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Teachers Evaluation of Concurrent and Consecutive Teacher Education Models in South-west, Nigeria

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Abstract

The provision of quality teachers is central to a nation's education system. This study evaluated two universities, based on teacher education curriculum models (concurrent and consecutive) using Stake's Antecedents-Transactions-Outcomes (ATO) evaluation model, on the subject content and education components. The study was a descriptive type using a survey method. The sample comprised 514 teachers from selected secondary schools (188 consecutive and 326 concurrent), Research instrument was the Teachers Questionnaire on Evaluation of Models of Teacher Education Curricula (TQEMTEC). The results indicated that teachers rated the consecutive teacher education curriculum model to be better. On the improvements needed, teacher educators suggested the inclusion of special education and more subject contents area for students enrolled in the concurrent, and an increase in the number of years for the pedagogical and practical aspects of the consecutive models. Results of the hypotheses indicated a significant difference between the views of teachers exposed to the concurrent and those exposed to consecutive teacher education models on subject content, (t =2.47; df=512; Sig= 0.014< p 0.05). Based on the findings, a recommendation was made that the two models of teacher education should be further strengthened through improved subject content, particularly for the concurrent teacher education program.

Keywords: concurrent, consecutive, curriculum models, evaluation models, teacher evaluation

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1. Introduction

The quality of teachers in any educational system determines the educational objectives' level. The structure, curricula, and contents of teacher education do vary from country to country. An individual who wishes to be a professional teacher must pass through the teacher education program. Teacher education is an aspect of education that deals with acquiring practical and applied skills in the teaching job (Gaba & Magama, 2016). It is a form of education that is appropriately planned, systematically tailored, and used for prospective teachers. In addition to the cultivation and acquisition of knowledge and skills, the program also prepares teachers to constantly review their attitudes and beliefs about learners and learning processes (the Federal Republic of Nigeria, 2013, Zuzovsky & Donitsa-Schmidt, 2017).

Good teacher education is imperative because it helps ascertain teachers' quality and effectiveness. Teaching is complex and demanding intellectual work that cannot be accomplished without adequate preparation. Teacher education guarantees that teachers are and remain proficient and ensures that they stay inspired through time (Musset, 2010). Teacher education's structure, curricula, and contents determine teachers' effecti-

veness and efficiency in the teaching profession. Teacher education modes are the different forms in which an individual who wishes to become a teacher can be certified.

The teaching profession entails developing knowledge and competencies developed in teacher education institutions. The initial teacher education program refers to professional and academic education programs taken to become eligible and certified to teach at primary or secondary schools. Initial teacher education and training are essential for the quality of teaching staff. Initial teacher education is a starting point and the foundation for future continuous professional education. Initial teacher education can be concurrent or consecutive. In the concurrent initial teacher education model, the students combine their undergraduate degree studies involving subject-matter content, pedagogy, and other education courses. The consecutive teacher education model is taken by candidates who have already completed or acquired a university degree in relevant arts, science, or social sciences (OECD, 2021; Onojah et al, 2021; Zuzovsky and Donitsa-Schmidt, 2017).

There are four major models of teacher education programs. These are the integrated, modularised, concurrent, and consecutive models. The Integrative Model of Teacher Education (IM) is a falsifiable progressive learning model of instruction that recognizes teaching-relevant knowledge and social, cognitive, and affective abilities as the standard precursors of learning to teach (Peercy & Troyan, 2017). When appropriate knowledge and skills learning has occurred, the phases of learning, practice, and reflection already entrenched within quality teacher education (pre-or in-service) can be attached to meaningful growth, finishing in automaticity of the essential teaching practices.

Modularisation divides the curriculum into small discrete modules or units in non-

sequential, independent, and characteristically short duration. Students amass credits for modules that can lead to the qualification for which a specified number of credit points are required. A module is a unit of work in instruction that is virtually self-contained and a teaching technique centered on building skills and knowledge in discrete units (Yoseph & Mekuwanint, 2015). Consequently, a module is a course and other interrelated courses that can constitute a particular area of specialization. Each unit or module is a measured part of a comprehensive education experience leading to a specified qualification.

Modularised degrees tend to be made up of stand-alone, autonomous components that can be undertaken in different orders and accrued at different speeds. It is related to the notion of distributing knowledge in "bite-sized" sections and, subsequently, lends itself to time-shortened and rigorous modes of delivery (French, 2015). The modular approach to teaching enables the student-teachers to control their learning and accepts more responsibility for learning. Although it demands greater maturity from the student-teacher, the modules are more appropriate for more mature students. In a modular approach, all the proficiencies required to perform are closely connected (Felix, 2011).

