IJCETS 9 (2) (2021): 63-76



# Indonesian Journal of Curriculum and Educational Technology Studies



http://journal.unnes.ac.id/sju/index.php/jktp

### Enriching the Lagos Model of Student Teaching with Pedagogical Provisions from the Columbia Model

Saheed Ahmad Rufai<sup>1⊠</sup> & Bello Musa<sup>2</sup>

- <sup>1</sup>Department of Curriculum Studies, Faculty of Education, Sokoto State University, Nigeria
- <sup>2</sup> Department of Educational Foundations, Faculty of Education, Sokoto State University, Nigeria

DOI: https://doi.org/10.15294/ijcets.v8i2.40780

### **Article History**

Received: June 2021 Accepted: September 2022 Published: November 2021

#### **Keywords**

Best practices; Columbia model of teaching field experiences; Lagos model of practical teaching; student teaching; teaching practicum enrichment

#### Abstrak

Capaian model persiapan guru sering dikaji menggunakan model input-output yang menempatkan pendidikan keguruan sebagai bagian dari input dan capaian belajar siswa bagian dari output. Beberapa model diketahui lebih efektif disbanding lainnya, hanya saja komponen program Pendidikan guru dan pengajaran oleh siswa tidak banyak memperoleh perhatian. Oleh karena itu, penelitian ini mengkaji praktik pengajaran siswa sebagai bagian dari program Fakultas Ilmu Pendidikan, Universitas Lagos dan Columbia Teachers College yang diatahkan untuk memperkaya praktik pengajaran dengan mengadopsi instrument Comprehensive School Reforms Classroom Observation System (CSRCOS) dan catatan pelatihan lainnya. Kajian dalam penelitian ini mengidentifikasi kekuatan dan kelemahan yang ada dengan tujuan memperkaya pengalaman mengajar siswa. Melalui penelitian ini diperoleh kesenjangan di program pelatihan guru di Lagos sesuai departemen masing-masing dalam kurun waktu tiga semester. Kesenjangan tersebut dikategorisasikan sesuai dengan mode dan tipe pengalaman lapangan siswa mengajar. Kajian ini menegaskan bahwa terdapat beberapa praktik baik pedagogic dari Columbia Teachers College yang direplikasi secara sistematis oleh model Lagos.

#### Abstract

The achievements of teacher preparation models have been studied through the use of input-output models. While teacher education programmes are considered to be the input, student achievements are the output. Consequently, certain models have been found to be more effective and evaluated more than others. It is noted that of all the components that constitute teacher education programme, the student teaching has received less attention. This study evaluates the student teaching subcomponents of the University of Lagos, Faculty of Education and the University of Columbia Teachers College, with a view to attempting an enrichment of the former with some of the best pedagogical provisions from the latter. With the use of an adopted instrument tagged Comprehensive School Reforms Classroom Observation System (CSRCOS) and other trainee records, the evaluation identifies strengths and weaknesses as well as best practices for enrichment purposes. Results reveal that there were disparities in Lagos teacher trainees' scores by their Departments and over a period of three academic sessions. These disparities can be defined and explained by the mode and type of field experience that the student teachers were exposed to. The study underscores some of the Columbia pedagogical practices for systematic replication by the Lagos Model.

Address: Birnin Kebbi Road, Sokoto State University, Nigeria E-mail: ahmadrufaisaheednew@yahoo.com

#### **INTRODUCTION**

Literature has been reviewed along the following concepts: effective teaching, organized teaching, evolution of student teaching, and models of teaching. It is noteworthy that good teaching is a common denominator to all these teaching related concepts. Good teaching is a product of effective student teaching which is a core object higher education. Student teaching is central to teacher preparation (Koksal & Genc, 2019). It is intended to prepare the student teacher for an effective engagement with learners in the classroom situation that forms a part of their professional experience during teaching practice. The student teaching sub-component is so crucial to teacher education that the success of the entire programme is often determined by the quality of student teaching (Orland-Barak & Yinon, 2007; Paker, 2011; Mutlu, 2014;Koksal & Genc, 2019), especially in view of the fact that "success depends less on materials, techniques, and linguistic analyses, and more on what goes on inside and between the people in the classroom" (Stevick, 1980 in Koksal & Genc, 2019: 896).

The value of student teaching is so enormous that no one can become a teacher without experiencing it at the actual teaching and learning setting (Kramer, 1973; Agudo, 2016; Beck & Kosnik, 2002; Kiggundu & Nayimuli, 2009). It is the stage at which a student teacher is given the opportunity to practice the art of teaching before entering the real world of pedagogical practices as a certified professional. That probably explains why student teachers see it as "the crux of their preparation for the teaching profession" in view of its place as the interface between their training as student teachers and their practice as professional teachers (Kiggundu & Nayimuli, 2009: 345). This probably accounts for the dominant thinking in the profession that teaching practice normally occasions excitement and apprehension as well as anxiety and anticipation in the student teachers as new entrants into the teaching profession (Buchner & Hay, 1999; Halloway, 2001; Hascher, Cocard & Moser, 2004; Perry, 2004; Castle, Fox & Soulder, 2006; Coskun, 2013).

According to Genevieve (2017), student teaching is the most essential ingredient of teacher education. Infact, being core to the professional experience of a teacher, it is often based on a country's National Policy on Education. The significance of student teaching is evident in its core status in the professional requirements for

the graduation of a prospective teacher (Geneveive, 2017:101). The incorporation of student teaching as a core component of teacher training was intended to "help the preservice teachers to use their theoretical knowledge in schools and classroom settings and to help them experience the real classroom atmosphere" (pp. 895-896). The concept involved in the present analysis is variously tagged as "teaching practice", "apprenticeship", "internship", "teaching practice", "field experience", "practical teaching", "practice teaching", "teaching practicum" and "field teaching" in the scholarship of teaching Stevick, 1980; Gebhard, 2009; Geneveive, 2017; Koksal & Genc, 2019).

According to Nguyen and Baldauf (2010) what matters is not the name by which the exercise is called but the experience to which the student teacher is exposed during the period. Student teachers must be enabled to practically demonstrate the pedagogical principles, methodological theories, and instructional techniques that they have learned in the course of their training whose ultimate objective is the facilitation of effective teaching. However, this paper shall later engage critically with each of these concepts. Effective teaching, which is central to all the concepts, has been identified as playing a significant role in preparing prospective teachers for professional teaching (Good, 2008). Rosenshine (1985) has summarized the research on most effective teaching into specific pedagogical skills. Others have found that effective teacher preparation normally leads to effective teaching practices (Berliner, 1988; Fisher & Berliner, 1985 Rosenzain & Yarden (1986)). Research also indicates that teachers' creativity and resourcefulness normally affect the quality of student teaching (Glaser, 1984; Kiggundu, 2007; Wenglinsky, 2004).

