2010:96) sees a profession as,

Any occupation which demands of its practitioners a prolonged and specialized intellectual and exclusive knowledge and training for the acquisition of special skills and attitude necessary for their particular type of service in the community as well as recognized association for the welfare both of its members and public services.

Ezewu (1985:126) sees profession as a body of persons engaged in certain occupation and whose members

- Are specifically prepared for the occupation.
- Practice the occupation freely, guided by a code of conduct.
- Benefit from well spelt out conditions of service.
- Come together under one umbrella as a union of an association.
- Are clearly seen by non-members to be practicing the same occupation.

The definitions of the term "profession" in recent or current literature stressed the following:

- The kinds of control exercised over the quality of membership
- The type of organisational life developed by the membership
- The nature of the procedures used
- The nature and services provided

The Development and Characteristics of Teaching as a Profession

The action of the Federal Government of Nigeria in recognizing teaching as a profession is a welcome development. The professional development of an occupation is measured in terms of the extent to which that occupation has been able to achieve a full professional status. For example, the Federal Government in the National Policy on Education (FRN, 2004:40) in Article 78(a), is emphatic, in stating that:

"teaching is a legally recognized profession in Nigeria; (and that) in this regard, government has set up the teachers registration council to control and regulate the practice of the profession (in Nigeria)".

Article 78(b) of the same document (FRN, 2004:40), went further to state that "those already engaged in teaching but not professionally qualified shall be given a period of time within which to qualify for the registration or leave the profession."

From the above statement it can be said that teaching as a profession in principle, has been legally recognized. The question is what characterize teaching as a profession.

- Professions require continuous in-service growth.
- Professions involve unique, exclusive, specialized and systematic occupational knowledge-set often represented by

skills. Knowledge-set is the productive function of professionals. It is a scarce but saleable product which warrants professional mandate jurisdiction, and also boost professional status.

- Professions have esoteric knowledge, and expertise which are acquired through long periods of advanced education and training.
- Professions afford life-long vocation/career and permanent membership.
- Professions possess closely knit organisation with group consciousness designed to extend scientific knowledge in technical language.
- Professions possess self-impelling autonomy and authority to exercise and control over the conditions of entry, recruitment, training, qualifying examination, licences, certification, standards of practice and orientation of members.
- Professions have affirmative and formal public response, recognition and respect that would grant autonomy to the occupation as a profession.
- Professional mandate or authority usually backed by laws.
- The nature of the work exhibited by professions should be service ideal and to the best interest of the public. This implies that the work should be beneficial, indispensable and satisfy social needs.
- Professions possess code of ethics through which the integrity is maintained.
- Professionals must demonstrate competence by passing the required tests organised by approved body.

Checklist of conditions for teaching as profession.

• **Affording life-long vocation/career and permanent membership:** Due to the fact that teachers conditions of service and salaries have been improved upon, pension and gratuity for retiring teachers are now well spelt out and enforced. For this reason teachers can now grow both vertically and horizontally. For this reason therefore, teaching should be seen as a profession.

• **Continuous in-service Growth:** it is a well known fact that a profession provides an in-service and professional growth for its members. This is necessary because a profession is founded upon a body of knowledge and skills which are constantly in a state of flux. Each profession should have its research elements and the tools for disseminating new information to members. Teaching satisfies this condition as this is what the mandatory continuing professional development programme of the teachers registration council of Nigeria is aimed at and so it should be regarded as profession.

• **Teaching profession has code and ethics for regulating and controlling the conduct of its practitioners:** The Nigerian Union of Teachers has drawn up a code of ethics, which stipulates forms of professional behaviours for protecting the teachers, the union, the pupils, the parents and the community. A code of ethics actually embodies the values, guides, social control principles, which govern the conduct of members of an organisation.

• **Ability of the professional to demonstrate competence:** Through passing some prescribed examinations usually organized by an Approved Body. It takes a long time of specialized intellectual training for any profession. This is important and crucial because professional work requires special intellectual skills. All professionally trained teachers at all levels of education in Nigeria did successfully complete their professional training. Teacher trainees are usually assessed and certified as successful through their performance in both internal and external examinations. The competence of such certified professional teachers cannot be questioned. In

this regards teaching satisfies this and should be looked upon as a profession.

