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ANALYSIS OF TEACHER EDUCATORS KNOWLEDGE LEVEL ON UTILIZATION OF TEACHING PRACTICE ASSESSMENT METHODS AMONG MATHEMATICS PRE-SERVICE TEACHERS IN CHILDHOOD EDUCATION

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Abstract

The study examines Analysis of Teacher Educators Knowledge Level on Utilization of Teaching Practice Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education. This study was carried out in tertiary institutions in Imo State. Based on the purpose of the study two research question and two hypotheses guided the study. The study adopted descriptive research design. The population of the study comprised 65 teacher educators in school of early childhood care and Primary Education. A sample size of 65 Educators teachers was used for the study. The instrument used for data collection was a structured [redacted]

Keywords:
Mathematics, Teaching Practice, Assessment Methods, Childhood Education and Teachers Educators.

Questionnaire titled Teaching Practice Assessment Methods Scale for Pre-Service Teachers (TPAMSPT). The reliability co-efficient(r) of 0.92 were obtained using Cronbach alpha method. Data collected were analyzed using mean, standard deviation for the research questions while t-test were used to test the hypotheses at 0.05 level of significance. The results

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showed that teacher educators have high knowledge level on utilization of Traditional Assessment method (classroom observation) while very low level on utilization of Authentic Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education. It is recommended that teacher educators need to be trained on the importance of authentic assessment methods because enhances teacher education developments.

Introduction

Teaching practice is known to expose pre-service teachers to the actual practice of teaching. It is during this period that pre-service teachers are given the opportunity to try the art of teaching before actually getting into the real world of the teaching profession (Kiggundu and Nayimuli, 2009). In view of this, Perry (2004) argues that teaching practice creates a mixture of anticipation, anxiety, excitement and apprehension in the student-teachers as they commence their teaching practice. Thus, this provides student teachers with the chance to express their personal educational philosophies, theories and understandings. In other words, this creates an opportunity for student- teachers to experiment and test their knowledge and skills in the profession of teaching and learning with an understanding of their personal educational philosophies and theories. According to Maduabum and Abah in Uwameiye and Ogunbameru (2012), teaching practice is a component of teacher education programme in which teacher trainees have the opportunity to put into practice all the teaching and classroom management theories they have acquired during the course of their studies with a view to attain professional competence.

Olaitan and Ausiobo in Nakpodia (2015) indicated that practice teaching is the phase of the education of teachers in which the student-teacher is given an opportunity to bring together educational theory and actual teaching procedures under competent supervision. De-ville (2010) stated that teaching practice is an internship experience, a part of formative training process for student's teachers in skills exploration and enhancement. Akbar (2002) noted earlier that the term practice teaching embraces all the learning experiences of student teachers in schools. According to Teacher Training Regulation in Asta, Jolanta and Marijona (2015), teaching practice is such a period of studies when the initial professional steps are made, when the attitude towards teacher's activity, right, obligations and responsibilities is shaped. It is the educational space where the quality of

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competencies acquired during the study is revealed. Teaching practice help student's teachers acquire professional competencies and experience necessary for practical activity. Teaching practice is a period when pre-service teachers are exposed to classroom situation to transform theoretical aspect of their programme into practical. During the teaching practice process, student teachers learn to implement what they have learned at the faculty under the supervision of mentors. It is clear that individuals learn through experience in combination with careful preparation, good mentoring discussions with colleagues and well-designed courses, but not from experience alone (Basturk, 2016). De-Ville (2010) stated that teaching practice affords the trainees the opportunities to make personal observations of teaching and learning, formulate hypothesis, test their hypothesis and form their own theories of teaching and learning.

Teaching practice is a means of effecting necessary emotional and professional changes in student teachers because as a learning method, it is experiential as students live through it. Alkan and Demirhan in Basturk (2016) indicated that, the general purpose of the teaching practice courses is to contribute to pre-service teachers" professional development by providing them, within the framework of the faculty and school cooperation, the opportunity to transform their content knowledge, pedagogical content knowledge and general cultural knowledge obtained from the faculty into practice.