Despite the fact that the aim of research in teacher education is to improve the quality of teacher preparation programmes, only a few studies have actually focused on specific components or variables connected to training procedure or preparation methods (Rosnani, 1996). However, a handful of studies have addressed such training procedures only with a view to determining their efficacy in influencing the immediate behaviour of student teachers. Lanier and Little (1986: 535) discovered that research on teacher education has concentrated more on teachers' cognitive development and factors that influence their decisions. There have been other instances of excessive emphasis on the use

of technology, almost to the detriment of the social and philosophical requirements in educational foundations (Finkelstein, 1982; Warren, 1982; Rosnani, 1996). Other researchers have maintained that the component that is most important to teacher professional development is the teaching practicum (Conant, 1963; Zeichner, 1990; Maphosa, Shumba & Shumba, 2007; and Rosnani, 1996)

Teaching practice is expected to bring the student teacher face-to-face with what Kramer (1074) characterizess as "reality shock" which is a stage in teacher preparation during which the student teacher is made to understand that his expected approach to teaching may not always be consistent with the approach employed by his or her teacher educator in preparing him/her for teaching. What this offers the student teacher is appreciation of the professional line of demarcation between school based knowledge and workplace practical operations. This line of analysis is consistent with the anticipated instances of mixed feelings, confusion and pressure that often characterize the behaviour of some prospective teachers during their first visit to schools where they are posted for teaching practice (Ngidi & Sibaya, 2003; Perry, 2004; Quick & Sieborger, 2005; Koksal & Genc, 2019: 897).

Teaching practicum is a generic term that comprises a wide variety of components such as clinical experience, student-teaching-in-school experience, teaching rounds, field experience and micro teaching (Iqbal, 1996). Accordingly, "the practicum refers to that body of professional experiences during which the student applies, tests and reconstructs the theory which he is evolving and during which he further develops his own competence as a teacher" (p.117). The need for effective delivery by the teacher requires sufficient amount of practical training to enable him function well. This infact is the part of teacher preparation that is of most value. For teacher preparation, any of the three dominant forms of teaching practice may be adopted. One of them is block teaching practice which puts the student teacher at a vantage position to assume a major responsibility for full range of teaching duties in a school setting under a close monitoring by both his college and the cooperating school.

Another variant is internship which is an extended period of placement in the school with complete responsibility for teaching the pupils but with a limited or lesser workload than that of a qualified teacher. And yet another is conti-

nuous teaching practice which provides an opportunity for the student teacher to engage in regular teaching tasks for a period of half day, one day, or two days per week such as in schemes of school attachment or day-release involvement in schools (Thew, 1994). However, the fact that teaching practice is aimed at the acquisition of practical pedagogical skills that are capable of aiding or facilitating a meaningful realization of pedagogical objectives makes it central to teacher education. This component depends more on the teacher's creativity and resourcefulness than on any other factor or consideration.

Student teaching is traceable to the effort of Jean Babtiste de la Salle, generally known as the father of student teaching, who, according to Johnson (1968), founded the first formal school at Rheims in France. Given that the period before Jean Babtiste witnessed little interest in specialized teacher preparation (Guyton and McIntyre, 1990). Student teaching can not be said to have been developed by any teacher or education beyond the medieval apprenticeship training model which, itself, has been criticized for lack of sound theoretical basis and lack of uniform or standard structure (Guyton and McIntyre, 1990).

Yes it was that apprenticeship model that, with the passage of time and especially sequel to the emergence of the normal schools in the mid-1800s, metamorphosed into student teaching though consisted of initiation and repeated practice of a particular method taught by the normal-school professor and demonstrated in the classroom by the model teacher" (p. 515). That was the approach to student teaching as at 1848 when formal education of teachers started in the United States in high schools (Larabee, 1992). Infact, it was those high schools that played pioneering role in preparing teachers for the elementary schools of the day which later became known as normal schools when they assumed more responsibility for teacher preparation.

This approach to student teaching dominated the professional education component of teacher education until the introduction of foundation courses at the beginning of the nineteenth century (Tozer et al, 1990). This explains why Andrews (1964) posits that the student teaching sub-component is like a structure constructed without a foundation. The implication of this analogy is that the component "developed prior to knowledge that would have provided a more sound theoretical base and that might have preempted the development of a sys-

tem narrow in both its conception and practice." (Guyton and McIntyre, 1990: 515).

Then followed a transition period which started in 1860 and continued till 1950 during which teacher education witnessed the metamorphosis of the normal schools into the university by either joining the existing faculties of education or becoming full-fledged faculties within the universities themselves, in North America and later in Europe (Meyers and Saul, 1974). During this period, student teaching took the form of a vocational and practically oriented course required for prospective elementary teacher while secondary teachers were produced by liberal arts colleges with no professional teacher education. It was during this period, especially "from 1920 to 1940 that most states began requiring student teaching and professional courses as prerequisites to certification." (Guyton and McIntyre, 1990: 515).

With the emergence of the American Association of Teacher Colleges (AATC) in 1917 which was later known as American Association of Colleges for Teacher Education (AACTE), a minimum of 90 clock hours of student teaching was required of students of member institution. This same period witnessed the emergency the Association Student Teaching (AST) which was later known as Association of Teacher Educators. The same period also witnessed the promotion of student teaching through the introduction of laboratory schools which provided a sit for student teaching and also served as centres for the study of teaching. The essence of this arrangement was to enable student teachers to practice teaching after their coursework which itself requires then to observe and work in laboratory schools.

Consequently, there were innovations in student teaching and school experiences. One of them, according to (McIntyre, 1983), is that student teachers are required to spend as many as 300 contact hours in classrooms prior to student teaching. Another development is the cooperation between the teacher education college and the school where student teachers undergo their teaching. The cooperation lies in the fact that a student may go over hundreds of miles from the university while a faculty member from the university supervises the student teaching and communicates his assessment thereof, to the university.

