Near East University Graduate School of Educational Sciences Preschool Education

Transitional Approach From Teacher-centered to Constructivist Teaching
Strategies

Master Thesis

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This Thesis, Transitional Approach from Teacher-Center to Constructivist Teaching Strategies is approved from the division of Pre-School Education Programme as a Master Degree Thesis.		
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ABSTRACT

This study came as a result of my desire on how to improve and develop other teaching strategies as a teacher. The research study was designed to gain knowledge of constructivist theory and how constructivist philosophies can be incorporate in my teaching and learning process in order to facilitate a shift from a traditional method of instruction to a student centered method where the learners are engaged actively in the learning process rather than being passively received information. The research methodology used in my data collection between the months of July - August 2016 is through auto-ethnography recording, documenting my results for that period of two months from my experiences gathered as a pre-service caregiver educator at Kaduna State College of Education. The findings show that students were positively influence during the learning process and the constructivist strategies adopted really workout successfully in transforming the learning environment to students centered. To modify one habit of doing what he/she is used to need painstaking, but not withstanding this can be achieve when more efforts are put to help the teachers in employing different methods in their teaching practices either by modifying or augmenting it.

Key Words: Constructivism, Student-Centered Learning, Caregiver Education,

Auto-Ethnography, Teacher-Centered Instruction

DEDICATION

I dedicated this work to my parents, who through their example introduced me to the fear of God, human values and to the values of education.

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My utmost gratitude to God for the strength, knowledge and protection granted to me to complete this thesis. Without Him, I could have not reached this milestone in my life.

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CHAPTER 1:

INTRODUCTION

1.1 The Problem

The state of Nigerian education is not encouraging, the situation presently is bleak. Both the teachers and the students are not finding it easy in the learning processes and this has caused a lot of concerned because of the level of failure in examinations. The pedagogy used in Nigeria is one of the major reasons why students fail woefully (Azuka, 2013). The dominant mode of instruction used by teachers in Nigerian system of education today is mostly teacher-centered, which is a form of instruction in which students passively receive information via lectures with an end goal of testing and assessment. This type of instruction does not help students to comprehend and remember well, they forget the lesson taught easily within a short period of time and as a result, performed poorly in their examinations. This implies that we need to modify or augment the method of instruction use in our schools because the lecture method that is mostly used now does not show any sign of further improvement in the system but rather worsening the situation.

Action need to be taking by employing functional learning strategies which will focus on a shift from teachers to students, as suggested by Brooks & Brooks (1993) that

"students are the ones constructing understanding, the teachers' role is to get students to take responsibility for their own learning, to be autonomous thinkers, to develop integrated understanding of concepts, and to pose and seek to answer important questions".

For that reason, all meaningful strategies should be employ in order to help the teachers implement a more viable method of instruction that will help the nation out of it present predicaments by either augment or modify the method of instruction.

1.2 Purpose of my Study

We choose to undertake my study on constructivism with my supervisor after a thorough discussion we had concerning the educational system in my country Nigeria and the method of instruction used in lesson delivery which is mostly teacher-centered. Realizing this new trend in education and how teachers and students are facing difficulties in the learning process which result in mass failure in our national examinations, I quickly swing into action to know more about the concept "constructivism" and how it may help me improve and transition from the teacher to the student-centered model of instruction. I was taught using the teacher-centered model of instruction and I understood I am equally using the same method to instruct my students. I am no more comfortable in my career with the traditional way of giving instruction where the students are passive throughout the lesson while the teacher remains the key actor in the entire learning process of transferring information to students.

Although in teaching, there are times that warrant the use of the traditional model of instruction but it always depend on the circumstances surrounding you; however, I was too much depending on the traditional way of instruction and was not even having a second thought of changing to a different method, that was the reason why I decided to take the bull by the horn to incorporate other teaching strategies when the opportunity came. Though I did not conclude by saying constructivism is the absolute and final

method, but it will shade more light and broaden my point of view as I seek more knowledge as a pre-service caregiver educator.