Teaching practice exposes pre-service teachers to new perspectives as well as prepares them in knowledge and skills. It equips them with knowledge of subject matter and pedagogical content knowledge or knowledge of how to teach (Wilke, 2004). Teaching practice offers the practicing students an opportunity to engage in profitable experiences in observing, sharing, participating and in teaching with the supervision of more experienced teachers (Cohen, 2017). With teaching practice, the student- teacher understands the rudiments of teaching which includes; use of teaching materials, methods of teaching, lesson planning, classroom management confidence and composure while in the classroom. Uwameiye and Ogunbameru (2012) citing other reports indicated that teaching practice; provides the time and avenue for student teachers to acquire competences that are required in their teaching professional development (Ehianetalor, 2018) , Brings student teachers into a programme of cooperation and interactive guidance by experienced teachers (Young & Edwards, 2006), Affords student teachers the opportunity to reflect on their own actions in the classroom and to acquire valuable skills, knowledge and attitude which are required in

management of student learning experiences in the classroom (Imogie,2019) and enhances pre-service teachers conceptualization of themselves as teachers.

One of the elements that determine a successful teaching practice exercise is the assessment of the student-teacher by their supervisors. In addition to the institution supervisors, pre-service teachers also had been evaluated by their mentor teachers as well as the school management while they undergo the teaching practice exercise. During the supervisor's assessment, the student – teacher journal contain a sheet known as teaching practice assessment form (TPAF) designed to assess the student- teachers in different parameters with scoring criteria and scoring procedures. Rusznyak & Bertram (2015) suggest that the use of teaching practice assessment form (TPAF) does not adequately support student teacher professional development because it lacks the element of assessment for learning concept rather than an assessment of learning in the current practice. Teacher educator's use of classroom observation is deemed as more suitable for formative assessment rather than summative assessment because the observation that has been done only reflects the state of practice at the specific time rather than the whole timeline and does not measure professional development in more holistic manner. There is need to shift from the traditional way of assessing students' knowledge, skills and attitudes by using classroom observation method.

Scriven in Syaiful, Rosnidar & Mohid-Hassan (2017) and Kulik (2001) had also criticized the use of observational for assessment because the visit from the mentor teacher and institution supervisor will make pre-service teachers alter their teaching styles. Scriven in Syaiful, Rosnidar & Mohid-Hassan (2017) further stated that the numbers of observation by supervisor and mentor teacher are relatively small to deliver a quality assessment during teaching practice. Furthermore, Kulik (2001) also added that the supervisor and mentor teacher who evaluate pre-service teachers may have biases that may skew their observations and judgments. The use of classroom observation as the main tool to evaluate pre-service teacher during teaching practice might be ineffective.

Also, teacher educators involved in instruction propose that teaching has become more complicated as a result of progressively demanding curriculum expectations and increasing diversity among learners and this situation suggested there is a need for changes in teacher preparation programme that enables student-teachers to become more practical in their understanding of the effects of context and learner variability (Shulman in Scriven in Syaiful, Rosnidar & Mohid-Hassan,

2017 ; Darling-Hammond & Snyder, 2000; Darling-Hammond, 2014a;).Based on the facts mentioned above, a change in the assessment of teaching practice is necessary to ensure the teacher training institution will produce a quality teacher for the future. In addition to giving a proper grade to the students, an effective assessment should help the pre-service teacher to enhance their teaching competencies as well as their professional development in order to improve their quality in the future. Therefore, to prepare a quality teacher, teaching practice supervision and assessment should be reform towards the 21st Century learning which involve the use of innovation. Teaching practice evaluation methods can be divided into two broad categories, namely traditional assessment methods and authentic assessment methods (Green, Johnson, & Adams, 2006).

Traditional assessment methods are teaching practice assessment method that existed and had been used to assess pre-service teachers during teaching practice from the 1980s until now. Queensland College of Teachers (2012) had described the traditional assessment method as mainly based on observation and ratings of pre-service teachers' competencies. While observation is widely used in the assessment of teaching practice, there are many weaknesses and criticism that associated with this method and also the integrity of the entire evaluation process pre-service teachers itself. Apart from observation, several other types of traditional assessment methods been had been used to assess teaching practice among pre-service teachers such as peer assessment and self-assessment.