Yet another development concerns the importance later attached to preparing student

teacher supervisors at both the university and the public school levels (Killian & McIntyre, 1986b). Again, another notable development concerns the attention now being given to research in student teaching and school experiences which makes it imperative on researchers to beam their searchlight on various issues relating to student teaching and examining the implication of various actions and practices of student teachers in the course of their teaching. There is no gainsaying that it is through a critical evaluation of the student teaching sub-components in the context of specific institutions that the strengths and weaknesses of the sub-component can be determined, for enrichment or reforms purposes. Hence the attempt in this study to benchmark the Lagos model of student teaching with the Columbia model.

The components of teacher education programme at the University of Lagos are typical of the components of programmes of most schools of education, with general education, specialized education, professional education and teaching practicum. However, there has not been any comprehensive evaluation of the student teaching sub-component of the programme which has attracted only casual comments and evaluative statements that are not significant enough for development into a theoretical framework. The component in question, is arguably the most neglected in research scholarship. In evaluating the model, this paper benchmarked it with the University of Columbia Teachers College model. This paper is specifically aimed at articulating the importance of pre-service student teaching to teacher education, .examining variants of and best practices in student teaching, evaluating the Lagos model of student teaching, exposing how the Lagos model of student teaching compare between Departments and across three academic sessions, and offering the Lagos model of student teaching enrichment propositions on replicable best practices in the Columbia model. Pursuant to these objectives the study is guided by five corresponding research questions namely. What is the importance of pre-service student teaching to teacher education?; What are dominant variants of student teaching?; What is the nature of the Lagos model of student teaching?; How does the Lagos model of student teaching compare between Departments and across three sessions?; and, How can best practices in the Columbia model of student teaching translate into an enrichment framework for the Lagos model?

#### **METHOD**

This consists of the research design, population sample, adoption of instruments and data processing. The Design adopted for this research is a comparative study of existing phenomenon - that is the practice of teaching is carried out in the sampled locations. Marshall and Rossman (2006) adduced that it is not uncommon to in qualitative studies to combine several data collection and analysis methods over the course of the study. The population for the study comprised all student teachers of the University of Lagos, as well as their cooperating teachers and Faculty-based supervisors for the period from the 2008/2009 academic session to the 2010/2011 academic session. From this population, a total of 541 trainees form the study sample Employing the analytic method, the study conducts a critical analysis of the various features of the student teaching sub-components of the two models which are also subjected to a comparative evaluation (Kosterek, 2016).

The study thereafter employs curriculum criticism and creative synthesis in enriching the Lagos model with appropriate ingredients from the Columbia model (Kliebard, 1992). Creative synthesis plays a methodological role in making a synthetic whole through enrichment (Murphy, 2009: 105). The Comprehensive School Reform Classroom Observation System (CSRCOS) developed by Good et al (2008) and adopted by this study involved 10-minute observation intervals during the first 5 minutes of which coders observe classroom activities and write down their observations. The next 3 minutes are devoted to reflection and refinement of the classroom activities whereas the last 2 minutes is devoted to observers' scoring of their observation interval. This study also adopt Good et al (2008)'s system of assigning observers randomly to classrooms, on the ratio of one observer for each classroom observation.

#### A. The Columbia Model of Student Teaching

Student teaching is a major component of the professional education of trainees in the Columbia model of teacher education. Infact, all aspects of the entire teacher preparation programme are designed to facilitate the acquisition of pedagogical knowledge and development of pedagogical skills in the teacher trainee. That explains why coursework related directly to student teaching accounts for as much as 25% of

the total points for degree requirements for graduation. The much importance attached to student teaching is also reflected in the fact that all student teachers are required to be in school as for two full semesters, sequel to their mandatory registration for a stipulated number of full regiment of courses associated with student teaching experiences. The mandatory course and the codes and number of points are as follows:

- 1. A & HW 4729 Fall observation in one's major specialization (opts)
- 2. A & HW 4530 Fall seminar for student teaching (2pts)
- 3. A & HW 4730 Fall student teaching placement (3pts)
- 4. A & HW 4730 Spring semester for student teaching (3pts)
- 5. A & HW 4730 Spring student Teaching Placement (3pts)
- 6. A & HW 550 Research Paper in major specialization portfolio (3pts)

It is worthy of mention that most of the student teachers undertake highly demanding placement at schools that require their attendance for full school day and the entire duration of an academic session. Others, who are not on such placements, do a significant amount of classroom observation during the spring semester. In such cases, student teachers are normally required to teach a minimum of two classes a day in their teaching placement. Student teachers' involvement in all these pedagogical practices characteristically enable them to log hundreds of hours in classrooms it various locations in New York City and its environs.

It is remarkable that Teachers College, Columbia has a good formula for tracking the number of observations and teaching hour through the instrumentality of both the student teaching Grid of Hours and the Student Teaching Record of Hours. The latter is meant to gather information from the student teacher, his current semester, course code, his school of placement, cooperating teacher, Teachers College field supervisor, student teaching placement coordinator or seminar instructor, while the former normally contains specific details of the student teacher's performance. It contains details of the student's actual teaching hours, and indicates when he has interacted with students in any capacity, of which examples include instruction of students in a full-time classroom teaching situation, tutoring of a small groups or individuals, laboratory and studio work with students, or supervision of homeroom and study halls. It is the desire of the designers of the student teaching package under discussion that the insights gathered in the field will assist student teachers in developing a personal teaching style based on self-reflection and feedback from cooperating teachers, supervisors, and students (p. 5).

#### B. The Lagos Model of Student Teaching

The Faculty of Education University of Lagos had started off as a College of Education in 1967' having provided for the teaching of both professional education discipline and content teaching subjects and having "inheritated the National Certificate in Education (NCE) programme" from the Teachers' College. The Faculty mounted programmes for the NCE, Bachelor's degree and postgraduate degrees in Education" (Faculty Prospective, 2009-2010).

The year 1975 witnessed the dissolution of the College and the emergence in its place of the Faculty of Education and an Institute of Education. The vision and mission of the Faculty are the preparation of "highly motivated, conscientious, efficient, and effective classroom teachers from all level of Nigerian's educational system" (p.2).

Student teaching, as noted above, is a mandatory exercise in the Lagos model of teacher education. It currently runs for a period of 6 to12 weeks during which student teachers are expected to participate in teaching under close monitoring by a teacher in a cooperating school. However, there are no clearly stipulated eligibility requirements for student teaching other than being in the final year of one's training. That explains why it does not really matter whether the student teacher has passed appropriate courses in teaching theory (FED 202), or not, despite the fact that these courses and others in the professional component of teacher education are ultimately aimed at preparing student teachers for the practicum.