My anticipation is that this study will serve as a channel that will open the way for me to develop my career and be a knowledgeable teacher and the constructivist teaching strategies I intend to incorporate will assist in creating a more conducive environment for my pre-service caregivers. Moreover, I plan to use pre-service caregiver's responses of Kaduna State College of education in an attempt to determine how to implement these strategies within my pre-service caregiver's classes in the college.

1.3 Research Questions

- 1. How constructivists teaching practices can facilitate a shift from the traditional method of instruction to a more student-centered learning environment?
- 2. How do constructivist strategies will positively impact student learning?

1.4 Importance of the Study

The thesis is significant as a result of the detailed picture of the process I gave of my transition from teacher center to constructivist teaching strategies using Brooks and Brooks descriptors as factors that influenced the process.

I did not realize the importance of scrutinizing my actions and practices in my teaching profession until I videotaped myself as a requirement in autoethnography method of research during this study. My qualities as a teacher were not that of a facilitator who motivates learners for reasoning and discussion. My practices were inadequate in connections and centered on transfer of knowledge to students. As a result,

my student's only have little idea and knowledge concerning the basic principles since they do not participate in the learning process. In view of the foregoing, I came to understand the need to critically scrutinize myself so that I can develop and improve my teaching practices that will make students become active participant in the learning process.

This postgraduate research study develops into a very serious change in my practices as a teacher and it is now that I realize the ownership and the will to improve my practices is in my hands. As expressed by Lampert (2001), "teachers are more accepting to examining and refining their practices when they see the need for change, rather than an observer who spends much less time in the teacher's domain". This autoethnography study that entails videotaping and recording was an epiphany of what I really need to see what my actions are as a teacher. It would be a wonderful thing for teachers that have been in the profession for over five years and think that they are doing well would feel. Any teacher who wishes to assist fellow colleagues in the profession and want to change in the way I did, this thesis can be of great help and useful for that.

1.5 The Research Limitations

The limitations of this study include:

1. The research work is conducted based on my personal characteristics as a preservice caregiver educator. The events that take place during the conduct of the study may not be applicable to anyone else except me. Therefore, the outcome of the result and it generalizability may only be applicable to pre-service caregiver's educators with similar temperament in their teaching context and goals.

- 2. Not documenting my experiences with all the levels of early childhood department. Age and maturity at other levels may offer different outcomes to the study.
- 3. The time period used in conducting this study is limited. A longitudinal research approach can be used to get a more thorough conclusive data.

1.6 Definition of Some Terms

The definition of the following terms applies for the purpose of this research study:

Auto-ethnography: "Autoethnography is an approach to research and writing that seeks to describe and systematically analyze (graphy) personal experience (auto) in order to understand cultural experience (ethno) (Ellis, 2004; Holman, 2005)".

Classroom management refers to different ways of applying various skills and methodology that educators employ during lessons to make sure that students are orderly organized through the learning process in order to be academically productive (Hand & Treagust, 1997).

Constructivism: A teaching philosophy based on the concept of learning implying that students construct knowledge and meaning by reflecting on their personal experiences, rather than record understanding of what they study and relating the new knowledge with what they already know (Russell 1999).

Constructivist learning environment: a learning location that students interact with each other and help one another using their various learning materials and knowledge resources in their problem-solving activities and effort in the process of gaining knowledge (Brent, 1996).

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Traditional instruction/teacher center: is a form of instruction in which students passively receive information via lectures with an end goal of testing and assessment (Azuka, 2013).

CHAPTER 2:

REVIEW OF LITERATURE

2.1 Constructivist Theory

Research in many fields of education indicates that the nature of human learning has experienced a significant shift in reasoning. One of the new trends in human learning is the perspective known as constructivism. In the past two decades, constructivist perspectives have increasingly become influential on learning, bringing new ideas about the nature and ground of knowledge and thus brought a total paradigm shift in the theory of learning and the study of knowledge.

