TEACHER EDUCATOR PROFESSIONALISM AND STUDENT TEACHER LEARNING IN NIGERIAN UNIVERSITIES

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ABSTRACT

Of the three components constituting teacher education curriculum, namely general education, specialized education and professional education, the professional education component is arguably accorded the highest consideration in the scholarship of teaching. However, there is an emerging concern over the involvement of non-education specialists in the teaching of this component. Yet, there is little evidence of sufficient engagement with this concern in the Nigerian context. As a sequel to a study on pedagogical misconceptions by student teachers, this paper examines the impact of teacher educators' professionalism on student teachers' learning in Nigerian universities. Through the analytic method, the study engaged with data collected through the instrumentality of official records like Faculty brochures, lecture notes developed by teacher educators, systematic observations by the researchers, and semi-structured interviews involving selected participants. The qualitative study employs a constructivist paradigm that methodically situates data and analysis in the context of the experiences and perceptions of both the participants and researchers, and focusses on the main theme, namely teacher educator's knowledge as a predictor of student-teacher learning, which emerged from the data for the earlier study as collected in three universities where the present lead researcher assessed prospective teachers on teaching practice in their third and fourth years, in his capacity as teaching practice supervisor. In exposing the effect of teacher educator professionalism on prospective teacher learning, the present study revealed instances of miseducation by some of the teacher educators involved in teaching professional education courses, which substantially accounts for the student teachers' pedagogical misconceptions.

1. INTRODUCTION

The professional development of teachers is well captured in the literature as a product of teachers' knowledge (Avalos, 2011). In the context of this study, teachers' knowledge concerns teachers' learning and applying the knowledge so acquired by them into practice through which their students cut their professional teeth. In his characterization of the process of teacher professional learning, Avalos (2011) identifies such components as individual and collective cognitive and emotional engagements, as well as capacity and dispositions for the appropriate deployment of the components for change, enrichment, or improvement in practice, though failed to expose the implication of such deficiency for teacher educator professionalism. According to Clarke & Hollingsworth (2002), teacher professional knowledge is acquired through teachers learning and change as occasioned by developing theory or applying it to the question of teacher change. Identifying the personal processes involved in teacher learning and how teacher learning is researched as well as proposition of models of professional teacher learning as the foci of teacher professional development, Avalos (2011) rationalizes that the scholarship on professional teacher learning is primarily concerned with the need for a better understanding of the processes through which the landscape of teaching or teacher practice is changed, enriched or improved it.

It should be pointed out that the scope of professional teacher learning is so vast that not only pedagogy and related areas are well covered but also various activities with the potential to alter the landscape of a school's professional orientation (Vescio et al., 2008). That explains why issues like those concerning professional learning communities are accorded attention in view of their potential to facilitate a positive shift in the habits, beliefs, dispositions, and mindsets that inform the directions of teacher performance in the classroom. The implication is that any factor contributing to positive change in the school's professional culture is subsumed under professional teacher learning. Unfortunately, however, there is little evidence of engagement with this question in research.

It is not out of place to provide an eye-opening overview of the teacher education curriculum to underscore the implication of teacher professionalism, which is the dependent variable for this study. Content knowledge is intended to equip the learners with accurate information for learning and subsequent application to life situations, while pedagogy is aimed at pedagogical skills for teacher performance. Finally, instructional methods or pedagogical practices aim to make learning both engaging and intelligible to the students (Creasy, 2015). These components are intended to facilitate the teachers' cultivation of professionalism, which is characteristically evident in their dispositions.

Teacher or teacher educator professionalism requires demonstrating knowledge, skills, values, attitudes, and dispositions associated with a teaching or teacher education professional. That explains why a professional teaching curriculum should contain curricular provisions and methodological explanations, and evaluation procedures concerning how to achieve the objectives involved in this regard and how to assess the progression of learning towards achieving them. Creasy (2015) has identified six tasks as constituting the professional responsibility and, by extension, teacher educator. These reflect on teaching, maintaining accurate records, communicating with families, working in and contributing to the school and district, growing and developing professionally, and showing professionalism. While these tasks may not be accepted as an exhaustive list of professional tasks in teacher education, there is no gainsaying that they provide a meaningful direction concerning the concept of professionalism in teaching and teacher education. There is an engagement with the idea of professional knowledge in what follows.

The importance of epistemological considerations in determining what makes a knowledge professional has been well captured in the research literature (Tom et al., 1990). Attention to this fact is imperative given the fragmentation of the definition of professional

knowledge into the critical, interpretive, and positivistic theoretical perspectives. Therefore, Tom et al. (1990) adds to this list of three formal epistemologies craft knowledge, practical knowledge, or what is often described as 'epistemology of practice.' The rationale for alluding to these epistemologies is to demonstrate the reason for the diversity in the purposes, orientations, and contents of the professional component of teacher education.