Classroom observation or teacher observation is always used as the principal method for determining the scoring for the pre-service teachers during teaching practice. Oparah, Nwoke, and Ikwuanusi (2017) defined the classroom observation as series of teaching observation as a professional development process by providing feedback on classroom interaction and help pre-service teachers teach more effectively while Bell, Qi, Crofit, Leusner, McCaffery, Gitomer & Pianta (2014) described that the classroom observation comprises of two main elements, which are scoring criteria and scoring procedures. Classroom observation is the oldest method of teacher's assessment and had been developed by 1960's Oparah, Nwoke, and Ikwuanusi (2017). Maxwell (2001) had categories classroom observation in the two main types which are Incidental Observation that occurs during the ongoing activities of teaching by the pre-service teachers and Planned Observation, which involves purposeful planning for the pre-service teachers to be observed on specific learning outcomes. Classroom observation for pre-service teachers is usually done by mentor teachers and institution supervisors as well as

the management of the school to evaluate the students-teacher during the teaching practice. Classroom observation consists of five stage which is Pre-Observation Planning Conference, Classroom Visit/ Observation, Post-Observation Analysis, Post-Observation Conference and also Post-Conference Analysis (Kusut, 2015). This steps maybe varies according to the teacher training institution requirements. During classroom observation, several criteria been assessed for teaching practice such as professional knowledge and practice in teaching and learning, teaching skills, professional practice: relationships, personality, language proficiency, classroom management and instruction (Al-malki & Weir, 2014). This criterion, however, is different from one to another teacher training institution because there are no standard criteria for assessing the classroom observation and commonly teacher training institution will be using their guiding principle for teaching practice to evaluate teaching practice.

Peer Assessment is another traditional assessment method with the view of improving the quality of the learning process, increase critical abilities in students, and also student autonomy, peer assessment was deemed suitable for measuring pre-service teachers' performance during teaching practice. Peer assessment is defined as an arrangement in which individuals consider the amount, level, value, worth, quality, or success of the products or outcomes of learning of peers of similar status (Topping, 2015). Due to the human tendency to accept criticism from peers which have a similar status, peer assessment can help pre-service teachers while undergoing teaching practice and can also assist teacher training institutions to evaluate pre-service teachers. Peer assessment of pre-service teachers' professional skills during teaching practice can take place within the institution or school. Peer feedback is effective in increasing pre-service teachers' use of motivational praise and also their self-esteem (Topping, 2018). Lydia Wen, Tsai, &Chang (2006) had suggested that pre-service teachers had positive attitudes towards peer assessment and had self-confidence in rating their peers. Although the benefits of peer assessment are significant, there was also negative drawback like lack of trust and unbalanced, non-objective, or dishonest feedback that need to deal with when implementing peer assessment (Topping, 2018).

In addition to the peer assessment, self-assessment can also help the pre-service teachers to be reflective teachers. Self-assessment is the participation of individuals in making decisions regarding their personal learning, especially relating to achievements as well as the outcomes of their learning (Boud & Falchikov, 2018). Topping (2003) defined self-assessment as "an arrangement for

learners to consider and specify the level, value or quality of their products or performances" (Topping, 2003). Self-assessment has been included in the evaluation of pre-service teacher by teacher training institution across the world while they undergo teaching practice with the need to provide a reflection journal. To implement self-assessment, Chung (2008) had formulated a conceptual model of the self-assessment process to improve pre-service teachers' critical thinking significantly and making a reflection. This conceptual model started with goal setting where the pre-service teachers will make an aim setting of what they want to achieve in their teaching practice. The second step is pre-service teachers will focus on the goals that they set in the first instance and recorded evidence of what they achieved concerning the criteria. After that, the next step is the pre-service teachers will judge the quality of their teaching regarding what went well and what did not go well; then they graded themselves against the criteria. The last step is pre-service teachers will make a reflection of what they had learned, and then they will make suggestions for improvement. The significant component in self-assessment is reflection whereby pre-service teachers need to reflect their learning together with the problem encountered during the process and also a possible solution.

Authentic Assessment methods is defined by Wiggins (2014) as an assessment that is realistic, requires judgment and innovation, involving first-hand experience on the subject matter, replicates the real situation existed, requires student to use their own skills and knowledge to solve the problem and allow opportunities for student to rehearse, practice, consult, resources and get feedback in order to refine their performance. Authentic assessment is any technique which can be used by teachers, instructors, educators and lecturers in order to assess students' professional and personal growth. It is a shift from the traditional way of assessing students' knowledge, skills and attitudes by using tests, examination and experiments. Wiggins (2014) describes authentic assessment as a form of assessment in which students are asked to perform real-world tasks that demonstrate meaningful application of essential knowledge and skills. Wiggins (2014) affirms that in authentic assessment students should construct knowledge. The cognitive work that has to be applied is disciplined inquiry. Students should engage in the use of prior knowledge to get beyond that knowledge, establish relationships between pieces of this knowledge to construct in-depth understanding around a reasonably focused topic, and conduct their work and express their conclusions through elaborate communication. This suggest that