Yet, the Lagos model attaches importance to student teaching supervision as lecturers are posted to various schools for the purpose of assessing students' performance during the period. Yet there are no eligibility requirements for teaching practice supervision. In some cases, student teaching is assessed, supervised, or managed by lecturers with little or no pedagogical knowledge and skills and this has serious implications for the quality of teachers produced by this model. Afterall, the professional outcome of

having such a professional education component as student teaching handled by both trained and untrained teacher trainers at the university of Lagos, can be accurately predicted.

#### RESULT AND DISCUSSION

An evaluation of teaching practice results for the sessions of 2012-2014 were done with reference to the six departments of the faculty of education in Lagos.

#### A. 2008/2009 Session

There is no significant differences in the performances of trainees across the six departments in 2008/2009 sessions

From Table 1, the F-statistic (2.908) is significant (p-value = 0.013), indicating that we reject the null hypothesis. Thus, there is significant evidence that the mean scores of the students' in these six Departments for the 2008/2009 session are not equal.

**Table 1** Differences in Scores across Departments in 2008/2009

	Sum of Squares	De- gree of free- dom	Mean Square	F	Sig.
Between Groups	531.891	5	106.378	2.908	.013
Within Groups	19568.279	535	36.576		
Total	20100.170	540			

\*Significance is at alpha level of 0.05.

Having established that differences exist between the mean scores of students across these Departments, Table 2 examines the extent of difference between the mean scores of Education Admin and the other Departments in a pair-wise format. From the significance values, it is observed that there is significant evidence (at a pvalue of 0.046, though not very strong evidence) to infer that the mean score of Education Admin students is better than that of Adult Education students by 5.61. There is no other significant evidence to conclude that differences exist between the mean scores of Education Admin students and each of the remaining Departments.

As shown in Table 3, there is confirmation that there is significant evidence (at a p-value of 0.046) to infer that the mean score of Adult Education students is lesser than that of Education

Table 2 Tukey's Multiple Comparisons for Education Admin and other Departments

	(I) Department	(J) Department	Mean Difference	Std. Error	Sig.	//	nfidence rval
			(I-J)			Lower Bound	Upper Bound
		Adult Education	5.61336*	1.94322	0.046	0.0556	11.1711
		HKHE	0.50642	1.18684	0.998	-2.888	3.9009
		Science and Tech	-0.16986	1.19898	1	-3.599	3.2593
Tukey HSD	Education Admin	Arts and Social Sciences	0.53989	1.06139	0.996	-2.4958	3.5755
		Guidance and Counselling	1.8192	1.1407	0.602	-1.4433	5.0817
		Guidance and Counselling	1.8192	1.1407	0.602	-1.4433	5.0817

<sup>\*</sup>Significance is at alpha level of 0.05.

Table 3 General Description of the Mean Scores for Departments in 2008/2009

	Freq.	Mean	Std. De- viation	Std. Er- ror	95% Confidence Interval for Mean		Minimum Scores	Maximum Scores
					Lower Bound	Upper Bound	-	
Education Admin	38	57.9211	6.18359	1.00311	55.8886	59.9535	43	68
Adult Education	13	52.3077	10.10268	2.80198	46.2027	58.4127	30	65
HKHE	82	57.4146	5.70456	0.62996	56.1612	58.6681	40	66
Science and Tech	77	58.0909	5.00837	0.57076	56.9541	59.2277	42	68
Arts and Social Sciences	223	57.3812	5.90259	0.39527	56.6022	58.1601	33	68
Guidance and Counselling	108	56.1019	6.5936	0.63447	54.8441	57.3596	34	66
Total	541	57.1479	6.10103	0.2623	56.6326	57.6631	30	68

Admin students by 5.61. Also, there is significant evidence (at a p-value = 0.019) to agree that the mean score of Adult Education Students is lesser than that of Science and Tech students by 5.78. In the same vein, there is significant evidence (at a p-value = 0.04) to conclude that the mean score of Adult Education Students is lesser than that of Arts and Social Sciences students by 5.07. There is no other significant evidence to conclude that differences exist between the mean scores of Adult Education students and each of the remaining Departments.

Generally, for 2008/2009 session, there is significant evidence (F = 2.908, at p-value = 0.013) to conclude that there are differences between the mean scores of the students in the six selected Departments. In terms of pair-wise performance across these Departments, as revealed from the Tukey's post-hoc test, the mean score of Education Admin students is better than that of Adult Education students by 5.61, the mean score of Science & Tech students is better than that of Adult Education students by 5.78, and the

mean score of Arts and Social Sciences students is better than that of Adult Education students by 5.07. There was no other significant revelation for the out-performance of any other Department pair-wise.

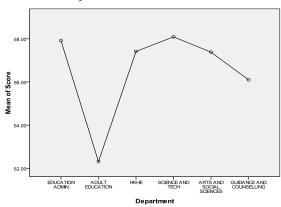
Therefore, from Table 3, it can now be said that there is significant evidence to infer that the students from Science and Tech had best performance with mean score of ( $58.09 \pm 5.008$ ), followed by Education Admin students ( $57.92 \pm 6.184$ ), HKHE students ( $57.41 \pm 5.705$ ), students of Arts and Social Sciences ( $57.38 \pm 5.903$ ), Guidance and Counselling ( $56.10 \pm 6.594$ ), then, Adult Education Students had least performance ( $52.31 \pm 10.103$ ).

Pictorially, Figure 1 shows the mean plot of the mean of the scores for the various selected Departments for 2008/2009 session.

#### B. 2009/2010 Session

As shown in Table 4, the F-statistic (2.978) is significant (p-value = 0.011), showing that we

Figure 1 Mean Scores for Selected Departments C. 2010/2011 Session for 2008/2009 Session.



reject the null hypothesis. Thus, there is significant evidence that the mean scores of the students' in these six Departments for the 2009/2010 session are not equal.

Table 4 Anova for 2009/2010 Scores across Departments

	Sum of Squares	De- gree of free- dom	Mean Square	F	Sig.
Be- tween Groups	608.195	5	121.639	2.978	.011
Within Groups	37170.202	910	40.846		
Total	37778.397	915			

<sup>\*</sup>Significance is at alpha level of 0.05.

Table 7 evaluates the extent of difference between the mean scores of Education Admin and the other Departments in a pair-wise approach. There is no significant evidence to infer that differences exist between the mean scores of Education Admin students and each of the rest of the Departments.