While there are models of teacher education, the most prevalent models globally are the concurrent and consecutive models (Barrera-Pedemonte, n.d.). The concurrent model is more widely adopted than the consecutive model. For example, an Organisation for Economic Cooperation and Development (OECD, 2021) report on 13 countries indicated that 61% of teachers in upper secondary education and 71% of teachers in primary education completed concurrent teacher education programs. On the other hand, 25% of upper secondary education teachers and 20% of primary education teachers trained through

a consecutive teacher education program (OECD, 2021).

In Nigeria, the pre-service teacher education program or initial teacher education program is organized based on the concurrent and the consecutive education models. The concurrent teachers' mode of education can also be regarded initial teacher education program. This model involves an individual regarded as a student-teachers simultaneously undergoing training in the different components of teacher education (subject content, education studies, and pedagogy) (Musset, 2010). It entails students being trained in specific subjects and pedagogical subjects and a certain amount of practical activity credits (Concurrent Education Program, 2014). Concurrent teacher education allows a more integrated learning experience since pedagogical, and subject-matter (content knowledge) training occur simultaneously.

On the other hand, the consecutive model, sometimes called the end-on model, delays the introduction of the professional component of teacher education until general or specialist subject studies have been completed. Under this model, students are prepared academically first in their subject area in which they would have had a degree and then enroll for professional training later (Orji & Abolarin, 2012). This mode of teacher education can also be referred to as continuing teacher education program. This mode helps update, develop, and broaden the knowledge teachers acquired during their initial education and/or provide them with new skills and professional understanding (Mkhwanazi, 2013). However, even if they receive a quality initial teacher education, teachers need to be trained their whole life.

Continuous professional development is even more critical in countries where teachers do not have academic preparation. Continuing training is a great tool to develop the skills needed to reach higher student outcomes. The promotion of ongoing training is also linked to the idea that schools are valuable places for teacher learning (Musset, 2010). Advocates of the consecutive teachers' education program opine that the consecutive teacher education program offers the opportunities for teachers to have in-depth knowledge of their discipline than those students who would have been exposed to the concurrent model. However, some educators propound that the consecutive is usually for those who failed to find employment elsewhere (Yoseph & Mekuwanint, 2015). In addition, they noted that the academic knowledge of the consecutive education program is usually, in most cases, unrelated to what the school curriculum can offer. Also, the consecutive has been criticized for its low practical aspect.

There is a strong link between teachers' preparation and students' achievement in reading and mathematics before and after controlling for students' variables (Oloyede, 2016). In the history of teacher education in Nigeria, the two models (concurrent and consecutive) have been practiced. Specifically, with the commencement of the teacher education program at the University College, Ibadan, the consecutive model was adopted. The concurrent came in 1961, at the University of Nigeria, Nsukka, after the Carnegie-sponsored conference on teacher education (Yusuf, 2014). It should be emphasized that the need to absorb more teachers into Nigeria's school system necessitated reawakening interest in consecutive teacher education programs, particularly during secondary school vacations. In addition, the sandwich postgraduate program is offered in various Nigerian universities (O-Saki, 2005).

Evaluation is an essential aspect in all facets of education, and it is an integral part of the curriculum development process. Evaluation assists in determining the value and worth

and sometimes compares to other programs, curricula, or organizational schemes (Ogle, 2012). Evaluation serves several purposes in developing instruction, goal refinement, documentation, determination of curriculum impact, and general program improvement (Hawkes, 2010). Evaluation has specific pivotal roles in ensuring a continuous improvement of the quality of the content and achievement of curriculum goals. It allows for the generation of data through a process of inquiry-based on which judgment can be made about the curriculum's strengths and weaknesses and overall effectiveness. Thereby, decisions can be made on how to improve it.

Evaluation is much more than measurement or assessment. Measurement refers to the numerical assignment of value using a specified instrument. Measurement serves to produce data for assessment used in the evaluation process. Assessment, in most cases, is applied to students' learning. As part of the overall evaluation process, there is always the need to determine if the learners are learning (Onoyase, 2015). Unlike assessment and measurement, evaluation is value-laden as it deals with judging the merit or otherwise of a program (Onoyase, 2015; Odewumi et al, 2021).