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authentic assessment encourages students develop analytical skills; have the ability to integrate what is learnt; to be creative; be able to work collaboratively; and develop written and oral expression skills (Wiggins, 2014).Authentic assessments have many potential benefits to students and teachers. These benefits include: Students assume active role in the assessment process , Authentic assessment can be successfully used with students of varying cultural backgrounds, learning and academic abilities, Tasks used in authentic assessment are interesting and reflective of students' daily lives, Ultimately a more positive attitude toward school and learning may evolve, Authentic assessment promotes a more student-centered approach to teaching, Teachers assume a larger role in the assessment process than in the traditional testing programmes, Authentic assessment provides valuable information to the teacher on the student progress as well as the success of instruction, Authentic assessment is helpful for special needs students because it incorporates social and behavioural skills necessary both in and outside the classroom and Parents will more readily understand authentic assessment than the abstract percentiles, grade equivalents, and other measures of standardized tests (Elsworth in Syaiful, Rosnidar & Mohid-Hassan, 2017).There are several types of authentic assessment which include; portfolio assessment, face-to-face interviews, writing articles, story retelling, demonstrations, projects/presentations and observations. The most commonly used authentic assessments are portfolio assessment, E-portfolio assessment, Exhibitions performance assessment, Problem – based assessment and cases (Wiggins, 2014).

A portfolio is a form of authentic assessment that been used to assess overall criteria of student assessment. Herman, Aschbacher, and winters in Syaiful, Rosnidar & Mohid-Hassan (2017) described portfolio as the collections of student work that are reviewed against criteria to judge an individual student or a program. Portfolios can include many documents that related to teaching practice like a lesson plan, syllabus, teaching material, assignments, tests, and also samples of student work, video-tapes, or audiotapes or classroom activities (Darling-Hammond & Snyder, 2000). The further suggested that the assessment in portfolio only exist when an assessment purpose is defined, criteria or methods for determining what is put into the portfolio, by whom, and then, are explicated; and criteria for assessing either the collection or individual pieces of work are identified. Portfolio assessment is the method most widely used to evaluate teaching practice in teacher training institution. The usage of portfolio assessment

can demonstrate the pre-service teacher professional growth through the developmental of portfolios that allow pre-service teachers to collect and organize artefacts related to their teaching (Dutt, Tallerico, & Kayler in Syaiful, Rosnidar & Mohid-Hassan, 2017).Also, the find out that through the usage of the portfolio can enhance the communication among the pre-service teachers through the collaborative review process. Besides that, portfolios also have the advantage of containing several samples of student work assembled in a purposeful manner. Well-conceived portfolios include pieces representing work in progress and samples, student reflection about their work, and evaluation criteria. E-portfolios is the use technology based assessment. Portfolio assessment has changed from paper-based to electronic-based storage resources (Hung, 2012). This form of the portfolio is more assessable from everywhere making it is a suitable replacement for the paper-based portfolio. However, e-portfolios are different from conventional portfolios in several manners. Oakley, Pegrum, & Johnston (2014) has listed the benefits of using e-portfolios apart from conventional portfolio which include, the types of resources that can be collected include digital images, audio, video, and animations, rather than just static paper-based artefacts, the information stored electronically can be more easily organized and cross-referenced –both linked internally and hyperlinked externally, E-portfolios can facilitate wide educational and professional networking and sharing through internal or external forums –ranging from discussion boards to social networking services and E-portfolios have multiple functions, some of which are partially in conflict with each other, since they can serve as tools for learner reflection and growth, for evaluation and assessment, or for marketing and employment. Boulton (2014) and Oakley et al. (2014) suggested that the e-portfolio may serve the purpose of assessment for the pre-service teachers during teaching practice provided that a clear set of assessment criteria be needed to assess their growth in teaching competencies. The use of e-portfolios is clearly had more advantages than conventional paper-based portfolio because it will reduce the paper consumption to prepare the paper-based portfolio and also different type resources that can be supported such as images, video and much more. Although there are many benefits of e-portfolios, Queensland College of Teachers (2012) had noted several obstacles to the implementation of e-portfolios which are the time constraint and technological competence to gather and produce an e-portfolio.