There has not been a consensus in the education parlance on the borders surrounding the territory that may be characterized as professional knowledge. However, the age-long perturbing question remains, what is the relevance of professional knowledge to the practice of teaching? According to Tom et al. (1990), uncritically embracing the growing conjecture that it is professional knowledge that determines good practice may not be of any value in that it is not merely whatever is characterized as professional knowledge that has the potential to guide practice but one that is epistemologically sound and empirically acceptable. The implication is that the epistemological foundations of teacher educators' professional knowledge must be carefully screened to determine its worth, relevance, or level of acceptability. However, there has not been sufficient attention to this question in detailed, comprehensive research in the scholarship of teaching. The positivist interest in professional knowledge in the early days of organized teacher education concerns the methodology of the process –product research (Appleberry, 1976; Dunkin & Biddle, 1974; Good, 2008; Grimes, 2013; Taylor & MacKenney, 2008). According to Popkewitz (1980), the collection of generalizations originating from positivist research is relevant to enhancing the quality of teaching in several ways, subject to the values or beliefs held by educators in a particular context. Thus, positivist scholars in the education tradition are sensitive to the generation of context-independent generalizations that are greatly important to knowledge generation.

Unlike the social-scientific positivists, the interpretivists are more actively involved in the subject or object of research. They attempt to understand others' nature, culture, and character, whose consistency they compare to their own. This means that the interpretivists have an appreciable strength in detecting differences among phenomena or characterological patterns, which presupposes the existence of commonalities in the knower and the known in view that one can easily know others by knowing oneself. Positivists distinguish between fact and values in the context of teaching as they place values outside the realm of teaching scholarship. In contrast, the interpretivists combine both values and facts as ingredients for the construction of educational experience as they both facilitate a meaningful understanding of issues. The critically oriented have taken another path marking a departure from the educational positivist and interpretivists. They accord values a core place in the generation of professional knowledge. They see both education and society as deserving of reforms, with education as arguably unintelligible to the society for which it is meant. Nonetheless, the status of professional knowledge among the critically oriented has been put into question. 'If values are central to critical inquiry, then what role is there for empirical knowledge?' This is the question put forward by (Apple, 1982) who further argues, 'Is not the critical scholar an ideologue, an advocate of particular values, someone whose motive for action is independent of a knowledge of relationships among educational variables, or of the meanings held by participants in a given educational setting?'.

While the earlier enumerated epistemologies have gained general acceptance and recognition as offering meaningful directions in the generation of professional knowledge, the craft that is less recognized as an epistemological orientation seems to wield more influence among classroom teachers, teachers, educators, and institutions practitioners. Yet it should be noted that what makes this of great value to this discourse is that teaching is regarded as a craft and teacher education, an enterprise' (Kirk, 1986). Thus, the challenge posed by advocates of craft as an epistemological orientation for professional knowledge is that scholars, researchers, and teacher educators formulate and develop what should be known as craft knowledge and demonstrate its relevance to teaching practice. The importance of knowledge to practice is

well captured in research literature where the various ways of using knowledge to enhance the quality of the practice are adequately addressed (Guyton, 1986, 1987; Paker, 2011; Castle et al., 2006; Holloway, 2001; Hascher* et al., 2004). In the experimental evidence available in the literature, a close connection has been established between teacher behaviors and student outcomes. Consequently, there has been a dominant scholarship on the interplay of the preset and specific instructional objectives and their associated outputs and other school-based or pedagogical considerations that have the potential to affect the quality of teaching.

Accordingly, knowledge is regarded as a crucial factor in ineffectiveness and can facilitate the attainment of instructional objectives through pedagogically creative means (Guyton & McIntyre, 1990; Killian & McIntyre, 1986, 1988; Marais & Meier, 2004; Schrag, 1981). Schrag (1981) has promoted in connection with the idea of a generative use of knowledge which almost certainly paves the way for the creative approach to issues in an unprecedented fashion. In the further pursuit of his analysis, he also demonstrates that any theoretically sound knowledge is expected to have generative value. However, there are exceptions to this principle, especially regarding psychological theories that, though invalid, are endowed with more generative value than generally sound theories. Yet, knowledge is often regarded as a single element among the multiplicity of factors that determine the quality or direction of the practice. There is an avalanche of evidence concerning the nature and dimensions of using knowledge to improve or enhance the quality of practice. However, scholars acknowledge the importance of knowledge in determining practice move a step further by regarding knowledge as intertwined with practice given their perception of knowledge as not only the rationale for new practices but also the outlines of new practices in a manner consistent with empirical theories. The issue here concerns the professionalism and non-professionalism divide of teacher preparation, which has enjoyed little attention among scholars and researchers.

