4-1-2006

# Methodological Competencies of Teachers: A Study of Nigeria

Nwachukwu Ololube

Follow this and additional works at: https://scholars.fhsu.edu/alj

Part of the Educational Leadership Commons, Higher Education Commons, and the Teacher Education and Professional Development Commons

Recommended Citation

Ololube, Nwachukwu (2006) "Methodological Competencies of Teachers: A Study of Nigeria," *Academic Leadership: The Online Journal*: Vol. 4 : Iss. 2 , Article 7.
Available at: https://scholars.fhsu.edu/alj/vol4/iss2/7

# Academic Leadership Journal

Introduction

The traditional stereotype of teachers as people who stand in front of the classroom and teach children has been at odds for many years now. Teaching in the modern societies involves the task of assisting students to make worthwhile and satisfying adjustments to school work, to social groups, and to their occupations. If these issues are not resolved, the individual child may not appreciate progress towards his or her learning. Since the main duty of teachers is to get the individual student to learn, it is their duty also to remove obstacles to learning. If proper adjustments are not made, friction and frustration will set in and successful learning will not take place (Stones, 1966, p. 389). According to McDaniel the essence of harmony, lack of friction, a smooth give-and-take, an interaction that is satisfying to cooperating parts of a social relationship, or in other words, the reduction of frustration is to make teaching and learning meaningful for the child to be interested in schooling (McDaniel in Amahala, 1979, p. 231). For example, teachers are expected not only to impact knowledge but also to foster adjustment of students; understand student's basic cognitive and social problems.

Secondary schools in Nigeria operate within the guidelines provided by the National Policy on Education (NPE) 1981, revised 1989 (Federal Government of Nigeria, 1989). This document stipulates the objectives of secondary education, the caliber of teachers to teach in them and their qualifications, as well as the curriculum content and methodology to be employed. It is frightening, however, to mention that in spite of the provision in the NPE, lots of problems still hinder secondary school education development in Nigeria. These include among others: acute shortage of the employability of professionally qualified teachers and the recruitment of unqualified and untrained people into teaching.

In Nigeria, teachers who are academically qualified and those that are professionally qualified are employed to carry out instruction in the classroom. By academically qualified (non-professional) teachers, I mean teachers who have academic training without professional teacher training as a result of enrolment into higher educational institution. While professionally qualified teachers, are teachers who get professional teacher training that gives them professional knowledge, skills, techniques, aptitude as different from the general education. To reach this end, it was hypothesized that "there are no significant differences in the effectiveness between professional and non-professional teachers in their classroom methodological competencies." The aim of this study is to identify 'best practices' of academically and professionally qualified teachers, which are to form standards of emulation to enhance teachers' methodological competencies in secondary schools. Specifically, this study is designed to evaluate the extent to which teachers with academic qualification and those with professional teaching qualification use problem solving methods, employ individual teaching methods, dramatize and demonstrate teaching situation effectively.

<center>Methodological Competencies of Teachers</center>

Methodology refers to the processes of teaching and learning which brings the learner into relationship with the skills and knowledge that are specified and contained within the curriculum (Harris & Muijs,

2005). In schools, according to Gutek (1988: 7), teaching methods are the means or procedures that teachers use to aid students in having an experience, mastering a skill or process, or in acquiring an area of knowledge. In addition, the Oxford Advance dictionary defined methodology as a way of proceeding or doing something, especially a systematic or regular one. The same source defines competence as the condition of being capable—having sufficient skill and knowledge. Consequently, methodological competencies could be defined as the procedures of doing something and having enough skill and knowledge to carry out the function. In addition, methodological competencies could further be defined based on their functional elements: to adapt to effective work methods; to analyze the task to be performed; to begin the process; to perform the task and to analyze ones procedures (Ololube, 2005b).