• **Service-oriented and in the best interest of society for purposes of satisfying some specific social needs:** Teaching is a social activity that is essentially serving humanity. Doctors and lawyers may deal with single individuals, but the teacher deals with groups of individuals. This makes the function of the teacher unique, for a single malfunctioning of the teacher will destroy not only one or two persons but millions of people. The role of the teacher in rendering selfless service for societal development which society itself has not been able to reward the teacher adequately for, is buttressed by society's assertion in Nigeria that the teacher's reward is in heaven. Teaching, then satisfies this condition and so it is qualified to be a profession.

• **Affirmative public recognition, respect and professional mandate or authority often backed up by laws:** Highly esteemed in the eyes of the public, members of a profession are regarded as people of high social esteem and high income. Ascogan cited by Kpangban (1997:87), pointed out, "a profession confers on its members and entitles them to have a powerful say in the affairs of state." He further said, "the association which protects the image of the profession is regarded as an important public institution that is entitled to a voice and active participation in the affairs of the community where they operate." This condition is very necessary because even though the Nigerian public perceives the teacher as a member of a particular occupation, the image the public has of the teaching profession is very poor. In this regard, the teaching profession does not enjoy full public recognition and respect.

• **Possession of self-autonomy and authority to control admission, recruitment, training, qualifying examination, licence, certification, standards of practice and retention of members:** The teachers in practice in Nigeria do not enjoy freedom of practice, teachers are the employees of the federal, state and local governments as well as private proprietors of schools. Teachers are, therefore, not autonomous to say the worst, teachers are not involved in taking decisions concerning their job. In looking at this anomaly Solomon (2006:270), quoting Okonkwo and Agada and Ocho (1992) bemoaned that "the Nigerian teacher is usually alienated from formulation of policy even in matters that affect him professionally and personally." Accordingly, teaching in Nigeria, in the face of all this criterion is yet to be real profession not minding the commendable work of the Teachers Registration Council of Nigeria in its efforts to professionalize teaching in the country.

• **Possession of closely-knit organisation with group consciousness:** A profession should have a comprehensive, self governing, closely knit professional organization for regulating the practice of its members. This organisation fights for the rights of members as well as caring for their welfare. The Nigerian Union of Teachers (NUT) and Academic Staff Union of Universities (ASUU) are some of the organizations for teachers to fight for their rights but unlike the Nigerian Medical Association and Nigerian Bar Association, the NUT in particular does not enjoy the solidarity and oneness of its members. This is because teachers tend to organize themselves in other subgroups e.g. All Nigerian Conference of Secondary School Principals (ANCOSSP), Graduate Teachers Association, Female Teachers Association, Science Teachers Association of Nigeria (STAN) among others. This trend is gradually finding its way into the university system which has given rise to such groups as Association of professors in Nigerian universities, female lecturers association among

others. The consequences of this type of fragmentation is that teachers do not speak with one voice and so lack professional unity because of this, teaching is yet to be seen as a real profession.

• **Involvement of unique exclusive specialized and systematic occupation knowledge:** Teaching is one occupation that has numerous techniques strategies, theories, fundamental concepts, principles and practice, etc. The different methods, techniques, and ways of teaching range from lecture method, discussion methods questioning, problem-solving, inquiry discovery, projects method, charting method even excursions, etc. Some teaching strategies include set induction, questioning variety and variation, use of examples, planned repetition and non-verbal communication. All these methods and techniques are utilized in the classroom. The implication of this is that it is not just anybody that can use these techniques and methods to facilitate learning that is a teacher as the major focus of teacher education is to give those who have chosen teaching as a career the unique exclusive specialized and systematic knowledge required of the profession. Teachers, through teacher education have to be socialized in their unique and general functions in both the school and the society for effective job performance. Teaching satisfies this first condition and, therefore, should be regarded as a profession.