Therefore, from Table 6, it can now be said that there is significant evidence to infer that the students from Science and Tech had best performance with mean score of  $(60.43 \pm 6.188)$ , followed by Guidance and Counselling (60.35 ± 6.692), Adult Education (59.45 ± 4.295), HKHE students (58.78 ± 6.374), Education Admin students ( $58.65 \pm 6.553$ ), then, students of Arts and Social Sciences had least performance (58.51 ± 6.396). Graphically, Figure 2 shows the mean plot of the mean of the scores for the various selected Departments for 2009/2010 session.

Table 5 presents that the F-statistic (2.959) is significant (p-value = 0.012), indicating that we reject the null hypothesis. Therefore, there is significant evidence that the mean scores of the students' in these six Departments for the 2010/2011 session are not equal.

Table 5 Anova for 2010/2011 Scores across Departments

	Sum of Squares	De- gree of free- dom	Mean Square	F	Sig.
Be- tween Groups	425.819	5	85.164	2.959	.012
Within Groups	18852.790	655	28.783		
Total	19278.608	66o			

<sup>\*</sup>Significance is at alpha level of 0.05.

Table 7 shows the extent of the differences between the mean score of Education Admin and the other Departments in a pair-wise approach. There is significant evidence (at a pvalue of 0.038) to conclude that the mean score of Education Admin students is lesser than that of Science & Tech students by 2.38. Then, there is no significant evidence to infer that differences exist between the mean scores of Education Admin students and each of the remaining Departments.

There is no significant evidence to infer that differences exist between the mean scores of Adult Education students and each of the rest of the Departments (See Table 9.). In all, for 2010/2011 session, there is significant evidence (F = 2.959, at p-value = 0.012) to conclude that there are differences between the mean scores of the students in the six selected Departments. For the pair-wise performance across these Departments, as revealed from the Tukey's post-hoc test, the mean score of Science & Tech students is bigger than that of Education Admin students by 2.38. Then, there was no other significant revelation for the out-performance of any other Department pair-wise.

Therefore, from Table 8, it can now be seen that there is significant evidence to infer that the students from Adult Education had best performance with mean score of  $(59.95 \pm 4.376)$ , followed by Science and Tech (59.67  $\pm$  4.789),

### **S.A. Rufai & B. Musa**/Indonesian Journal of Curriculum and Educational Technology Studies 9(2) (2021): 63-76

Table 6 General Description of the Mean Scores for Departments in 2009/2010

	Freq.	Mean	Std. De- viation	Std. Er- ror	95% Confidence Interval for Mean		Minimum Scores	Maximum Scores
					Lower Bound	Upper Bound	_	
Education Admin	139	58.6475	6.55287	0.55581	57.5485	59.7465	40	69
Adult Education	22	59.4545	4.29537	0.91578	57.5501	61.359	50	65
HKHE	148	58.7838	6.37442	0.52397	57.7483	59.8193	40	69
Science and tech	133	60.4286	6.18807	0.53657	59.3672	61.49	40	69
Arts and Social Sciences	339	58.5074	6.39636	0.3474	57.824	59.1907	40	68
Guidance and Counselling	135	60.3481	6.69185	0.57594	59.209	61.4873	40	69
Total	916	59.1463	6.42556	0.21231	58.7296	59.563	40	69

Table 7 Tukey's Multiple Comparisons for Education Admin and other Departments

	(I) Department	(J) Department	Mean Difference	Std. Error	Sig.	95% Confidence Interval	
			(I-J)			Lower Bound	Upper Bound
		Adult education	-2.66031	1.10695	0.157	-5.8242	0.5036
		HKHE	-1.75076	1.31248	0.766	-5.5021	2.0005
	Education	Science and Tech	-2.37576*	0.80298	0.038	-4.6708	-0.0807
Tukey HSD	Admin	Arts and Social Sciences	-1.34944	0.80596	0.549	-3.653	0.9541
		Guidance and Counselling	-0.56435	0.94976	0.991	-3.2789	2.1502

<sup>\*</sup>Significance is at alpha level of 0.05.

Table 8 General Description of the Mean Scores for Departments in 2010/2011

	Frequency	Mean	Std. De- viation	Std. Er- ror	95% Confidence Interval for Mean		Minimum Scores	Maximum Scores
					Lower Bound	Upper Bound		
Education Admin	55	57.2909	6.84666	.92320	55.4400	59.1418	30.00	68.00
Adult Education	41	59.9512	4.37579	.68338	58.5700	61.3324	50.00	67.00
HKHE	24	59.0417	4.26797	.87120	57.2395	60.8439	45.00	66.00
Science and tech	237	59.6667	4.78905	.31108	59.0538	60.2795	41.00	69.00
Arts & Social Sciences	228	58.6404	5.56044	.36825	57.9147	59.3660	30.00	70.00
Guidance & Counselling	76	57.8553	6.00601	.68894	56.4828	59.2277	37.00	67.00
Total	661	58.9017	5.40463	.21022	58.4889	59.3144	30.00	70.00

HKHE students (59.04  $\pm$  4.268), Arts and Social Sciences (58.64  $\pm$  5.560), Guidance and Counselling (57.86  $\pm$  6.006), with Education Admin students having least performance (57.29  $\pm$  6.847). Graphically, figure 3 shows the mean plot of the mean of the scores for the various selected Departments for 2010/2011 session.

#### D. Comparing All the Sessions

Table 9 portrays that the F-statistic (12.095) is highly significant (p-value = 0.000), indicating that we reject the null hypothesis. Therefore, there is significant evidence that the mean scores of the students in these selected sessions are not equal.

**Figure 2** Mean Scores for Selected Departments for 2009/2010 Session.

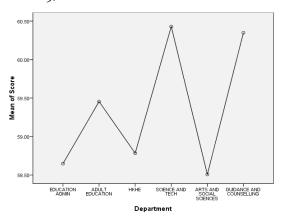


Table 10 shows the extent of the differences between the mean scores of students across the three selected sessions in a pair-wise approach. There is a very high significant evidence (at a p-value of 0.000) to conclude that the mean score of students in the 2008/2009 session is lesser than that of 2009/2010 by 1.54 and also lesser than that of 2010/2011 session by 1.35.

Table 9 Anova for the Scores across Sessions

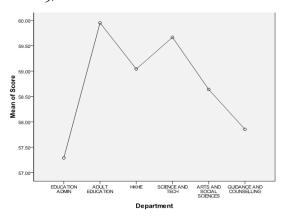
	Sum of Squares	De- gree of free- dom	Mean Square	F	Sig.
Be- tween Groups	871.947	2	435-974	12.095	.000
Within Groups	76238.491	2115	36.047		
Total	77110.439	2117			

For the 2009/2010 pair-wise comparisons, there is confirmation that students mean score in 2009/2010 session is better than that of 2008/2009 session by 1.54 (at p-value =0.000). However, there is no significant evidence (at p-value = 0.799) to infer that the means scores of students for 2009/2010 and 2010/2011 sessions are any different.