One of the most important methods of teaching is mastery learning because it accommodates the *natural* diversity of ability within any group of student. Beare *et al.* (1989: 51-52) observed that to accomplish this goal with careful preparation and greater flexibility in instructional methods, individual students can be appropriately accommodated according to their respective levels of understanding and they can progress at their rate because teaching at this stage is directed to individuals or to small groups of students dealing with essentially the same problem solving or learning mode, rather than to the entire class of students. The teacher monitors more closely the progress of individual student and ensures that concepts and processes are understood before the student progresses to the next component. Likewise, Gbamanja (1989: 108) argued that this method of instruction has the advantages that could be used to provide remedial materials for individual students, encourages individual study and thus frees teachers from routine teaching, and the participation in the learning task is almost hundred percent.

Demonstration method of teaching involves the teacher showing students a process or procedure such a science process, a cooking procedure or a computer procedure. Involving students in demonstrations allow this method to be less passive (O'Bannon, 2002). This method of teaching means teaching by displaying of the instruction situation with an audio-visual explanation of an idea, process or product. It involves showing, doing and telling the students the point of emphasis. It is mostly used as a technique within a method of teaching, and sometimes used as a method itself. In his methods of teaching, Gbamanja describes demonstration method of teaching as techniques within a method used in order to assist students discover the concept of metal. Teachers need to demonstrate the physical and chemical properties of several different metals (Gnamanja, 1989: 90). Also, in the laboratory for example, teachers need to demonstrate the use of a microscope to their classes before letting their students use it to discover things themselves. When a science teacher shows the action of carbon dioxide on a blue moist litmus paper, he or she is presenting a demonstration.

Similarly, a teacher may demonstrate the dissection of a toad or of a rabbit to the students in the laboratory or classroom before students can do it themselves (Amahala, 1979). For science subjects, laboratory work is an essential ingredient of the course and some component of this is generally preserved, even though the amount may fall. In addition to the experience of laboratory work, students often derive a lot of their contact with teachers in the laboratory setting (Forster *et al.*, 1995). In addition, the demonstrator combines the showing, doing and telling of the materials or equipment with (1) examples of ways in which they are used or operated, (2) cautions to be observed in their use, (3) reasons why certain actions are taken and certain results obtained, and (4) the importance of each step involved. In this way, students are brought into close personal contact with the materials or

equipment demonstrated (Brown *et al*., 1959: 284).

Therefore, courses that can expose teachers to these methodological skills are courses in education that will enhance teacher's capacity to handle instructional processes in classroom, which are embedded in the teacher training process of various faculties of education, or other similar institutions charged with the responsibility to train teachers (Reid *et al*., 1987). This is evidence where psychology of education, teaching method courses and curriculum development and evaluation play an essential role in teacher education programs in order to improve teachers' methodological competencies. Accordingly, Owens noted, "Today, psychology remains a predominant element in teacher education. Departments of educational psychology in schools of education commonly exert strong influences not only on the content of courses in teaching methods and curriculum but in such topics as test and measurements and statistics loom so large in the undergraduate and graduate studies of teachers." Generally speaking, educational psychology is a method of training and teaching and their effectiveness. In particular, it is the study of how to help people develop intellectually, especially school children who have learning problems to conquer their learning complexities (Owens, 2004: 19). Although, teacher's own perception, beliefs, and values guide their interaction with students, the selection of curriculum materials, and organization within the classroom improves their performance (Highet, 1963; Stones, 1966).

Students' manifest cognitive and social problems in school due to lack of effective early stimulation, students may show weakness in some areas of their study. If such a situation arises, teachers need to throw in the towel to have full grasp of the situation and then embark on remedial to alter the effects of lack of stimulation. On the other hand, some children are problem behavior cases. Problem behavior is a behavior that is characterized by an inability of the child to meet the demands of the school environment. It may include inability of a child to get along with other children, inability to achieve self-reliance, and inability to adhere to the values prescribed by a system. Many students come to school having developed problem behavior because their parents allow their children to get what they want when they exhibit problem behavior such as temper outburst (Amahala, 1979: 232). However, it is recommended that teachers should refer such children to the guidance clinic when it is obvious that the problem is beyond their reach. The guidance clinic of a school is staffed with experts—professional educational psychologists, psychiatrists, and psychiatric social workers. Their duty is to diagnose the difficulties of children referred to them and recommend a course of action (Stones, 1966).