Curriculum evaluation refers to the procedure of assessing the peculiarity or worth of some aspect of the entire curriculum (Kurt, 2018). In the manner the term curriculum is defined, the objective of program evaluation may include the curriculum design, learning situation, instruction process, materials, and resources employed in the method of education. Equally, it is indispensable to find out about the suitability and the competence of resources essential for teaching, such as instructional resources, laboratories, library books, and instruments. Curriculum evaluation is a procedure to gauge the worth and effectiveness of a section of educational activities such

as a rational project or a piece of work undertaken by or with students. Evaluating a curriculum leads to the assurance that deficient educational goals, resources, and instruction methods are retained and updated along with the advancements in the cultural, social, and scientific fields (Sharma & Raval, 2019).

The model employed in this study is the Kirkpatrick Model. This model is probably known for analyzing and evaluating the results of teaching and educational programs. It considers any form of formal or informal training to determine aptitude based on four criteria levels. This model's reaction is the first level; it measures how students react to the teaching (i.e., satisfaction). The second level is learning analyses, which ascertain the level of understanding students gain from exposure to teaching (i.e. proliferation in knowledge, skills, or experience). Another level is the behavior level which utilizes the change in behavior due to teaching. Lastly, results decide if the resources positively impacted the institution (Kirkpatrick Partners, 2022).

In Nigeria, curriculum evaluation studies have been carried out on different subjects. For example, Ajibola (2018) evaluated the secondary school Islamic studies curriculum, while Mkhwanazi (2013) assessed the Nigeria Certificate in Education (NCE) integrated science curriculum in Niger State. Other studies in teacher education include Ogunyinka, Okeke, and Adedoyin (2015), who evaluated teacher education and development in Nigeria, and Muhammad (2008), who assessed the implementation of the microteaching component of educational technology in Nigerian colleges of education.

Maynes, Mottonen, and Sharpe (2015) investigated the relationship between pre-service teachers in concurrent and consecutive teacher education programs' self-reports of their levels of knowledge and confidence in professional teachers' knowledge and skill.

Their findings revealed that the pre-service teachers in the consecutive program scored higher consistently than those in the concurrent education program on the measures of knowledge and confidence with age as a factor. However, with age discountenanced, their knowledge and confidence levels were similar.

Zuzovsky and Donitsa-Schmidt (2017) examined the effectiveness of the concurrent model and the consecutive models' efficiency and equity measures of the initial teacher education programs in Israel. The study adopted a longitudinal survey method to follow two cohorts of graduates who finished in teacher colleges for ten years in Israel from the 2005/2006 academic session. The results indicated that the consecutive model was better in most of the initial teacher education measures examined.

The Nigerian national policy on education emphasized that no nation could grow beyond the quality of its teachers (FRN, 2013). In Nigeria, teacher preparation programs adopt either the concurrent or consecutive models in initial teacher education. Each model has advantages and disadvantages, with the merits of one model seeing as the demerits of the other and vice versa. Despite the two models being widely used in Nigeria, no systematic study known to the researcher had been carried out on the evaluative comparison of the two models in the southwest zone of Nigeria. Thus, this study attempts to provide empirical data and information on the comparative effectiveness of the concurrent and consecutive initial teacher education models in the southwest zone of Nigeria.

There is a need for research to investigate the strength and weaknesses of the two teacher education curricula being implemented in Nigerian universities. The investigation is vital from the perspectives of secondary school teachers and administrators, who had been exposed to either of the two models in their pre-service or in-service teacher education program. Therefore, this study attempted to fill part of this research gap by undertaking a comparative analysis of the secondary school teachers' and administrators' evaluation of two-teacher education models (Concurrent and Consecutive) in selected Nigerian states.

The following research questions were raised to guide the research, (a) How adequate are the concurrent and consecutive teacher education program's education components in the southwest; (b) How adequate are the concurrent and consecutive teacher education program's teaching subject components in the southwest; and (c) What is the level of adequacy of the practical teaching component of the concurrent and consecutive teacher education program in the South-west.

2. __Method__

This study is descriptive research using the cross-sectional survey method. A survey was considered appropriate for this study because it allowed the researcher to compare the views of secondary school teachers and administrators on the two-teacher education curricula models. The population for this study was all teachers in South-west Nigeria (Ekiti, Lagos, Ogun, Ondo, Osun, and Oyo States). Multi-stage sampling technique was used for the study. First, the target population was drawn from three randomly selected states in the South-west, Nigeria. Second, respondents were stratified based on the states and nature of initial teacher education (concurrent or consecutive). Finally, a random sampling technique was also used to select 171 teachers in each of the sampled states.

Stake's (1967) Antecedent, Transaction, and Outcome (ATO) evaluation model were used for the evaluation. Teachers' Questionnaire on the Evaluation of Models of Teacher

Education Curricula (TQEMTEC) and unstructured interview guide were researcher-designed based on the components of the ATO model used to gather the research data. The statistical mean was used to answer the research questions raised, while an independent sample t-test was used to analyze the hypothesis formulated at a 0.05 level of significance.