Teacher educator professionalism revolves around the concept of pedagogical content knowledge (PCK), which is developed through reflection-in-action and reflection-on-action in the context of specific instructional settings. It characteristically culminates in teacher efficacy (Park & Oliver, 2008). The role or impact of students in the development of PCK is significant, especially about their misconceptions which generally contribute to the shaping of PCK as a pivot on which teacher professionalism is wheeled (Park & Oliver, 2008). This line of thinking finds support in Rozenszajn & Yarden (2014), who engaged critically with the 'role of the reflective practice as a plausible alternative to achieve teacher awareness about the guiding rules of a pedagogical action.' In the opinion of Shulman (1987), the PCK is a 'special amalgam of content and pedagogy that is uniquely the province of teachers, their special form of professional understanding'. In his characterization of the categories of the knowledge base for the teaching profession, Shulman identifies content knowledge, general pedagogical knowledge, curriculum knowledge, pedagogical content knowledge, knowledge of learners, knowledge of educational contexts, and knowledge of educational ends, purposes, and values, and their philosophical and historical grounds, as being of great value.

However, it is remarkable that Shulman (1987) rationalizes that, 'among those categories, the PCK is of special interest because it identifies the distinctive bodies of knowledge for teaching, and represents the blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organized, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction.' It should be pointed out that what is known as content knowledge in the educational parlance is merely about the subject matter or content, while pedagogical knowledge is about the teaching or teachability of content, whereas the PCK is the totality or combination of the two which prepares the teacher for excellent professional performance (Rufai, 2010a, 2010c, 2012; Mishra et al., 2020; Shulman, 1987b; Suprapto et al., 2020). The argument advanced in the

previous is that teacher educator professional knowledge is a major determinant of student-teacher learning.

There is an emerging concern over the growing involvement of non-education specialists in the teaching of this component. This concern is a product of the possible implication of such practice for student learning, especially regarding acquiring professional knowledge and skills and the cultivation of professional attitudes and dispositions required for their job as school curriculum implementers. Consequently, as a gap in research, the need to assess the impact of teacher professionalism on student teachers' learning in Nigerian universities became imperative. Therefore, the study's contribution includes an attempt to expose a few instances of miseducation by both professionals and non-education professionals among university-based teacher educators. They participate in the teaching of professional education courses for teacher preparation. In specific terms, the paper is aimed at achieving the following five objectives (1) To examine the concept of professional learning; (2) To investigate the nature of teacher's professional knowledge; (3) To examine the association between knowledge and practice; (4) To articulate the effect of teacher educator's knowledge on student teaching; and (5) To provide propositions for improved linkage between professional knowledge and practice.

The study is guided by the following five corresponding research questions (1) What is the concept of professional learning? (2) What is the nature of a teacher's professional knowledge? (3) What is the association between knowledge and practice? (4) What is the effect of teacher educators' knowledge on student teaching? (5) What are propositions for improved linkage between professional knowledge and practice?

2. METHODS

2.1. Study Design

Since this paper is a sequel to qualitative research that relied on the constructivist paradigm in examining prospective teachers' pedagogical experience and performance on teaching practice, qualitative data from interviews were the major component. The researcher is an insider in the research setting for this analytical study which consisted of the three public universities where he taught full-time at different times. These are the University of Lagos in Southwestern Nigeria, Lagos State University also in Southwestern Nigeria, and Sokoto State University, in the North-West of the country. That put him in good stead to refine and update the research design through peer assessment for technical validity and reliability.

Through the analytic method, the present study engaged with data collected through the instrumentality of official university records like Departmental and Faculty brochures, lecture notes developed and authored by teacher educators, systematic observations by the researchers, and semi-structured interviews involving selected participants. The official university records provide data concerning the professional backgrounds and performance of the teacher educators. At the same time, systematic observations by the researchers seek to match teacher educator knowledge with student-teacher learning. In contrast, the structured interviews with the twelve lecturers selected on the ratio of four per university provided further insight into the association between the teacher educator knowledge and prospective teacher learning. The respondents were tagged A1234 for University A, B1234 for University B, and C1234 for University C. The data so collected were after that subjected to careful analysis through the instrumentality of the analytic method, which exposes the interplay of the various features of teacher educator professionalism (Kosterek, 2016), especially in the context of the PCK and their implications for the student-teacher learning (Park & Oliver, 2008; Shulman, 1986,1987; Rozenszajn & Yarden, 2014b).