It could be concluded that classroom instructional and methodological competencies when accompanied by clearly written instructional objectives and the application of adjustment of students; understand student's basic cognitive and social problems without-doubt provide the student the necessary guidance in learning and help the instructor in assessing the outcome and therefore aid in overall teaching, learning and assessment (Amahala, 1979). This is because teacher's instructional methods provide an additional resource in associating the instructional activity with the intended outcomes. However, well-written instructional objectives also aid in peer-evaluation of instruction (Gronlund, 2000). On the whole, teachers should have a repertoire of capacities which enables them to structure instruction, methods to be used, order content adequately, ask questions, use tests, and give feedback to their students (Creemers, 1994: 203).

## Methodology and Results

As this is a survey study, a self designed suitable questionnaire with the help of faculty members was

structured along a four-point likert-type scale (summated) of strongly agree (4), agree (3), disagree (2) and strongly disagree (1) to collect data for the study. Section "A" of the research questionnaire describes respondents' background information. While section "B" comprises of possible methodological competencies. Simultaneously, to arrive at the intended comparative analyses, several sets of statistical analyses were conducted using SPSS version 11.5 of a computer program: T-test of significance, ANOVA and Simple percentages. T-test was computed to test for statistical significant differences in the variables. It is a statistical significance set at $p < 0.05$ to assess if the researcher's level of confidence observed in the sample also exists in the population. One-way-analysis of variance (ANOVA) was employed to test the relationship between variables and respondents' background information (Bryman and Cramer, 1990: 151; 2001: 159; Saunders, *et al.*, 2000).

The research population comprises of principals, subject heads and teachers from ten (10) randomly selected secondary schools. Supervisors of education from the Ministry of Education and the post primary schools Board who periodically supervised teachers in school to ascertain if actually they carry out their duties effectively. Of the total number of respondents, 270 *(90%)* were subject heads and teachers, 10 *(3.3%)* were principal including 20 *(6.7%)* supervisors. ANOVA analysis of the respondents background information showed no significant differences in their attitude towards teacher's methodological competencies *(F = 1.71, Df = 299, p > 0.34).* Coherence and reliability scale was tested with the Cronbach's alpha coefficient. A respectable coefficient of 0.983 was obtained. Thus, indicating a high inter-item consistency. The T-test analysis showed that there are significant differences in the methodological competencies between the academically qualified teachers and professionally qualified teachers in all the variables tested. SPSS version 13.0 displayed it as *p < 0.000* significant levels. This does not mean that the probability is 0. It is less than *p < 0.0005.* The highest t-value is *–27.08* and the lowest t-value is *–35.69, Df = 299, p < 0.000*, Therefore, the $H_0$. was rejected.

Discussion

The findings from this study depicts that trained teachers takes into account the individual differences that exist among students. For instance, the problem with the child who lags behind in schoolwork is one of the most difficult situations that teachers have to face. It is a problem that can arise in almost every school. These deficiencies are built on the foundation of persistent failure on the part of some children to achieve what other children are achieving, or difficulty in reaching the academic standard set. Special interest in these students is seen as part of the professional teachers' job, which is very unlikely for many non-professional teachers.

It was also found that there are relationships between teaching practice and methodological competence. Methodological competence produces facts as input to instructional process and instructional process establish requirements to stimulate rational input in student's academic achievements. Teaching practice and method course given to students at the faculty of education of a university or teacher education institutes equip student teachers in gaining relevant methodological skills that aid teaching and learning. A good example is the graduate teacher training registry program in the UK which provides initial teacher training for non-trained would be teachers (GTTR guide for application, 2005).

Teacher effectiveness *vis-à-vis* their methodological competence as used in this study is the impact

that classroom factors, such as the use of classroom teaching methods, teacher expectations, classroom organization, and use of classroom resources, have on students' performance (Cambell *et al.,* 2004). There is no gain saying the fact therefore that no matter how laudable an educational system may be; and no matter how well equipped the educational system may be, not much could be achieved by way of manpower training in the absence of adequately trained and well motivated teaching cadre (Aiyepeku, 1989).

From the preceding discussion, the findings showed that there are multifaceted roles that professional teachers play in effecting quality in teaching. The information contained in the data showed that there are differences in the way and approaches trained and untrained teachers go about their role in the instructional process. Also, it could be suggested that a great deal importance should be attached to developing the untrained teachers in the process of teacher training because quality teaching is scored high in the evaluation of an effective teacher.

