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IMPROVING TEACHING AND LEARNING IN NIGERIAN UNIVERSITY TEACHER EDUCATION: APPRAISAL OF CLASSROOM INTERACTION MODES

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ABSTRACT

The thrust of this study places premium on the need to improve the teaching and learning process in Nigerian university teacher education so that teaching and learning at lower educational levels can be improved. Using Scriven's evaluation model, the study appraised input factors such as classroom processes and trainee teachers' performance trends over a period of five years. Five lessons of each of the sample of 250 university teacher trainers in two first generation and three state universities in Nigeria were observed. Questionnaire, checklist and record analyses were used to gather data. Based on the findings from this study, we recommend that university teacher trainers use intermittent short-term school-based training to train trainee teachers.

KEYWORDS

Teacher education, classroom interaction modes, performance trends

INTRODUCTION

Over the past two decades there has been evidence that Nigerian classrooms have both non-professional and professional teachers. In fact, the teaching and learning process has been adversely affected by the quality of teachers available in schools. In an information-rich present generation is more inquisitive, outgoing, adventurous, aggressive and dynamic. Factual teaching will not ignite their zeal for learning. For teachers to be effective, a periodic review of teachers' educational needs which takes into account the difficulties they face

experience in teaching (e.g. large class size, youth decadence, political instability, economic crisis, inadequate instructional materials, lack of interest, certificate-oriented learners, poorly equipped laboratory) is needed. These difficulties can hardly inspire anyone to become teachers. Therefore, teacher education has to help teachers make their indelible impact on prospective teachers and other learners.

The National Policy on Education (1998) states that the goal of teacher education is to encourage the development of inquiring, creative, highly motivated, conscientious and efficient classroom teachers who are socially fit with adequate intellectual and professional background that can help them adapt to changing situations. (FGN, 1998, p. 17).

However, there is little literature on classroom interaction modes lecturers use at the university level. This could be traced to a lack of practical mentoring, bench marking and quality teaching. Although teacher education should focus mainly on teaching, research and public service (Obanya, 2003), teaching is the most important of the three. Research should be conducted to improve teaching and learning process (Matriano, 2000).

The thrust of this study therefore places premium on the need to improve the teaching and learning process in university teacher education. This is currently required to improve teaching and learning at lower educational levels. The study will unveil several factors that could probably serve as bench marks for improving classroom interactions during teacher preparation.

PURPOSE AND RESEARCH QUESTIONS

The present study appraised the input factors, classroom processes and teacher trainees' performance trends over a five-year period at the Nigerian University Teacher Education (NUTE).

Significance of Study

The research is aimed at creating an awareness of the adequacy and scope of instructional materials which may perhaps influence classroom practices of lecturers and consequently affect their performance. It could also establish the areas that need to be changed in the teacher education curriculum.

Method

The study employed an evaluation research design that covers ex-post-facto and survey. The subjects for this study were teachers and students. A sample of 250 university teacher trainers was taken from two first-generation and three state universities in South West Nigeria. 50 lecturers (10 each from five universities) answered a questionnaire and checklist with the assistance of research assistants. Five lessons on each of the subjects were observed with some variations in time allocation. Some were one- or two-hour lectures while others were six-hour practical sessions. Only the students' records were analyzed.

Instruments

Scriven's input-process-output evaluation model was adopted. The four basic instruments used were:

1. A 20-item Input Evaluation Instrument (IEI, $r = 0.84$) which appraised various input factors.
2. The process factors were evaluated using two instruments: (a) A 3-point-scale, 10-item Checklist Level of Use (CLOU) which covered major infrastructures like designated Technology and Science Laboratories, library resource, Internet resource, course materials and equipment. The CLOU was aimed at observing the lecturers. (b) The Subject Classroom Interaction Analysis (SCIA) developed by the authors and validated by three educators was used to observe the classroom practices of the subjects. The SCIA was a modification of the Flanders Interaction Analysis with consideration for small group work, teacher talk, student-initiated activities, practical work, assessment modes etc.
3. Documentary Analysis was used to examine the student's performance over five years. The Broadsheet Summary Reports (BSR) for science and humanities education students for five courses (biology, chemistry, physics, mathematics and language) from 1999 to 2002 academic sessions were analyzed using a 5-point scale. The Delphi technique was adopted to validate the instruments.

RESULTS AND DISCUSSION

The appraisals of the input factors show that: i) 65% of the teacher trainees are rejects from other faculties; ii) 90% of trainers in the cognate faculties are non-professionals; iii) the mean ratings of availability of instructional materials were 95% for technology laboratory, 92% for science/language equipment, 100% for library resource and 31.5% for course materials. Internet for staff only is available in only two universities (40%).

The low mean score of 1.82 shows a low level of utilization of some of these instructional materials. For the classroom interaction modes, 92.8% of the trainers use factual presentation, 1.0% use problem solving method and 6.2% use experimentation. From the documentary analysis of the five years of performance records, majority (74.2%) of the students performed averagely at the point of graduation, out of which 50.7% came from the Bachelor of Education (B.Ed) course.