The population for the study comprised all teacher educators and student teachers in the three universities. As regards validity and reliability of the data involved in this study, it is pertinent to state that the intertwined concepts of validity and reliability in the context of qualitative research, as noted by Lincoln & Guba (1985), is 'trustworthiness of a study as the naturalist's equivalent of for internal validation, external validation, reliability and objectivity, which is achievable by credibility, authenticity, transferability, dependability, confirmability in qualitative research. In an attempt to demystify the concept of validation that (Eisner, 2017) constructed standards such as structural corroboration, consensual validation, and referential adequacy as evidence for asserting the credibility of qualitative research. This implies that the researcher is expected to have specific credible sources to support or deny a particular view or interpretation. This explains why, in addition to a diversity of credible sources on this subject, the researchers' reliance on official records as supported by systematic observations and assessed by peers goes an appreciable length in strengthening the validity and reliability of this study.

The qualitative study employs a constructivist paradigm that methodically situates data and analysis in the context of the experiences and perceptions of both the participants and their researchers and stimulates the construction of reality by the student teachers in consonance with their individual and environmental contexts (Beck & Kosnik, 2002; Dunkin & Biddle, 1974; Ngidi & Sibaya, 2003; Phillips, 1980). The present study focuses on the main theme emerging from data analysis from the earlier study, namely student-teacher educator's knowledge as a predictor of student-teacher learning. In exposing the effect of teacher educator professionalism on prospective teacher learning, the present study led by an active player in implementing the professional curriculum of teacher education paid attention to ethical concerns of the research context, which his peers critically examined in the three universities involved.

2.2. Data Collection and Analysis

Prospective teachers on teaching practice in the third and the fourth years were assessed by the present researcher in his capacity as teaching practice supervisor for three consecutive years in each of the three universities covered by this study namely 2009 - 2011 at the University of Lagos, 2012 - 2014 at the Lagos State University and 2015 - 2017 at Sokoto State University. All the interviews conducted in the three universities for the preceding research were semi-structured. It is noteworthy that this level of data collection served two purposes. One is that it offers a clear picture of the nature of the misconceptions involved in each of the pedagogical concepts identified and rated by the researcher as the top ten. Second, it provided some clues concerning the possible source of each misconception, which is the teacher educator factor. This factor featured most prominently among the sources of misconceptions. It, therefore, necessitated further engagement with it in another paper intending to ascertain the conjecture that teacher educators were responsible for student teachers' misconception of pedagogical principles. Hence the focus on teacher educators' professional learning as the subject of this research. According to the objectives of the present study, semi-structured interviews were conducted with twelve of the teacher educators involved in teaching the professional components of teacher education, especially those who peered with the current lead researcher for the team teaching of courses in curriculum and pedagogy, on a ratio of four lecturers per university.

The curriculum and pedagogy courses covered in the study include an introduction to teaching, general teaching principles, preparation for teaching practice, and principles of curriculum development. The selection of the twelve participants was based on staff profiles as provided in the Faculty/Departmental brochures and/or what the lead researcher knew of the professional backgrounds of his colleagues about familiarity with the field of education.

Two teacher educators with professional backgrounds in education (tagged ABC1 & ABC2) and two with no education backgrounds (tagged ABC3 & ABC4) were selected for participation in the study. They are A1, A2, A3, and A4 for the first set of semi-structured interviews, B1, B2, B3, and B4 for the second set, and C1, C2, C3, and C4 the third set. In addition, they were asked to provide some information about each of the top ten misconceptions that were found by the preceding research.

The participants were all lecturers for the professional component, especially curriculum and pedagogy. Ten of them were male, while two were female. However, they all cooperated with the researchers and participated fully in the study. This may not be unconnected with the fact that the lead researcher was a lecturer in the system where data were collected, and the respondents involved were his friends and colleagues. This indeed is a case of insider research which is often complex and works productively well whenever it works Chan & Bray (2014) because 'inside researchers readily know the language of those being studied along with its particular jargon and meanings and are more likely to understand the vent under discussion'.

The top ten misconceptions found by the preceding research constitute the subject of investigation in interviews with them. These ten are (1) textbook as a teaching aid (2) lesson note for lesson plan (3) instructional design as curriculum (4) teaching method as different from instructional strategy (5) instructional procedure as teaching approach (6) assessment for evaluation (7) learning outcome as examination results (8) drama as demonstration method (9) instruction as pedagogy and (10) curriculum experience as a teaching. The central focus of the interviews was to match students' instructional misconceptions with the professional knowledge of their teachers or teacher educators to accept or reject the conjecture that their lecturers are a major source of such misconceptions as held by them. The students' misconceptions that their teachers or teacher educators equally hold are marked X in the data presentation and analysis below, while those that are got right and corrected by the teacher educators are left blank. Therefore, the present study seeks to reproduce findings from the preceding study that are relied upon in conceptualizing the present research before narrowing down or zooming unto the teacher educator knowledge and student-teacher learning.