Russell (1999) stated that "constructivism is a philosophy of learning founded on the premise that we construct our own understanding of the world we live in by reflecting on our experiences. Each of us generates our own rules and mental models, which we use to make sense of our experiences. Learning, therefore, is adapting our mental models to accommodate new experiences".

As derived from the above statement, the constructivist's central belief is that there are "rules" and "mental models," that we create to use in making learning meaningful. Learning, for that reason, can be said to simply mean the act of acquiring new knowledge that brings permanent change or new experiences. The theory of constructivism is grounded in different beliefs of influential developmental theorists, including Piaget, Bruner, and Vygotsky.

Piaget (Gallagher & Reid, 1981) accepts that the basic form of learning should be the discovery that is to say to comprehend, to obtain knowledge or to construct again by rediscovery. According to his beliefs, there are stages which children pass through and receive ideas they may see later in life as not correct. Piaget stressed children's need for self-sufficiency and also claimed that children participating in activities that they want in classroom situations will find out that their association and something they imagine or picture in their mind happen in an autonomous performance.

In a similar manner, Bruner (1990), who was influenced by Piaget's theory, also discussed the notion that learners must engage in active process during learning to construct their new thought or ideas using their past or present knowledge. He expressed that choosing and transformation of knowledge, construction of an idea or theory and decision making is the sole responsibility of the learners. All those procedures will depend on the mental structure that will give an idea and organization to the knowledge that you have and let the person go further than the given knowledge.

Vygotsky (Berk & Winsher, 1995), like Piaget, believed in the same basic view of a child as a "biological organism". Piaget stressed what happens within the organism that guides cognitive change. Vygotsky, on the other hand, explained how social experience might cause important revisions in the child's thinking, which becomes an essential component of learning. He also emphasized the fundamental role of instruction as development to enhance verbal dialogue. Knowledge is acquired well when the learner is actively involved in the learning procedure. Knowledge and ideas emerge from situations in which learners draw their knowledge and ideas out of the experience that have meaning and importance to them.

Therefore, constructivist practice means that children are expected to form their own meaning, which involves skills of divergent thinking, critical thinking, decision

making, and social interaction. These skills will help create a foundation to enable these children to live meaningful lives and be productive citizens in the future so that they are capable of thinking, analyzing, and solving the problems on their own.

Within the literature, we find two substantially different constructivist theoretical beliefs; cognitive constructivist theory and social constructivist theory. The two theories share the same beliefs about learning, such as learner-centered or as Leonard (2002) said "learner-centric". The theories also claim that learners have some prior knowledge and experience as a foundation for testing out their hypotheses and to build their own set of knowledge to solve an identified problem brought in by the teacher. The social constructivist theory, however, extends the beliefs of the cognitive constructivist by creating a learning environment where children construct their knowledge in team-based collaborative learning environments while still focusing on the importance of learners. Moreover, social constructivist believes that children develop their ideas in a rich language environment.

Some critical elements to enhance successful constructivist environments are learner inquiry and discovery, learner autonomy, and learner self-motivation. In active learning constructivist paradigm, teachers' roles include being a facilitator, a catalyst, a coach, and a project director. All of the above elements represent characteristics shared by constructivists (Glaserfeld, 1989; Brooks & Brooks, 1993; Fosnot, 1996; Leonard, 2002). However, though there are two substantially different constructivist theoretical beliefs, yet there are very important ideas or arguments that most of the constructivist agreed on as opined by Fox, (2001), "generally accepted guidelines of current views of constructivism encompass the following criteria:

- 1. Learning is an active process.
- 2. Knowledge is constructed, rather than innate, or passively absorbed.
- 3. Knowledge is invented not discovered.
- 4. All knowledge is personal and idiosyncratic.
- 5. All knowledge is socially constructed.
- 6. Learning is essentially a process of making sense of the world.
- 7. Effective learning requires meaningful, open-ended, challenging problems for the learner to solve".