Similarly, for the 2010/2011 pair-wise comparisons, there is confirmation that students mean score in 2010/2011 session is better than that of 2008/2009 session by 1.35 (at p-value =0.000). Also, there is confirmation that there is no significant evidence (at p-value = 0.799) to infer that the means scores of students for 2009/2010 and 2010/2011 sessions are any different.

Therefore, for 2008/2009, 2009/2010 and 2010/2011 sessions, there is overwhelming signi-

**Figure 3** Mean Scores for Selected Departments for 2009/2010 Session.



ficant evidence (F = 12.095, at p-value = 0.000) to conclude that there are differences between the mean scores of the students in these three selected sessions. Judging by the pair-wise comparisons of performances across these sessions, as revealed from the Tukey's post-hoc test, the mean score of 2009/2010 session is bigger than that of 2008/2009 by 1.54 while that of 2010/2011 is bigger than the same 2008/2009 by 1.35. Then, there was no other significant revelation for the out-performance of either of 2009/2010 and 2010/2011 sessions pair-wise.

Hence, from Table 11, it is now obvious that there is significant evidence to infer that 2009/2010 session witnessed the best performance with mean score of (59.10  $\pm$  6.458), followed by 2010/2011 session (58.90  $\pm$  5.405), with 2008/2009 session having least performance (57.56  $\pm$  5.899). Figure 4 shows the mean plot of the mean of the scores for the three selected sessions (2008/2009, 2009/2010 and 2010/2011).

## E. Enriching the Lagos Model of Student Teaching with the Columbia Model

It has been noted earlier that the Lagos model of student teaching has as three of its cardinal objectives promotion of "high standards of teaching through mandatory participation in practical teaching by all student teachers". It is also noted that the exercise runs for a period of 6 to 12 weeks during which student teachers work with cooperating teachers and get assessed by their lecturers who are posted to such schools for supervision which is conducted once or twice. It is interesting to note that there is no other eligibility requirement for student posting for the exercise other than being in a final year as students who have not passed courses in the

Table 10 Tukey's Multiple Comparisons for Sessions

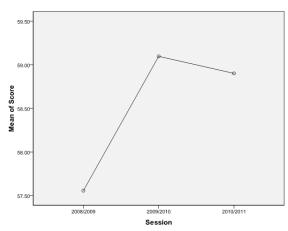
	(I) Department	(J) Department	Mean Difference	Std. Error	Sig.		nfidence rval
		(I-J)				Lower Bound	Upper Bound
	2008/2009	2009/2010	-1.54078*	0.32555	0.000	-2.3043	-0.7773
	2006/2009	2010/2011	-1.34529 <sup>*</sup>	0.34808	0.000	-2.1617	-0.5289
Tukey HSD	2009/2010	2008/2009	1.54078*	0.32555	0.000	0.7773	2.3043
	2009/2010	2010/2011	0.1955	0.30641	0.799	-0.5231	0.9141
		2008/2009	1.34529*	0.34808	0.000	0.5289	2.1617
	2010/2011	2009/2010	-0.1955	0.30641	0.799	-0.9141	0.5231

<sup>\*</sup>Significance is at alpha level of 0.05.

Table 11 General Description of the Mean Scores for Departments in 2010/2011

	Frequency	Mean	Std. De- viation	Std. Er- ror	95% Confidence Interval for Mean		Minimum Scores	Maximum Scores
					Lower Bound	Upper Bound	-	
2008/2009	541	57.5564	5.89939	.25363	57.0581	58.0546	30.00	68.00
2009/2010	916	59.0972	6.45847	.21339	58.6784	59.5160	40.00	69.00
2010/2011	661	58.9017	5.40463	.21022	58.4889	59.3144	30.00	70.00
Total	2118	58.6426	6.03526	.13114	58.3854	58.8998	30.00	70.00

Figure 4 Mean Scores across 2008/2009, 2009/2010 and 2010/2011 Sessions.



principles of teaching and preparation for teaching practice are all posted to schools. A model with some of such characteristics as enumerated above, undoubtedly deserves an enrichment or ameliorative attention based on best practices from a stronger or more recognized model.

It is not a bad idea to have all aspects of the entire teacher preparation programme in Lagos designed and channeled towards the facilitation of the acquisition of pedagogical knowledge and development of pedagogical skills in the teacher trainee, as is the case in the Columbia model coursework related directly to student teaching accounts for as much as 25% of the total points for degree requirements for graduation. This recommendation is consistent with the line of argument pursued by Haigh and Ell (2014), Kiggundu and Nayimuli (2009), Genevieve (2017), and Koksal and Genc (2019) with regard to the fact that preparation for student teaching is the essence of teacher education.

Another area of possible enrichment for the Lagos model is that the Columbia model requires all student teachers to be in school as for two full semesters, "seguel to their mandatory registration for a stipulated number of full regiment of courses associated with student teaching experiences". It is remarkable that a total of 14 points is devoted to preparation for student teaching in the Columbia model while the Lagos model devotes just six units to such an important subcomponent. The six units cover principles of teaching, preparation for teaching practice and teaching in one's specialized area on a ratio of two units per course. The fact that these courses are not prerequisites to student teaching in the Lagos model whereas a minimum of fourteen points is associated with student teaching in the Columbia model, explains the strengths of the two models.

Also of immense value is that the Columbia model requires the attendance of student te-

achers for full school day for the entire duration of an academic session. Conversely, the Lagos model operates its teaching practice for a period of 6 to 12 weeks and from this researcher's experience as a lecturer and student teaching supervisor for the period covered by this study, one may not be sure that student teachers are always in school, working with their cooperative teachers and participating actively in the programmes, though there are student teachers who do due diligence in this regard. It is equally remarkable that in the Columbia model, students who are not on such placements as described above, do a significant amount of classroom observation during the spring semester when they are normally required to teach a minimum of two classes a day in their teaching placement. The implication of this field experience is that the student teachers' involvement in all these pedagogical practices characteristically enable them to log hundreds of hours in classrooms it various locations in New York City and its environs. This indeed is one of the remarkable strengths of the Columbia model that is worth replication and contextualization in the Lagos model. This recommendation is in consonance with the practice of embracing standards required for qualified teacher status, as enunciated by Mutlu (2014), Agudo (2016), Geneveive (2017) and Koksal and Genc (2019).