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An exhibition of Performance method suggested by Darling-Hammond and Snyder (2000) is a little bit different from classroom observation that has been used in the traditional assessment. Darling-Hammond and Snyder (2000) suggested that exhibition of the performance of pre-service teacher should be evaluated against a set of professional standards for teaching competencies. This exhibition of performance can be in the form of observations or videotapes of teaching, teaching material like teaching plans or teaching resources, or even the pre-service teachers' activities that represent what their action when solving problems of practice with mentor teachers, institutional supervisor, and fellow students. The key of exhibitions of performance's assessment is the set of professional standards. This key can be seen from Darling-Hammond and Snyder (2000) explanation on exhibitions of performance, Exhibitions allow teachers to demonstrate particular abilities in ways that include or closely simulate teaching contexts or events. The distinguishing feature of an exhibition that differentiates it from an unguided observation of practice is that it allows the evaluation of these abilities about articulated standards of practice.

Problem-based inquiries or teacher research is another form of authentic assessment that suggested by Darling-Hammond & Snyder (2000). The idea of problem-based inquiries is more systematically planned to adhere the cyclical processes of planning, action, evaluation, reflection and re-planning (Queensland College of Teachers, 2012). In order to assess pre-service teacher during teaching practice, they are required to investigate systematically inquiries that related to a problem that they faced during teaching practice. They are required to performance an action research which is a mini research with a shorter time frame to overcome the problem they faced during teaching practice. The result of the action research can be used to re-plan the strategies for the next teaching activities. Apart from making problem-based inquiries alone, Darling-Hammond and Snyder (2000) had suggested that these pre-service teachers need to be assigned to a support group that involves self-selected group and a facilitator to facilitate the inquiries activity. These support groups can hold a regular meeting in order to discuss their problem or issue regarding practice with the evidence so that they can select an appropriate solution to their problems. After they had applied an intervention to the problem, the support group may call for a meeting to look at the effectiveness of the response and discuss what are the strategies that need to be done after that to strengthen the result.

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Cases are another authentic assessment tool that is used during the teaching practice. The cases are a report that prepared by pre-service teachers regarding the phenomena those they experienced regarding the subject that interested them during teaching practice. The cases are portrayed as: Whether they take the form of case reports -first-person narratives of personal experiences of teaching - or case studies -third person analyses of situations or students -cases allow the exploration of precepts, principles, theories, and perennial issues as they actually occur in the real world. Students may read and analyze cases, seeking the lessons and insights they offer, or they may write their own cases, developing interpretations of events as they work through the process of representing their experience. The cases can provide an assessment strategy that oversees the foregrounds issues of the teaching context (Queensland College of Teachers, 2012). In order to use cases as an authentic assessment, Darling-Hammond and Snyder (2000) suggested that the pre-service teachers need to construct context-specific narratives about either of their students, a teaching event, or teaching and learning environments. After that, the pre-service teachers need to relate their experience encountered by them with the available knowledge of theory, research or other experience that available in the literature. When pre-service teachers explored the cases that they encountered, they will begin to learn a new knowledge that can equip with a better understanding of the phenomena that they had encountered.

Researchers like Ernest (2017) investigated analysis of senior high school mathematics teacher characteristics and utilization of assessment practices and the result showed that assessment practices were not influenced by teacher characteristics such as gender and years of teaching. It was however found that professionalism of the teacher and exposure to INSET on classroom assessment influenced the use of assessment in the classroom. Idika and Eke (2017) examine Assessment of teachers' knowledge and application of differential assessment techniques in all-inclusive classroom in universities in south-south zone, Nigeria and result showed that the non-specialist teachers neither have the knowledge nor the application of assessment techniques in all-inclusive classrooms, while the specialist teachers exhibited adequate knowledge of assessment techniques. However, little application of differential assessment techniques was displayed. Therefore, this study intends to examine teacher educator's knowledge level on use of traditional and authentic assessment methods during teaching practice exercise. Emenyonu, Unamba & Akaraonye (2021) assessed teaching performance

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in Mathematics among early childhood care education Pre-service teachers during teaching practice. Results showed that indicated that teaching performance of the pre-service teachers was at the high extent, mean score on parameters of assessment are high on skill of classroom management strategies and communication skill while there are low mean scores on Quality of lesson preparation, skill of evaluation and teacher personality attitude and values and very low mean score on preparation, presentation and development of lesson and the inter-rater reliability was found to be valid percent (66.7%) irrespective of gender performance.