• **Acquisition of esoteric knowledge and expertise through long period of advanced education and training:** This condition implies that members of a profession have to be specially prepared to be thoroughly knowledgeable in the subject matter of their profession. Although the continuing education programmes of various teacher preparation institutions such as part-time, sandwich and post-graduate diploma programmes in education in colleges of education and universities as well as the National Teachers Institute Kaduna are helping to reduce the number of untrained professional teachers in Nigerian schools, there are still quite a number of such teachers who teach without sufficient qualification as professionals. The presence of such teachers reduces the esteem of teaching as a profession, and until such teachers receive proper professional training or preparation to qualify as professionals, teaching cannot attain full professionalism it deserves.

Challenges in Teaching Profession and Teaching in a Digital Age

One of the main challenges poised by digital technologies. According to Eckstein (2003). Modernization has brought the spread to Education and training and the paraphernalia of assessment devices and credentialing that accompanies those developments. Advance technologies has added to the problems in education.

Electronic means of communication have revolutionized cheating methods by examination candidates who now have access to receivers and computer as aids to cheating replacing the old fashioned, trick of writing notes on shirt cuffs etc.

It is also noted that the use of high-tech facilities make malpractice a growing international phenomena. For example, in some foreign Universities where candidates who wish to sit for entrance examination outnumber the available spaces, students, can pay a device so-called 'Jockey' to supply answers of the examination paper through the use of mobile phones and certain codes given on payment of a few.

The internet, regarded as the information super highway (to bad) is another revolution that has posed challenges to the practice of education in our institutions. With respect to education, internet is used for sourcing information for

research, instruction delivery and for other educational purposes, but it's being used negatively both by students, lecturers and other individuals and professionals for instance, Wideman (2008) explained that according to a study conducted by the centre for academic integrity in 2003, 94% of the students were sufficiently experienced with internet, use for cutting and pasting resources, 50% agreed that they use it to cheat in order to avoid a failing grade, 32% use the internet to plagiarize etc.

Also according to the chronicle of Higher Education (2001) in Eckstein (2003), internet and E-mail are now the tools of choice for plagiarism advertisement in colleague papers, and in regular press as well as on the internet announce the availability of students and professional services sometimes concluded in such euphemistic terms as 'editorial' assistance but often blatantly offering commercially prepared essays, academic papers for sale. Also the easy availability of such assistance from various Websites has increased students cut and paste activities to the degree that it is now expected and regarded as common practice. It is also a known fact that a more serious level of fraud is reached when academic qualifications are marketed on a large scale; adverts of periodicals on the internet offer degrees for sale requiring little efforts and at not much expense. Internet advertisement by fake degrees offers spurious credentials from reputable colleges and universities.

Havard and Poisson (2007) agree with the above, when they reported that the internet (all forms of e-learning) is now arguably the teaching vehicle for fraudulent practices as it has facilitated the practice of selling of essays as well as fake degrees and term papers, (rendering plagiarism a major problem) at minds, even from reputable colleges and institutions, such as Havard and Yale or others in London and Paris.

The internet opening the way for student to read e-books but according to Salawu (2011) plagiarism takes the form of copying of other people's works or statements from electronic materials especially the internet and e-books. Many students and professors and other professionals in various fields now use the electronic-book as their own work without necessary correction and due acknowledgement of the source. Digital technique like internet also opens doors for other fraudulent activities in academic. Salawu equally reported that a new kind of insidious internet-enabled academic fraud sprouting in the world called "Bait and Switch" publishing. According to him this is already affecting the Nigerian academic community very badly. "Baid and Swith" is a way a cute sounding but actually fraudulent academic journal sands out un-solicited E-mail 'call for papers' to individuals whose E-mail addresses are scouted on the internet using E-mail harvesting software (king used by 419 Scam artist) to get Contributors or Peoples E-mail addresses. It specifically targets E-mail addresses that are listed in Academic Conference Presentations and on University websites telling un-suspecting contributors whose works have been peer-reviewed that they their would be delighted to publish their papers in their fraudulent journals. This no doubt is targeted at lecturers who must present published papers in order to be promoted to higher ranks.

There are several websites in the internet that are concerned with educational activities. Some though, concerned with the practice of education are for negative or fraudulent activities. For instance, Laturop and Foss in Eckstein (2003) reported that the possibilities of plagiarism are enhanced by websites such as the "Evil house of Cheat",

(Www.Cheathouse.com) and www.scholsocks.com” where finished term papers are available for purchase and easy transfer to students and other sources of useful information for examination candidate can be located. It must also be noted that there are many websites in advanced countries such as USA that offer essays, research notes and examination answers.