Concluding Remarks

This research study has discussed considerable amount of literature on teacher methodological competencies, and their various assessments. It covered a major issue of interest that appeared to be extremely important in guaranteeing school effectiveness and quality improvement. It is hoped that this piece of work will be an added input into academic literature on teacher effectiveness, school effectiveness and educational effectiveness in Nigeria and abroad. It is very essential to have an understanding of the role of teachers' methodological competencies which this research work has helped in explaining the meaning and significance of it from an African country perspective.

The major limitation of this study is that the findings were based on self-reported data on the part of the teachers who served as respondents and are liable to distortions because they were directly focused. However, additional investigation in this direction will be in order. Researchers should give their attention to the ways in which both professional and non-professional teachers construct and apply their methodological competencies in schooling students such as their grouping procedures and behaviors.

References

Amahala, B. M. (1979). The Teacher in the Classroom. In Ukeje, B. O. (Ed) *Foundations of Education.* Benin-City: Ethiope Publishing. pp. 229-252.

Aiyepeku, T. F. (1989). *6-3-3-4 System of Education in Nigeria*: College and University text. Ibadan: NPS Educational Publishers.

Beare, H., Caldwell, B. J. and Millikan, R. H. (1989). *Crating an Excellent School: Some New Management Techniques.* London: Routledge.

Brown, J. W., Lewis, R. B. and Harcleroad, F. F. (1959). *A-V Instruction Materials and Methods.* New York: McGraw-Hill Book Company.

Bryman, A. and Cramer, D. (1990). *Quantitative Data Analysis for Social Scientists.* London: Routledge

Bryman, A. and Cramer, D. (2001). *Quantitative Data Analysis with SPSS Release 10 for Windows: A*

*Guide for Social Scientists.* Philadelphia: Routledge: Taylor and Francis Group.

Campbell, J., Kyriakides, L., Muijs, D and Robinson, W. (2004). *Assessing Teachers Job Effectiveness: Developing a Differentiated Model*. London and New York: RoutledgeFalmer.

Creemers, B. P. M. (1994). *The Effective Classroom*. London: Caseell.

Denscombe, M. 2003. *Research Guide for Small-Scale Research Project*. Buckingham: Open University Press.

Federal Government of Nigeria (1989). National Policy on education: Revised. Lagos: NERDC Press.

Gbamanja P. T. (1989). *Essentials of Curriculum and Instruction. Theory and Practice.* Port Harcourt: Pam Unique Publishing Company.

GTTR (2005). Guide for Applicants. Rosehill: Graduate Teacher Training Registry.

Gronlund, N. E. (2000). *How to Write and Use Instructional Objectives.* (6th Ed). New Jersey Upper Saddle River.

Gutek, G. L. (1988). *Philosophical and Ideological Perspectives on Education.* Englewood Cliffs, N.J. Prentice Hall.

Harris, A. and Muijs, D. (2005). *Improving Schools Through Teacher Leadership*. Berkshire: Open University Press.

Highet, G. (1963). *The Art of Teaching*. London: Methuen.

O'Bannon, B. (2002). What are instructional methods? Retrieved 10/12/2005 from

http://edtech.tennessee.edu/~bobannon/instructional_methods.html#demonstration

Ololube, N. P. (2005b). School Effectiveness and Quality Improvement: Quality Teaching in Nigerian Secondary Schools. *African Symposium, Vol. 5, No. 4. pp. 17-31.*

Owens, R. G. 2004. *Organizational Behavior in Education: Adaptive Leadership and School Reform*, (8th Ed). Boston: Pearson Education.

Reid, K., Hopkins, D., and Holly, P. (1987). *Towards the Effective School*. Oxford: Basil Blackwell.

Saunders, M., Lewis, P., and Thornhill, A. (2000). *Research Methods for Business* Studies, (2nd) Edition. Harlow: Printice Hall.

Stones, E. (1966). *An Introduction to Educational Psychology*. London: Methuen.

VN:R_U [1.9.11_1134]