## 3.   Result and Discussion

The demographic information about the respondents is presented in Table 1 and further depicted in Figure 1. Also, the results and discussion related to the research questions and hypothesis are shown in Tables 2 – 5.

As shown in Table 1 and Figure 1, the majority of the teachers had their initial teacher education program through the consecutive model, 326 (635), while 118 (37%) went through the concurrent teacher education program. These results indicate that most of the teachers had a first degree earlier in the arts, sciences, or social sciences before their enrolment in the education program. The enrolment figure does not agree with the submission of OECD (2021) which indicated that most teachers went through the concurrent teacher education mode.

The results related to question one are presented in Table 2.

Table 1. Demographic Information on the Respondents

Initial Teacher Education Models	No.	%
Concurrent	188	37%
Consecutive	326	63%
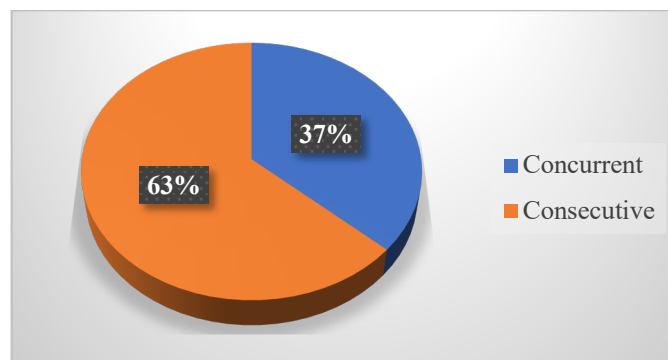
Figure 1. Respondents' Distribution

Question One: How adequate are the concurrent and consecutive teacher education program's education components in the south-west?

Table 2. Responses on the Adequacy of Education Components of Teacher Education Programme

	Variables	No.	Obtainable mean	Mean	Decision
Teachers	Concurrent	188.00	5	3.81	V. Adequate
	Consecutive	326.00	5	3.77	V. Adequate
Total		514.00	5	3.78	V. Adequate

Results of the analysis relating to research question one are presented in Table 2. Most teachers exposed to the concurrent or

consecutive teacher education program rated the education component adequate in quantity and quality. This is because teachers who

underwent concurrent teacher education programs (188) gave a mean rating of 3.81 in terms of quantity and quality of their program. Similarly, teachers trained through the consecutive teacher education program (326) rated the education component at a mean value of 3.77, out of a maximum possible value of 5. The average mean for all the teachers was 3.78. These results show that the teachers rated the education components of their teacher education programs (concurrent and consecutive) to be very adequate in terms of quantity and quality.

Question Two: How adequate are the concurrent and consecutive teacher education program's teaching subject components in the southwest?.

Table 3. Secondary School Teachers' Views on the Adequacy of Teaching Subject Components of the Two Teacher Education Programme

Variables		No.	Obtainable Score	Mean	Decision
Teachers	Concurrent	188.00	5	4.01	Adequate
	Consecutive	326.00	5	3.87	Adequate
	Total	514.00	5	3.92	Adequate

Table 3 reveals that teachers who had trained through the concurrent teacher education program rated the subject content of their program at the mean value of 4.01. In contrast, those consecutives rated their subject content to be 3.87. These results indicated that they rated the subject content as adequate. These high mean values indicate that the teachers, based on their teaching experiences in schools, judged the contents of the teaching components they had been exposed to in their pre-service training to be adequate. The views of school administrators on this were also sought.

Question Three: What is the level of adequacy of the practical teaching component of the concurrent and consecutive teacher education program in the South-west?

Table 4. Teachers' Views on the Adequacy of Practical Teaching Components of the Two Teacher Education Programme

Initial Teacher Education Models		No.	Obtainable Score	Mean	Decision
Teachers	Concurrent	188.00	5	3.93	Adequate
	Consecutive	326.00	5	3.79	Adequate
	Total	514.00	5	3.84	Adequate

As shown in Table 4, teachers who trained under the concurrent model rated the practical aspect of their program as adequate with a mean of 3.97. Similarly, their counterparts in the consecutive model also ranked them as adequate but with a lower mean of 3.79. This result shows that the practical components of both models (concurrent and consecutive) were adjudged by practicing teachers to be adequate.

Hypothesis Testing:

H_{o1}: There is no significant difference between the views of practicing teachers exposed to concurrent and those exposed to consecutive teacher-education

curricula on their professional preparation.

The results related to this analysis are presented in Table 4 on the subject content, education, and practical components of the two models of teacher education.