2.2.1. *Textbook as a Teaching Aid*

This is one of the pedagogical misconceptions that features as a common denominator in all the respondents. When asked to support their teaching with teaching aids, the subject textbook was among the materials brought out by the students. In fact, in all the instances of this recorded in this study, especially where the Textbook was the only material relied upon by the student-teacher as teaching aid, the researcher asked, is this Textbook your teaching aid for this lesson. Remarkably, there was no instance of a negative answer. Suppose this experience is so recorded in universities located in different socio-cultural parts of the country. In that case, the implication is arguably that teacher educators in the country seem insensitive to the student teachers' pedagogical knowledge, which is not without grave implication for the quality of teachers' professional performance in the country. Interestingly, none of the participants attempted to disabuse the researcher's mind over the inaccuracy of characterizing a textbook as a teaching aid. One of them has the following to say in his defence of Textbook as a teaching aid:

> *I use Textbook as a teaching aid because I have used it several times in the past. I did so during our preparation for teaching practice and earned a good grade in the course. I also did so during my first teaching practice in my 300 level and had a B. Even when together with our course mates and teaching aid is mentioned, one of the first things that come to our minds is the Textbook. I am sure the Textbook is a teaching aid* (P 7).

The misconception involved here is fast gaining the status of "true knowledge" in the estimation of the students. This is because the misconception has flourished unchallenged among the student teachers who have repeatedly used it without being made to understand that it is wrong. This confirms Chan and Bray's (2014) view that an unchallenged misconception can be erroneously accepted as a universal truth. This misconception was strongly held by all the other participants who were asked to comment on the accuracy or otherwise of characterizing the Textbook as a textbook. One of them says,

> *I would be surprised to learn that Textbook is not a teaching aid. That was what our lecturers taught us, and they don't question us whenever we say so. Sir, please don't tell me our lecturers have been teaching us nonsense. I maintain my position on the relevance of Textbook as a teaching aid* (P 1).

The view expressed above represents the student teachers' teaching line as evident in the participants' perspectives.

2.2.2. *Lesson Note for Lesson Plan*

This is another pedagogical misconception held by the student teachers on teaching practicum. What makes it different from the earlier one was that there were exceptions in the student teachers' understanding of the concept. Some of them accurately describe the lesson note as the content section of the lesson plan, a teaching guide. Some of those holding the misconceptions attributed it to their lecturers, some of whom use the two interchangeably. This is the effect of having student teachers trained by lecturers who are not well-soaked in the professional component of teacher education. The fact that some of these lecturers were still struggling with the concepts when they taught the students who innocently received the incorrect information explains the teacher's angle to the problem. This researcher worked closely at different times in the three universities, with many 'teacher trainers' with no training in teacher education. He is, therefore, a living witness to the plight of student teachers in this regard. Fifteen of the twenty-seven respondents held this misconception and were so sure they were right. To demonstrate that they were sure of the accuracy of their view, one of them said,

> *If you don't mind, I can bring you the Textbook where I read that tomorrow. Professor XYZ wrote it, and the book was even recommended to us in the Faculty* (P 4).

Some of the textbooks containing those misconceptions were indeed written by Professors. This researcher is familiar with some of such education textbooks and their writers. Moreover, he had published in a few international journal's reviews (Rufai, 2010a; Rufai, 2010b 2011c; Rufai, 2012d) on some of such textbooks where he exposed such misconceptions, including the lesson plan/lesson note confusion. This confirms the opinion of (N. Suprapto et al., 2020), who argue that teachers' reliance on textbooks written by teachers or lecturers with skewed knowledge of the subject will promote misconception and even accord them the status of accurate knowledge given the respect accorded the authors among scholars who are more fascinated by their high academic status than their professional excellence, intellectual capacity or mastery of the subject.

2.2.3. *Instructional Design as Curriculum*

Some of the student teachers created the impression that instructional design is the same as a curriculum. They are probably confused by the word "design" to which the word "instructional' is merely a qualifier. Does that mean that anything design is the curriculum? When a student-teacher tells the students that "that topic is part of the instructional design for this term", and is not corrected or enlightened, then there is much to be desired. The most vocal of the respondents said in connection with this,

I can't see any difference between the two because a curriculum is designed for teaching and learning. An instructional design is also a design for instruction that also covers teaching and learning (P3).

It took this researcher some time to enlighten them that an instructional design is a systematic creation of learning experiences and materials to facilitate a meaningful acquisition of knowledge and skills. In other words, an instructional design is a pathway to curriculum making. It logically follows that teachers or teacher trainers with insufficient professional knowledge will cause students' misconception of these closely related concepts, which sound somewhat similar but are entirely different. The literature was almost unarguable that teachers' misconceptions normally originate from their lack of mastery of the subject matter, which is often transferred to their students through teaching (Suparno, 2005).