There is also the use of an “Essay Mill” in sourcing for written assignment from the internet. According to Wikipedia (2013), an ‘Essay Mill’ helps student to seek and to buy essays and other written home work, and pass this ghost-written work as their own. Many Essay mills state that a unique Essay mill will be composed by a ghost author and preserved with the plagiarism-detect software before delivery and as such will be undetectable as an Essay mill product. Another website that specializes in fraudulent services in academia is the fake degrees.com. There are also fake universities some of which advertise in the international press, circulate information by sending spam and rank high on the listed search engines Havak and Poisson (2007). The victim of this type of acts are usually international students who have opted to student in one of the online schools abroad.

The use of mobile phones to cheat is now a common place in our institutions of higher learning. Technology has flooded markets with more sophisticated cell phones that are capable of doing nearly everything from writing, photos graphing, drawing, copying to storing of different kinds and columns of data. With them some students store answers to examination questions get a photograph of the notes which they refer to inside the examination hall. Others do outright down-loading of topics related to the questions asked right inside the examination hall, while some use the phones to get external assistance right inside the examination hall.

Computers are also used to perpetrate fraudulent acts in education such frauds include for falsification of all kinds of data since some facilities inside the computer are capable of making changes in an original document, with computers, logos of institutions, signatures of executives can be scanned into the computer in the original colours and used to transfer to a falsified certificate or any other related papers which with the use of coloured printers are printed out in their original colours e.g fake Admission letters, fake appointment letters, our elongation of tenure of office by chief executives, etc. They are also used in impersonation of candidates whose examination cards or the like must bear a photograph of the examinee. The computer exports the cheat’s passport photograph in the place of the passport photograph of an authentic student in order to impersonate. It must be remembered that most of the earlier frauds of the internet and websites are carried out via the computer system.

Regarding use of technology therefore, there is no gainsaying extensive developments in Educational Technology materials meant to improve practice of education especially teaching and learning have not only widened the scope of fraud in academic but have also introduced, innovative methods of malpractice in education, How then can Education Technology materials be used in Combating Academic fraud?

Ways of combating digital technologies fraud in Educational Institutions. For the technology-driven Academic fraud, the following could be used.

i. Some higher educational institution even requires submitting electronic versions of their term papers, assignments projects etc. To check for plagiarism institutions should purchase anti-plagiarism software e.g. Turnitin to compare student work

against databases of known Essay Mills Term papers and to detect plagiarism and fabrications.

ii. Institutions can track internet protocol (IP) and E-mail addresses to assist in the identification of technologically unsophisticated fraud rings especially in relation to Distance Education Programmes even though it is observed that sometimes the fraudsters do use proxy serve and dummy E-mail accounts so that they cannot be traced.

iii. The in-thing today in our societies is the use of social networks which also aid cheating. These could be turned around and be used to improve students’ retention of what has been taught. With then, environments that favour collaborative assessment could be achieved while cheating schemes could also be detected.

iv. Technology has provided electronic devices used to defect fraud in examinations by identifying when distribution of scores in an exam is erratic or difficult to interpret as a result of doctoring of scores.

v. Technology has made it possible to manage all stages examination of process for instance, the computer can be used to design test, administer exams and grade, tests. It can be used in processing University admissions and inform students of their results. The difference between this method and what is happening with UMTE and Post UMTE exam results in which examinations are hand-written and scratch cards are used to check results, is that in the later proposed type, computer is to be used in writing the examinations as well.

vi. To check the incidences of fake results, computer micro chips should be in-built inside the degree certificates so that fraud could easily be detected by a computer program. This will help to reduce the circulation of fake degrees in our society.

vii. To check absenteeism of both teachers and students, the computer clocking system should be introduced to allow teachers and students clock in and out of lecture periods especially to determine who is cheating who academically.