Statement of the problem

For teachers to effectively take up the role of educating, they need to be adequately trained to acquire the functional prerequisite in teaching. Students undergo training in the various colleges of education and the Universities which offer education programmes. The programmes are meant to prepare students who are often called pre-service or prospective teachers. Among the training given to them are content knowledge and pedagogical knowledge. Specifically, students are introduced to the curriculum of the subjects they are being prepared for. After that the methods and strategies required to teach the content are taught. Pre-service teachers are further provided with knowledge on classroom management, ethics of the teaching profession, interpersonal relationships with students, teachers and administrators and many more. Having being exposed to these essential aspects of training, students are made to put them into practice through micro or on-campus teaching practice. The micro-teaching makes students to practicalize the methods and strategies learnt on their peers. The exercise also intends to prepare and equip them for the off-campus teaching practice where they would handle the category of students they are being prepare for. Thus, the off-campus teaching practice is also an avenue for pre-service teachers to put their ideas and skills into practice. Although institutions and faculties training teachers require their students to undergo off-campus teaching practice, not much systematic investigations seemed to have been conducted to unravel how they apply the knowledge gained in class and the challenges they encounter in the course of the internship. What they seem to be doing is assessing the teaching of the trainees for grading purposes. It is against this backdrop that this study was executed to examine teacher's educator's knowledge level on use

of traditional and Authentic Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education.

Purpose of the study

The purpose of this study is to examine Teacher Educators Knowledge Level on Utilization of Teaching Practice Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education.Specifically, the study sought to:

i. Find out theTeacher Educators Knowledge Level on Utilization of Traditional Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education
ii. Find out theTeacher Educators Knowledge Level on Utilization of Authentic Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education

Research Questions

The following research questions guided the study

1. What is the knowledge level of teacher educators on Utilization of Traditional Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education?
2. What is the knowledge level of teacher educators on Utilization ofAuthentic Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education?

Hypotheses

The following research hypotheses were tested at 0.05 level of significant.

HO1: There is no significant difference between the mean scores of male and female teacher educators on Utilization of Traditional Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education?

HO2;There is no significant difference between the mean scores of male and female teacher educators on Utilization of Authentic Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education?

Methodology

This research is a survey research with a descriptive research design. According to Gay and Airisian (2009), descriptive research involved collecting data in order to answer question concerning the current status of the subject of study. It means

that descriptive research would help the researchers in collecting the data. In addition, quantitative research was the process of discovering knowledge by using numeral data as the instrument to find information about what was wanted to know. It means that quantitative research used the data in the form of the numbers and statistic analyzing. So, descriptive quantitative is numeral related to statistic descriptive such as measuring scale, portrays graphic and variability. The data would be in numeral statistic and would be explained in narrative. In this research, the descriptive research was used to analyze the Teacher Educators Knowledge Level on Utilization of Teaching Practice Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education. The population of the study involved all the 65 early childhood teacher educators (ECTE) in school of early childhood care and primary education. A sample size of 65 involving 25males and 40females teacher educators participated in the study, due the small nature of the population and no sampling technique was used. The instrument used for the collection of the data is structured Questionnaire titled Teaching Practice Assessment Methods Scale for Pre-Service Teachers (TPAMSPT). The face and content validity of the instrument were done by two experts in measurement and evaluation and one expert in mathematics education. A Cronbach alpha measure of 0.92 were obtained as the reliability index for internal consistency of the items. The schools involved were visited by the researchers and the questionnaires were administered to the respondents with the help of some trained research assistance. The instruments were collected on completion; this ensured a 100% return of the instrument. The descriptive statistic of mean and standard deviation was used to answer the research questions while t-test were used to test the hypotheses at 0.05 level of significance.

Results

Research Question One: What is the knowledge level of teacher educators on Utilization of Traditional Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education.

Table 1: Mean and Standard Deviation on knowledge level of teacher educators on Utilization of Traditional Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education.