2.2.4. *Teaching Method as an Instructional Strategy*

These two concepts feature together in the teaching of just nine of the student teachers in their teaching practicum who use the latter in the former in their teaching register, which contains their weekly and daily lesson plans. When invited to explain their instructional strategy, they offered no more than a description of the teaching method. However, instructional strategies are techniques employed by the teachers to stimulate a sense of independence and strategic learning. An instructional strategy used by the teacher is expected to lead to strategic understanding on the part of the student. It is evident from the responses provided by the student teachers in question that they are familiar with the concept of teaching method but almost totally blank about the idea of instructional strategy.

"I think they are the same" (P2). "I am sure they are the same" (P 4). "A method is a strategy now" (P 7). "Ok, what is teaching, and what is an instruction? (P8). "I think they are two different names for the same concept" (P 17). "I can see any difference in them" (P 21). "Sir, tell us what difference there is. We are learning" (P 22).

The above are the respondents' views as captured on tape.

2.2.5. *Instructional Procedure as an Instructional Approach*

These two represent another pedagogical misconception by the student teachers on teaching practicum. An instructional procedure is a plan for systematic classroom handling for meaningful instructional outcomes. In contrast, an instructional approach is an instructional model comprising various components like field trips, simulations, games, storytelling, field observations, etc. This experiential dimension of instruction is situated within decisions concerning how best to achieve instructional goals without necessarily sticking to the stereotypical, traditional way of doing the business of teaching. The student teachers are not familiar with any difference between the two. Eleven of the twenty-seven respondents stated instructional approach, whereas others stated instructional procedure, which is simply the step-by-step order of the classroom instruction for a particular lesson. What strange is that none of them attributed their misconception to their teachers. No meaningful explanation is provided by any of the eleven student teachers involved here. Quoting them or producing their words may therefore be unworthy. However, their misconception may be another case of textbook influence as one cannot easily associate their problem with any other considerable factor. A respondent had the following to say in the interview,

The instructional procedure is another name for instructional approach as the means to conduct your instruction to students (P 24).

Another one said the same thing in a different way,

> *Your instructional procedure is how you give instructions to students. And that is what your instructional approach also means* (P27).

Yet, another respondent said,

> *Going by the meaning of procedure and approach, I cannot see any difference between an instructional procedure an instructional approach* (P8).

It is captured somehow differently by the respondent that uttered the following words:

> *My instructional procedure is my teaching method, and my instructional approach is my teaching approach and technique* (P20).

All these various responses expose the distorted knowledge and polluted learning of the student teachers. It has serious implications for the teaching profession. It confirms the assertion that how knowledge is presented can influence understanding and the principle that accurate dissemination of information or transmission of knowledge has great potential to help students form accurate connections between previous knowledge and new concepts.

2.2.6. *Assessment for Evaluation*

This is a common but arguable unpardonable misconception among education practitioners. What the student teachers demonstrated in this regard is therefore not strange in the estimation of this researcher. In the evaluation sub-section of the lesson plan, nine of the twenty-seven respondents wrote "Assessment", seven wrote "Assessment/Evaluation", and eleven wrote "Evaluation". The researcher enlightened them to the effect that assessment is conducted to attract feedback for improvement purposes. At the same time, the evaluation seeks to judge the quality of performance based on a stipulated standard. Literature is replete with instances of interchangeable use of assessment and evaluation. While such interchangeable use is often contextually permissible, student teachers may not always discern the contextual implications of such convertible use on teacher educators the burden of drawing a line of demarcation between the two to prevent misconceptions.

> *Assessment is evaluation, and vice versa incredibly features in the words of five respondents who do not know what distinguishes one of the concepts from the other* (P 2; P8; P 12; P 20; P 24; P26; 27).

One may not be able to exonerate teachers or teacher educators from being instrumental to this misconception. Literature is replete with findings that there are many concepts that teachers charged to teach them are confused about (Ay, 2017; Massey & Riley, 2013; Mishra et al., 2020).

2.2.7. *Learning Outcome as Examination Results*

Learning outcomes are stipulations of knowledge, skills, and competencies that are expected to be demonstrated by learners at the end of learning. In contrast, examination results are statements of achievements in aptitude, knowledge, or skills-based on written exercises, oral questions, or practical tasks. However, these two concepts convey the same meaning in the estimation of the nineteen participants who were unable to distinguish between them.

2.2.8. *Drama as Demonstration Method*

The drama method applies to a situation where a pedagogical conflict or an instructional topic is addressed through a theatrical means that resolves the conflict by the character whose engagement is dyadic rather than a monologue. In contrast, the demonstration method relies on narration devoid of an arrangement between two actors (Adams, 2009). This is yet another misconception involving all respondents, none of whom could distinguish clearly between the

two. The researcher patiently engaged the 27 respondents on this due to the common pattern noticed in their responses. There was no exception. This again may not come as a surprise as the present researcher had on several occasions witnessed abysmal failure by teacher educators to distinguish between these two concepts. It may therefore not be out of place to hold teacher educators responsible for this. Doing so is consistent with the findings by Mishra et al. (2020), who narrates how most teachers often take responsibility for their students' failure to perform at the expected level. In the light of such findings, the teachers are encouraged to master their subjects well to disseminate accurate knowledge as that is better for them than taking responsibility for the failure of the students (Mishra et al., 2020).