Another replicable strength of the Columbia model is its strategy for tracking the number of observations and teaching hour through the instrumentality of both the student teaching Grid of Hours and the Student Teaching Record of Hours. While the former contains details of the student teacher's performance, the latter is used to gather information on the student teacher and his activities with regard to his current semester, course code, his school of placement, cooperating teacher, Teachers College field supervisor, student teaching placement coordinator or seminar instructor. Replicating this Columbia strategy for the Lagos model has the potential to facilitate efficiency in obtaining information concerning the student's actual teaching hours, timelines of his interaction with students whether in the form of a full-time classroom teaching situation, or tutoring of a small groups or individuals, laboratory and studio work with students, or supervision of homeroom and study halls. All these may not be fully replicable but the most replicable of them for the Lagos context may be determined for integration. The importance of pedagogical practices involved in this regard is underscored by Halloway (2001), Marais and Meier (2004), Shumba and Shumba (2007), Kiggundu and Nayimuli (2009), and Gursoy et al (2013) who emphasise the need for close monitoring and mentorship of the student teachers during field experience.

It may also be a kind of improvement for the Lagos model to pay more attention to formulation of a template for gathering accurate information on the student's teaching support and observation hours like conferencing with or observing the cooperating teacher, participating in curriculum planning committee meetings, attending staff meetings, sitting in on parent-teacher conference and others, all of which are part of the strengths of the Columbia model. This has the potential to strengthen the student teaching sub-component through accurate capturing of the total number of times student teachers were observed by the Teachers College supervisor. The implication of this is that the student teacher is normally supervised several times in the Columbia model, as against once, twice or, in rare cases, thrice that the present writer was accustomed to supervising his student teachers in the Lagos model. The importance of repeated assessment of student teachers is well captured in the contemporary scholarship of teaching (Gebhard, 2009); Hasher, et al. (2004; Koc, 2012; and Koksal & Genc, 2019). The most unpardonable weakness of the Lagos model at the time under review was lack of regard for professionalism as both professional teacher educators and lecturers in the content areas with no formal training in education were allowed to supervise student teachers. This disregard for professionalism attained its peak when a non-education specialist was appointed Teaching Practice Coordinator for the Faculty of Education during the period from 2010-2014. It is derivable from the foregoing that what constitutes a weakness in the Lagos model, is a replicable strength in the Columbia model.

#### CONCLUSION

This paper has attempted to assess the student teaching model of the University of Lagos for the purpose of enriching it with some of the pedagogical provisions of the Columbia model which is generally recognized as offering one of the best practices in student teaching. The paper analysed variants of teaching practice and enumerated their implications. It assessed the performance of students on practical teaching across three consecutive academic sessions as

well as across the six Departments that constitute the Faculty of Education. It identified some of the strengths and deficiencies that deserve attention in any attempt to effectively strengthen the Lagos model. Results reveal that there were disparities in trainees' scores by their Departments and over a period of three academic sessions. These disparities can be explained by the mode and type of field experience that student teachers were exposed to.

#### REFERENCES

- Adrews, L. O. (1964). *Students Teaching*. New York: Centre for Applied Research in Education.
- Agudo, J. M. Z. (2016) What Type of Feedback do Student Teachers Expect from their School Mentors during Practicum Experience? The Case of Spanish EFL Student Teachers. *Australian Journal of Teacher Education*, 41(5), pp. 36-51.
- Appleberry, M. (1976). What did you learn for student teaching? *Instructor*, 85(6), 38-40.
- Beck, C. & Kosnik, C. (2002). Components of a Good Practiculum Placement: Pre-Service Teacher Perceptions. *Teacher Education Quarterly*, 29, pp. 81-98.
- Berliner, D. C. (1988). *The development of expertise in pedagogy*. New Orleans, LA: American Association of Colleges for Teacher Education.
- Borman, G. D., Hewes, G. M., Ovreman, L. T., & Brown, S. (2002). *Comprehensive school reform and student achievement: A metal-analysis (Technical Report No. 59)*. Baltimore: Centre for Research on the Education of Students placed at risk.
- Buchner, J. & Hay, D. (1999). Learning to teach: a framework for teacher induction. *South African Journal of Education*. 19: pp. 320-326.
- Caroline, H. W., Thomas, L. G., & McCaslin, M. (2008).

  Comprehensive School Reform, International Practice throughout a school year: The Role of School matter: Grade level, and Time of Year, *Teachers College Record*. 110(11).
- Castle, S., Fox, R. K. & Souder, K. (2006). Do professional development schools (PDSs) make a difference? A comparative study of PDSs and non-PDS teacher candidates. *Journal of Teacher Education*, 57(1), pp. 65-80.
- Conant, J. B. (1963). *The Education of American Teachers*. New York: McGraw Hill
- Coskun, A. (2013). Stress in English Language Teaching Practicum: the views of all stakeholders. Hacettepe University Journal of Education, 28(3), pp. 97-110.
- Denton, J. (1982). Early field experience influence on performance in subsequent Coursework. *Journal of Teacher Education*, 33(2), pp. 19-23.
- Finkeskin, B. (1982). Technicians, mandaring and witnesses: Searching for professional understanding. *Journal of Teacher Education*. 33(3),