Other types of checks which are found veritable in combating academic fraud in our institutions; include:-

viii. Publishing an integrity self-check to help institutions work with faculties in combating fraud in academia.

ix. Frequent interactions, group assignment and other improved techniques for assessment should be employed in checking cheating.

x. Viva Voce (oral examinations) should be preferred in some instances instead of the written. It could also be used to check whether students actually wrote an assignment or term paper.

xi. Institutions should publish list of misconducts in the academic books.

xii. Strict punitive measure should be spelt out by authorities for academic cheats as a deterrent.

Conclusion

Teaching is a complex activity which also requires multi-variant and dynamic approaches. Due to its complex nature, lots of persons have shallow understanding of the concept, thereby reducing it to anything that goes between one person and another. Teaching however could be understood as an occupation with repute and dignity, since it provides the teacher with a decent income. Teaching can be described as career since it deals with a series of exposure, training and projections for a lifelong engagement. Teaching has been traced from classical society to ancient and modern day in Nigeria, it is discussed as a profession which requires professional training, skills, knowledge and attitude to impart on human life. It requires professional body, ethics of practice,

long duration of training or education and other things demanded by a profession.

Challenges of Digital Technology

However, there are some challenges especially in the area of digital technology. The federal government is yet to address the issue properly. First there is the problem of ignorance, finance, adequate teaching aids, requires experts either as technologists or attendants, etc.

Recommendations

As part of making teaching a profession in Nigeria, Decree No. 31 of 1993 FRN (1995) was promulgated to facilitate the establishment of the Teachers' Registration Council of Nigeria (TRCN).

According to Fafunwa (2003:12). If the Nigeria teacher is to cope adequately with the monumental task that lies ahead of him, he has to be well trained for his job. He must be willing to enter into the spirit of new African axe, willing to share new information and skills with his fellow teacher, seek more knowledge on his own initiative and above all be flexible and willing to experiment and not afraid of failure.

The Federal Ministry of Education FME has proposed reforms in the teacher education sector, developing a 242 page National strategy for Teacher Quality and Development document which has been approved by the National Council on Education, meeting in April 2007. Already Ajeyalemi (2008) had pointed out that a TEP developed with the assistance of USAID/ENHANSE, which specified standards for admission, curriculum, teaching practice, basic infrastructure and facilities, qualifications for academic and number of academic staff, etc for pre and in-service teacher education as well as condition for registration, licensing and motivation of teachers is about to be approved. All these will ensure that a proper foundation is laid for teacher education. According to Obanya (2006), we must produce teachers who can, are able and are willing to teach.

Again, the clinical experience through effective teaching practice, mentoring and licensing must be integrated into the training of teachers. Already the FME through the NCE is proposing for the NCE programme and the NUC is proposing a five year Bachelor degree programme to provide for mastery of content, longer internship and licensing by teachers. Also the current trend to transforming COES to universities of Education should continue so that they can effectively control the teaching of content and pedagogy, including clinical experiences of student teachers as well as pursue post graduate programmes. All these will improve the quality of teaching and pre-service teacher education.

Also, staff of teacher education must avoid corruption and examination mal-practice at all times. The student teacher who performed below average in course work, teaching practice or micro teaching should be asked to repeat. The exercise next time to improve his performance; lecturers should also maintain their dignity and integrity in the system by not aiding and abetting examination malpractice at all times, so that sanity would be restored in teaching profession and teacher education institutions.

Furthermore, the teacher education process must make adequate provision for computer training for students of teacher education institutions. For teacher in the teacher education institutions to start using ICT and other instructional technologies in their teaching they need to appreciate how helpful the digital technologies are to themselves as well as to the students. This appreciation and the desires to start using the technologies demand a degree of change in teachers

perceptions and attitudes towards the use of ICT. Government should assist in the provision of adequate funding, motivation of staff, necessary infrastructural support, massive training and deployment of ICT skilled manpower into teacher education institutions. It is very important that teacher education institutions develop programmes that ensure co-ordination between government, non profit and private institutions towards policy reforms for rapid replication of best practices in teacher education.

Government should make sure that unqualified teachers who are already in the teaching fields be sponsored and encouraged to obtain higher qualifications for proper functioning of teaching/learning process. There is also a need for high standard of teachers education through placement of high values on the criteria and the process guiding the admission of candidate into our teacher institutions in Nigeria. Admission of candidates should be based on merit, in all subject areas including oral and written examination and interviews.

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