2.2.9. *Instruction as Pedagogy*

Pedagogy is the body of scholarship into which the art or science of teaching is situated. In contrast, teaching, which implies the transmission of knowledge from the teacher to the learner, is meant by instruction. However, it may not be easy to hold anyone responsible for the misconception involved here. This is because only a negligible proportion of them (six respondents) hold this misconception. This is an example of the misconceptions that Ojose (2015) associates with the "students' overriding need to make sense of the instruction they receive". Such erroneous assertions as "instruction are pedagogy" (R 15), "pedagogy is teaching" (P 16) ", the two concepts are synonymous" (P 23), "I can't see any difference in them" (P 22), "I believe you know better, Sir" (P4) and "the two are self-explanatory" (P24), do not show sufficient pedagogical learning on the part of the students. While it is true that the teachers are expected to use all possible means of knowing what misconceptions some of their students hold, it may not be fair to hold teachers or lecturers responsible for students' failure to learn or know what they are supposed to be to know. This is where the issue of Textbook features again as some of the students read textbooks that contain wrong conceptions, which can confuse students and cause them misconceptions (N. Suprapto et al., 2020).

2.2.10. *Curriculum Experience as a Teaching*

Curriculum experiences are the elements that constitute the content to be imparted to the learner by the teacher, whereas teaching is the process of the transmission of the elements. Student teachers' misconception in this regard may be attributed to many factors, especially false intuition. This happens when an individual casually offers his idea or perception of something without thinking critically about it. However, the fact that the interviews were not conducted just once means that each student-teacher had several meetings with the researcher. As a result, a wrong concept earlier expressed could have been corrected. Although sixteen of the respondents correctly distinguished between the two concepts, the eleven of them who hold the misconceptions do not constitute a negligible proportion. The sixteen respondents with sound knowledge of the two concepts offered accurate descriptions of each, while the eleven with a faulty understanding of the two concepts got it wrong.

3. RESULTS AND DISCUSSION

The results and discussion on the present research have been presented below as separate subsections, with the former preceding the former, which logically fits well as its sequel.

3.1. Results

The results of this research are presented in a tabular form for intelligibility easy comparative association.

Table 1 Capturing teacher educators' professional knowledge as a source of pedagogical misconceptions

S/N	Misconceptions	A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
1	Textbook as Teaching Aid			X	X	X		X	X			X	X
2	Lesson Note for Lesson Plan			X	X	X		X	X		X	X	X
3	Instructional Design as Curriculum	X	X		X	X	X	X	X		X	X	X
4	Teaching Method as Instructional Strategy	X		X	X	X	X	X	X	X	X	X	X
5	Instructional Procedure as Teaching Approach			X	X	X		X	X	X		X	X
6	Assessment as Evaluation			X	X	X		X	X	X		X	X
7	Learning Outcome as Examination Results		X	X	X		X	X		X	X	X	X
8	Drama as Demonstration Method			X	X	X		X	X	X		X	X
9	Instruction as Pedagogy	X	X		X	X	X	X	X	X		X	X
10	Curriculum Experience as Teaching	X	X	X		X	X	X	X	X		X	X

3.2. Discussion

Table 1 offers remarkable revelations concerning the top ten pedagogical misconceptions studied to determine how teacher educators' professional knowledge influences student teachers' pedagogical learning. It is interesting to note that the remarkable revelations cut across the three universities and both professional and non-professionals among the respondents, both professional and non-professional teacher educators. For instance, the findings reveal that the misconception of textbooks as teaching aids that student teachers hold is consistent with their teacher educators' professional knowledge as exposed in their responses which shows a pattern between the professionally knowledgeable and those without education backgrounds. But for the accurate answer provided by Respondent B1, a professional teacher educator in University B, the pattern of the responses would have clearly distinguished the professionals from the non-professionals in pedagogical knowledge. This confirms the finding by (Mustami, 2016) that most of the initial concepts that students came with are parts of students' previous experiences and are often traceable to previous rudimentary learning at the feet of non-experts or teachers with modest learning or as a result of casual unguided observations in their locality. The present study is therefore consistent with works whose findings confirm that misconceptions constitute a barrier to new learning through learners' failure to grasp the instructional topic as is the case with the teacher educators' learning as evident in this study (Adzape & Akpoghol, 2015; Goodnough et al., 2009; Kiggundu, 2007; Maphosa et al., 2007; Orland-Barak & Yinon, 2007; Seferoğlu, 2006; Vescio et al., 2008; Wiley et al., 2008).