Table 5. t-Test Analyses on the Views of Teachers on the Education, Subject Contents, and Practical Components of Teacher Education Programme

Variables	No	Mean	Std. Deviation	df.	t-test	Sig. (2 tailed)
Education						
Concurrent	188	3.81	.535			
				512	0.77	0.440
Consecutive	326	3.77	.546			
Subject Content						
Concurrent	188	3.87	.645			
				512	2.47	0.014
Consecutive	326	4.01	.649			
Practical						
Concurrent	188	3.93	.679			
				512	2.42	0.016
Consecutive	326	3.79	.575			
Grand Assessment of the Models						
Concurrent	188	3.91	.541			
				512	2.18	0.029
Consecutive	326	3.80	.528			

Table 5 shows the results, t (512) = .773, p. = .440 regarding the views of teachers exposed to concurrent and those exposed to consecutive teacher education programs revealed no significant difference. The probability value of .440 is greater than the alpha value of 0.05. Therefore, the hypothesis was not rejected because no significant difference existed between teachers' views exposed to either the concurrent or the consecutive teacher educator model regarding the educational component of their preparation with the concurrent model rated as richer in education content.

The same hypothesis was tested on their view regarding the subject content component, and the results are also as indicated in Table 4, t(512) = 2.466, p. = 0.14. The result was significant because the probability value of 0.014 is less than the alpha value of 0.05. Therefore, the hypothesis proposing no significant difference regarding the opinion of teachers on subject contents was rejected in favor of teachers who were exposed to consecutive teacher education programs.

Also, the hypothesis was tested on the practical component of teacher education models, as shown in Table 4. The results t(512) = 2.42, p. = 0.16, indicate a significant difference between the view of teachers exposed to concurrent and those exposed to consecutive education programs. The probability value of 0.016 is less than the alpha value of 0.05. Furthermore, the teachers exposed to the two models' aggregate views (education, subject content, and practical components) were also examined. The aggregate view results revealed a significant difference between teachers exposed to the concurrent and consecutive views favoring the teachers exposed to the concurrent teacher education model t (df = 512), 2.18, p = 0.029).

It can be deduced from the four preceding t-test values on education, subject contents,

practical and grand value for the three components that: (a) concurrent teacher education is richer in education and practical components, (b) consecutive is richer in subject content, and (c) in all concurrent better favored than consecutive by the teachers.

The results indicated that teachers who had been exposed to the two models of teacher education considered the two education components of their respective programs to be adequate in terms of quantity and quality. However, they rated the consecutive teacher education program higher; this supports the position of Oloyede (2016) that the alternative certification of the teachers can promote teacher education programs. The findings also align with the earlier findings of Zuzovsky and Donitsa-Schmidt (2017) which indicated a higher rating of the concurrent model on all factors when age is discountenanced. The findings also agree with the submission in OECD (2021) study of teacher education in 13 countries.

Teachers considered the subject content component of the pre-service teacher education models to be equally adequate in terms of quantity and quality. This finding contradicts the position of Okebukola (2015), who opined that the concurrent teacher education program in Nigeria in the area of subject content is inadequate. This finding tends to support the position of O-Saki (2005), who noted that the concurrent teacher education model offers an opportunity for the combination of traditional education content and pedagogical skills, thereby offering an opportunity for intellectual synthesis and personal development.

Teachers also rated the practical components of the two models to be adequate. However, they rated the practical component of the concurrent teacher education program to be better. This finding tends to tally with the results of Oloyede (2016). In most cases, teacher educational institutions under the concurrent model expose teachers to several aspects of practical experiences (micro-teaching, peer teaching, and teaching practice). In contrast, in the consecutive model, it is mainly the teaching practice, thereby reducing the intensity of the practical aspect of the consecutive model. This finding would seem to be in congruence with the position of O-Saki (2005).

4. Conclusion

Based on the findings of this study, the following conclusions can be drawn. First, the respondents, that is, practicing teachers and school administrators, perceived the education components of the two teacher education curriculum model to be generally adequate in terms of quantity and quality. They both, however, agreed that the concurrent model was better than the consecutive in the area of education components for teacher training.

Second, the subject components of the two teacher education curriculum model were considered adequate by practicing teachers and school administrators. The subject content component of the consecutive model was also considered the richer of the two.

Based on the findings, the government should provide special incentives such as training, seminars, and different workshops both within and outside the country for teachers so that quality candidates will be attracted to the field of teaching. In addition, remuneration in teaching should be competitive with other well-paid jobs. Furthermore, entry into the teaching profession should be based on initial aptitude and interest.

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