Question 1: What is the adequacy of input factors in Nigerian University Education?

The findings reveal that language and biology, physics, chemistry and mathematics have fairly large classes. Also, the undergraduates are exposed to many courses which make the course load heavy for the teacher trainers. The students' attitude towards learning, learning and assessments is found to be negative. However, the student-teacher ratio is found to be adequate. Furthermore, the NUTE trainees comprised mainly of students holding senior secondary school certificate examinations (SSCE) (65%), National Certificate in Education (NCE) (5%) and internally certified Diploma (30%). Further analysis reveals that more than 65% of trainees admitted with SSCE are not interested in education. Failure to meet the off point in their first choice of study drove them to education. Though all the trainees in the

faculty of education are professionally trained, 90% in the cognate faculties are non-professionals. The mean ratings of instructional materials shown in Table 1 reveal that all the federal and state universities sampled in this study have science laboratories and libraries but only one federal university has Internet resources for both staff and students.

Table 1
Availability and Mean Ratings of Level of Utilization

Instructional Resources	Availability			Level of Utilization		
	Fed. Univ.	State Univ.	Mean X	Federal Univ.	State Univ.	Mean X
Technology Laboratory	97	93	95%	2.24	1.78	2.01
Science Laboratory	98	86	92%	2.00	1.30	1.65
Language Resource	96	88	92%	2.00	1.54	1.77
Library Resource	100	100	100%	2.00	1.95	1.98
Course Materials	10	53	31.5%	1.42	2.70	2.06
Internet	62	18	40%	1.85	1.05	1.45
Grand Mean Score						1.82

Although some of the instructional resources are readily available, most of the equipment/materials within the laboratories are found to be non-functional. Also, the textbooks and journals in the libraries are not up to date. Despite the availability of the Internet in all the universities, the findings reveal that most students and teachers use it mainly to e-mail and very few use it for literature search. Only two federal universities (40%) have Internet resources for both staff and students.

Question 2: To what extent are instructional materials used in selected institutions?

The level of utilization of all these instructional materials is very low in both the federal and state universities ($X = 1.82$).

Question 3: What classroom interaction modes can be observed in lecture/laboratory/workshop rooms in Nigerian University Teacher Education?

In 92.8% of all classroom interactions, lecturers use mainly factual presentation and dictation of notes while 6.2% focus on experimentation. 97% of the overall classroom interaction modes were trainer-directed while 3.0% accounted for student-directed lessons.

Question 4: What is the trend of performance of prospective teachers that are engaged within the past five years?

From the documentary analysis, the majority (74.2%) of the trainees performed averagely at the point of graduation, out of which 50.7% are from the Bachelor of Education (B.Ed) course. In the classroom practices observed by the trainers, trainees learn by memorizing definitions and factual statements. One of the obvious teaching methods observed in almost all the universities sampled was the dictation of notes to students. No innovative teaching and learning process can ensue from teachers exposed to such a classroom environment where there is no balance of construction, facilitation and consolidation.

RECOMMENDATIONS

The following suggestions that can help to improve the teaching and learning process in NUTE are advanced:

1. The intake from NCE should be increased and all trainers participating in teacher preparation should possess at least a certificate in education.
2. Virtual learning environments should be established in all universities to support trainees' self-learning after the classroom sessions. The science laboratory at the faculty of education should be functional to consolidate secondary school subject teaching.
3. Active teaching strategies and a participatory classroom interaction mode are required to help prospective teachers acquire the ability to foster adequate comprehension in their teaching. University teacher trainers need intermittent short-term school-based training (e.g. problem-solving mode) in order to meet the global challenges in university teacher education.

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'TEACHING HOW TO TEACH' FROM CENTER FOR TEACHING AND LEARNING (CTL) AT SEOUL NATIONAL UNIVERSITY (SNU)

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ABSTRACT

Generally, the performance of teachers plays a pivotal role in the reform of higher education. The teaching workshop 'Teaching How to Teach' developed by CTL in SNU is aimed at improving the teaching skills of instructors. The primary objective of the workshop is to (1) foster competence and confidence in teaching and (2) to provide teachers an opportunity for professional growth and development.

The CTL workshop provides general teaching strategies, lecturing skills and practices (microteaching), the usage of Web and other multimedia tools, self-evaluation techniques and tips that instructors should know for preparing and teaching their classes. Participants will receive a teaching certificate endorsed by CTL's director after completing the coursework.

KEYWORDS

Class improvement, teaching method, 'Teach How to Teach' course, professional development, self-evaluation, teaching certification

NECESSITY FOR EDUCATION SUPPORT PROGRAM IN UNIVERSITIES IN KOREA

It is perceived that higher education in Korea is at the stage of popularization. Taking into account the proportion of institutions to the population and the number of registered students in higher education institutes with respect to age group, this popularization of higher education in Korea can be seen as being more advanced than that in Europe or Japan.

When this visible growth is analyzed, however, many difficulties are noticed in both the educational structures and quality of education. Korean universities are organized in a strictly