Similarly, the student teachers' misconception of the lesson plan as being the same as the lesson note also exposes the influence of their professional learning as professional teacher educators got the concepts right. At the same time, the non-professionals among them hold a misconception thereof. But for the inaccurate answers provided by Respondents B1 and C2, who are professional teacher educators, the pattern of responses would have constituted a clear line of demarcation between a professional's pedagogical knowledge and a non-professional's instructional learning. This may be situated in the context of an unchallenged misconception that, according to Gooding & Metz (2011), has a high tendency to earn legitimacy or perceived

accuracy among people. However, the misconception of instructional design as curriculum, as captured above, seems a major commonality between teacher educators and student teachers, though a professional teacher educator, as well as a non-professional one, got it wrong. This obviously is a product of faulty learning and consistent with the findings by Köse (2008); Ojose (2015), who posit that misconceptions often originate from miseducation or faulty understanding, which can cause misapplication of rules. By this is meant the possible association of misconceptions with the transition of learners from a simple concept to technical learning activity or experience. This implies that an unsound previous knowledge is almost certainly a precursor to misconceptions that logically culminate in subsequent erroneous knowledge.

While learning outcome as examination result is held as a misconception by a professional teacher educator (A1) in a university. Both a professional teacher educator and a non-professional teacher educator in another university are correctly understood and accurately articulated by both professional and non-professional teacher educators in yet another university. However, instruction as pedagogy is a misconception held by all but two teacher educators (Respondents A3 and C2). In contrast, curriculum experience as teaching is another one held by all but two teacher educators (Respondents A4 & C2). The misconception of teaching method as an instructional strategy seems more remarkable than the earlier analyzed misconceptions. This is because virtually all the teacher educators equally hold this misconception that almost all the student teachers hold. This finding may be easily located within the context of Adzape & Akpoghol (2015)'s characterization of misconceptions as institutional, environmental, operational or pedagogical, as well as few earlier studies (Aglazor, 2017; Chan & Bray, 2014; Cheng et al., 2010; Nguyen & Baldauf Jr, 2010). The implication is that a misconception may be traced to a faulty conception of the wrong perception and dominant experiences or observations that may be institutional, even though the teacher or teacher educator as a technical person is the source.

It is of great value to note the incredible commonality in the pattern of participants' response to these three misconceptions (5) instructional procedure as a teaching approach, (6) assessment as evaluation, and (8) drama as a demonstration method where only the teacher educators tagged Respondents A1 and A2, B2, and C2 offer correct description of the pedagogical concepts. In contrast, the rest of the teacher educators provide wrong answers. This finding is consistent with Mishra, Tushar, and Abba (2020), who see the professional knowledge of the teacher or teacher educator as central to the professional learning of student teachers. It is equally of great value to note that the same teacher educators from the same universities hold the same set of misconceptions which the same teacher educators correct from the same universities.

The fact that this study has found teacher educators themselves to hold a significant percentage of the misconceptions held by student teachers makes possible the inference that teacher professionalism seems at the core of student teachers' professional knowledge, especially about pedagogical conceptions which concern the interpretation of instructional terms or application of teaching-related concepts (Andrew, 2012; COŞKUN, 2013; Erbacher & Poland, 2019; S. Suprapto et al., 2019) has exposed the insufficiency of evidence of special attention to this issue in the available body of teaching scholarship and therefore strengthen the rationale for the present study which found a strong association between teacher educator professionalism and student-teacher learning, thereby accepting the assumption that teacher educators are essentially responsible for their students' pedagogical misconceptions.

4. CONCLUSION

The present paper has attempted to assess the place of the professional education component of teacher education, which arguably accorded the highest consideration in the

scholarship of teaching. The paper articulated the significant role of teacher educators' professional learning in preparing the teacher for professional practice. It devoted some attention to the emerging concern over the growing practice of involving non-education specialists in teaching this component. It examined the possible implication of such practice for student learning, especially regarding the acquisition of professional knowledge and skills and cultivation of professional attitudes and dispositions by teachers whose job it is to implement school curricula. Drawing on personal experience as a teacher educator at three public universities in Nigeria, the researchers added insider perspectives to the issue of teachers' professional knowledge as a predictor of student learning. The study has as its tiny contribution to knowledge the exposure of specific instances of miseducation occasioned by both education professionals and non-education professionals among the university-based teacher educators. They participated in the teaching of professional education in a generalizable manner. Based on its findings, the study recommended the non-involvement of non-professionals in learning the professional component of teacher education and monitoring of teaching for attention to any possible miseducation.

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