- pp. 25-27.
- Fisher, C. W. & Berliner, D.C. (1986). Perspectives on Instructional Time. *Instructional Science*. 15(2) 169-173.
- Gebhard, J. G. (2009). The practicum. In Burns, A. & Richards, J.C. (Eds.), *The Cambridge guide to second language teacher education* (pp. 250-258). New York: Cambridge University.
- Genevieve, A. (2017). The Role of Teaching Practice in Teacher Education Programmes: Designing Framework for Best Practice. *Global Journal of Educational Research*. *16*: 101-110.
- Glaser, R. (1984). Education And thinking. The role of knowledge. *American Psychologist*, 39(2) pp. 93-104.
- Good, T. L. (2008). In the midst of Comprehensive school reform: principals perspectives. *Teachers College Record*, 110(11).
- Goodnough, K., Osmond, P., Dibbon, D., Glassman, M. & Stephens, K. (2009). Exploring a triad model of student teaching: Preservice teacher and cooperating teacher perceptions. *Teaching* and *Teacher Education*, 23(2) pp. 285-296.
- Gorsoy, E., Bulunaz, N., Goktalay, S.B., & Kesner, J. (2013). Clinical Supervision Model to Improve Supervisory Skills of Cooperating Teachers and University Supervisors during Teaching Practice. *Hacettepe University Journal of the Faculty of Pharmacy. 1*: pp. 191-203.
- Guyton, E. (1986). *Incentives at the summer working with student teachers*. Paper presented at the summer workshop of the Association of Teacher Education, Flagstaff, A2.
- Guyton, E. (1987). Working with student teachers: Incentives, problems and advantages. *Professional Educator*, 10(1), pp. 21-28.
- Guyton, E. & McIntyre, D. J. (1990). Student Teaching and School Experience. In W.R. Houston (Ed.), Handbook of Research on Teacher Education (pp. 514-534). New York: Macmillan.
- Haigh, M. & Ell, F. (2014). Judging teacher candidates' readiness to teach. *Teaching and Teacher Education*, 34, pp. 1-11.
- Halloway, J. (2001). The benefits of mentoring. *Educational Leadership*, 58: 85-86.
- Hascher, T., Cocard, Y., & Moser, P. (2004). Forget about theory-practice is all? Student Teachers' learning in practicum. *Teachers and Teaching: Theory and Practice, 10,* pp. 623-637.
- Iqbal, M.Z. (1996). Teacher Training Institute of Policy Studies. Islamabad, Pakistan.
- Johnson, W.D. 91968). An Analysis of Teacher Performance Appraisal Scale. University of Illinois, February 1968.
- Kiggundu, E & Nayimuli, S. (2009). Teaching practice: a make-or-break phase for student teachers. South African Journal of Education. 29: pp. 345-358.
- Kiggundu, E. (2007). Teaching Practice in the Greater Vaal Triangle Area: The Student Teachers' Experience. *Journal of College Teaching and Learning*, 4: pp. 25-35.

- Killian, J. E. & McIntyre D. J. (1986). Quality in the early field experience's: A product of grade level and cooperating teachers, training. *Teaching and Teacher Education*, 2(4), pp. 367-376
- Killian, J. E. & McIntyre D. J. (1988), Grade level as a factor in participation during early field experiences. *Journal of Teacher Education*, 39(2), pp. 36-41.
- Kok, E.M. 2012). Idiographic roles of cooperating teachers as mentors in preservice distance teacher education. *Teaching and Teacher Education*, 28(6), pp. 818-826.
- Koksal, D. & Genc, G. (2019). Learning while teaching: Student teachers' reflections on their teaching practicum. *Journal of Language and Linguistic Studies*. 15(30), pp. 895-913.
- Kramer, M. (1973). *Reality Shock: Why Nurses Leave Nursing*. C.V. Mosby Company, St. Louis Larsen
- Larabee, N. (1992). Power, Knowledge and the Rationalization of Teaching: A genealogy of the movement to professionalize teaching. *Harvard Educational Review.* 62(2) pp. 123-154.
- Shumba, C. & Shumba, J. (2007). Mentorship for Students on Teaching Practice in Zimbabwe: Are student teachers getting a raw deal? South African Journal of Higher Education, 21: pp. 296-307.
- Marais, P. & Meier, C. (2004). Hear our voices: student teachers' experience during practical teaching. *African Education Review. 1*: pp. 220-233.
- May, M.H., Cheng, A.y.n., Cheng, S.Y.F.T. (2010). Closing the gap between the theory and practice of teaching. Implications for teacher education programmes in Hong Kong. *Journal of Education for Teaching*. 36(1), pp. 94-104.
- McIntyre, D. (1983). Microteaching Behaviour and Assessments of Teaching in Schools. Cambridge: Faculty of Education.
- McIntyre D. J. & Guyton, E (1990). 'Student Teaching and School Experiences'. In Houston, W. R (Ed) *Handbook of research on Teacher Education*. London: Macmillan.
- Meyers, S. & Saul, J. (1974). *Practical Teaching*. New York: Macmillan.
- Mutlu, G. (2014). Challenges in Practicum. Pre-service and cooperating teachers' voices. *Journal of Education and Practice*. 36(5), pp. 1-7.
- Ngidi, D. M. & Sibaya, P. T. (2003). Student teacher anxiety related to practice teaching. South African Journal of Education. 23: pp. 18-23.

- Nguyen, H. T. M., Baldauf Jr., R. B. (2010). Effective Peer Monitoring for EFL Pre-service Teachers' Instructional Practicum Practice. *The Asian EFL Journal Quarterly*, 12(13) 40-61.
- Orland-Barak, L. & Yinon, H. (2007). When theory meets practice: What student teachers learn from guided reflection on their own classroom discourse. *Teaching and Teacher Education*. 23, pp. 957-969.
- Paker, T. (2011). Student teacher anxiety related to the teaching practicum. *Eurasian Journal of Educational Research*, 42, pp. 207-224.
- Perry, R. 2004). Teaching practice for early childhood: A guide for students. New York: Routledge.
- Quick, G. & Sieborger, R. (2005). What matters in practice teaching? The perception of Schools and students. *South African Journal of Education*, 25: 1-4.
- Rosenshine, B. (1985). Direct Instruction. In T. Husen & T.N. Postiethwaite (Eds.), *International Encyclopedia of Education* (Vol. 1-10, Vol. 3). Oxford: Pergamon Press.
- Rosenzajn, R. & Yarden, A. (2014). Expansion of biology teachers' pedagogical content knowledge (PCK) during a long-term professional development program. *Research in Science Education*, 44(1), pp. 189-213.
- Seferoglu, G. (2006). Teacher Candidates' reflection on some components of preservice English Teacher education programme in Turkey. *Journal of Education for Teaching*. 32(4). pp. 369-379.
- Shumba, C. & Shumba, J. (2007). Mentorship for Students on Teaching Practice in Zimbabwe: Are student teachers getting a raw deal? *South African Journal of Higher Education*, *21*: pp. 296-307.
- Stevick, E. (1980). *Teaching Language: A Way and Ways.* Rowley, MA: Newbury House.
- Thew, T. (1994). "Working on erendipity: An Approach to Teaching Legal Research for Practice". Australian Law Librarian. 2(3) pp. 127-133.
- Tozer, S., Thoma, H. Anderson & Bonnie, & B. Ambruster. (Eds.). (1991). Foundational Studies in Teacher Education: A Reexamination. New York: Teachers College Press.
- Wenglinsky, H. (2004). How Schools matter: The link between teacher classroom practices and student reading comprehension: An exploratory study. *Education Policy Analysis*. 12(64).