Variable		Category Level	Mean	SD	Decision
	Classroom Observation	High Moderate Low Very Low	3.89	1.25	High Level
	Peer Assessment	High			Moderate level

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Traditional Assessment Methods		Moderate Low Very Low	2.50		
	Self-Assessment	High Moderate Low Very Low	1.23		Low level

Result in table 1 showed that the knowledge level of teacher educators on Utilization of Traditional Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education scored high level on classroom observation while peer assessment and self-assessment scored moderate and low level respectively.

Research Question Two: What is the knowledge level of teacher educators on Utilization of Authentic Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education

Table 2: Mean and Standard Deviation on knowledge level of teacher educators on Utilization of Authentic Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education.

Variable		Category Level	Mean	SD	Decision
Authentic Assessment Methods	Portfolio	High Moderate Low Very Low	1.05	0.56	Very low level
	E- Portfolio	High Moderate Low Very Low	1.00	0.43	Very Low Level
	Exhibitions of Performance	High Moderate Low Very Low	1.05	0.67	Very Low Level
	Problem – based Inquires	High Moderate Low Very Low	1.02	0.56	Very Low Level
	Cases	High Moderate Low			

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	Very Low	1.00	0.43	Very Low Level

Result in table two showed that the knowledge level of teacher educators on Utilization of Authentic Assessment Methods among Mathematics Pre-Service Teachers in Childhood Educationscored very low level on Portfolio, E- Portfolio, Exhibitions of Performance, Problem – based Inquires and Cases respectively

Hypotheses

HO1: There is no significant difference between the mean scores of male and female teacher educators on Utilization of Traditional Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education.

Table 3: t-test analysis on teacher educators on Utilization of Traditional Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education?

Variable	Gender	N	Mean	SD	DF	t-cal	t-tab	Decision
Traditional Assessment Methods	Male	25	39.17	15.45	63	2.46	1.96	Accept Ho
	Female	40	49.45	15.98				

Results in table 3 show that the t-cal 2.46 is greater than the critical value of t-value (1.96) at df-63 at 0.05 level of significant. Based on the results the null hypothesis is upheld. This implies that there is on significant difference between male and female teacher educators on Utilization of Traditional Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education.

HO2; There is no significant difference between the mean scores of male and female teacher educators on Utilization of Authentic Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education?

Table 4: t-test analysis on teacher educators on Utilization of Authentic Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education

Variable	Gender	N	Mean	SD	DF	t-cal	t-tab	Decision
Authentic Assessment Methods	Male	25	40.17	15.25	63	2.36	1.96	Accept Ho
	Female	40	41.25	15.28				

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Results in table 3 show that the t-cal 2.36 is greater than the critical value of t-value (1.96) at df-63 at 0.05 level of significant. Based on the results the null hypothesis is upheld. This implies that there is on significant difference between male and female teacher educators on Utilization of Authentic Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education.

Discussion

The study reveals that teacher educators have high level on utilization of class observation as the only Teaching Practice Traditional Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education. The hypothesis reveals that there is on significant difference between male and female teacher educators on Utilization of Traditional Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education. This result is in accord with the finding of Idika and Eke (2017) examine Assessment of teachers' knowledge and application of differential assessment techniques in all-inclusive classroom in universities in south-south zone, Nigeria and result showed that the non-specialist teachers neither have the knowledge nor the application of assessment techniques in all-inclusive classrooms, while the specialist teachers exhibited adequate knowledge of assessment techniques. However, little application of differential assessment techniques was displayed.

Conclusion

The study reveals that teacher educators have Very low level on utilization Teaching Practice Authentic Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education. The hypothesis reveals that there is on significant difference between male and female teacher educators on Utilization of Authentic Assessment Methods among Mathematics Pre-Service Teachers in Childhood Education. Idika and Eke (2017) examine Assessment of teachers' knowledge and application of differential assessment techniques in all-inclusive classroom in universities in south-south zone, Nigeria and result showed that the non-specialist teachers neither have the knowledge nor the application of assessment techniques in all-inclusive classrooms, while the specialist teachers exhibited adequate knowledge of assessment techniques. However, little application of differential assessment techniques was displayed.

Recommendations

The following recommendations are made:

1. The use of authentic as an assessment and pedagogical tool should be extended to other courses in the teacher education.
2. Teacher educators need to be trained on the importance of authentic assessment methods because enhances teacher education developments.
3. Alternative assessment techniques which are authentic need to be emphasized in teacher education inorder to for them to influence their pedagogies and practices during teaching practice exercise.

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