Despite the similarities in critical elements, the beliefs of how learners construct their knowledge are different between cognitive constructivists and social constructivists. Two major cognitive constructivist theorists provide support to this study; Jean Piaget and Jerome Bruner. Lev Vygotsky theory of constructing knowledge is represented the social constructivist theorists (Glaserfeld, 1989; Fsnot, 1996; Leonard, 2002). These major differences between the two constructivist theorists are further described in the literature review that follows.

2.2 Cognitive Constructivist Theory

Jean Piaget (1896-1980), will be continued remembered for his extensive research on developmental psychology. Piaget's in his constructivist theory assert that bestowing knowledge to the individual is not possible in such a way that it brings immediate comprehension and its application. But rather individual has to "construct" in their best understanding and form meaning based upon their experiences. His theory cut across so many theories such as; teaching method, learning theories, and education reform. Piaget

emphasis social environment is crucial in the developmental process of children, yet upon all these, children are believed to be developing in a situation that is separate from others, behaving as young scientist's investigators, formulating their own theories experimenting to create and construct knowledge within their surrounding (Das Gupta & Richardson, 2001). The most paramount part of Piaget hypothesis which leads to the individual construction of new information is assimilation and accommodation. Making the person integrate new ideas into the previous knowledge is the work of Assimilating. The process makes the person look different about things, think carefully on the issue once misinterpret and judge the value or condition in a careful way and determine only the most important, eventually, changing those that were at one time misinterpret. On the other hand, when talking about accommodation, is the readjustment of the pre-existing idea in order to fit in new information. The way Individuals envisage how the world function, differ. If the way we think of something does not happen that way, then individual must learn to accommodate and then readjust the anticipated outcome with the result (Fosnot, 1996), and disequilibrium must occur for proper learning to be in effect, without disequilibrium, accommodation of new information will not take place. In disequilibrium, mistakes in learning are regarded as the result of students' knowledge, therefore, in such a situation; students' should always be encouraged rather than stopping the occurrence. To some degree or extent, students are giving the green-light to investigate and get different solutions in rigorous, open-ended discovery in their natural sense (Fosnot, 1996). Knowledge construction is very important and it acquisition needs to be stress. Educators are intimate to breed a conducive atmosphere that will help students investigate content using scientific test. Therefore, teachers will need a dedicated

time and hard work in dealing with students of the same age group to take the difficult task.

Another cognitive constructivist theorist is Jerome Bruner who was inspired by Piaget's work (Leonard, 2002) and was influenced by Vygotsky theory as well. In later years, most of Bruner's work focused on language and culture. However, he and Piaget are primarily identified as a cognitive constructivist theorist (Glaserfeld, 1989; Brooks & Brooks, 1993; Fosnot, 1996; Leonard, 2002).

According to Bruner (1990), "the central concept of human psychology is meaning and the process and interactions involved in the construction of meaning". He also pointed out saying it's deserving that students gain knowledge on how, where, to whom and in what condition instead of learning what to say.

The primary tenet of Bruner's theory is that learners construct knowledge by interacting with the environment. Bruner (1966) believed it takes a functional process to learn and new thoughts or ideas are constructed by students depend on their present or previous information. According to him, student depends on his intellectual ability to choose and reframe the knowledge to form a theory which involved conversation making. The mental arrangement gives ideas and structures to experience and leaves the person with more knowledge than before.

Bruner is famous for many cognitive studies; however, the aspect of his research that considered constructivist in design is a discovery-learning theory (Leonard, 2002). His concepts of discovery learning are that learners will remember concepts more when they discover the concepts on their own and apply those concepts to their knowledge base

and structure the concepts to their own background and life experiences. Bruner believed that learners may make mistakes during the process of discovery, but the mistakes are essential to the learning process. Learners will actively take part in the formation and structuring of learning content when they are mature enough, self-motivated enough, and experienced enough. In discovery learning, the teacher roles are as a facilitator, coach, and guide, who lead the way and assist the learners through their active learning activities (Bruner, 1960, Leonard, 2002).

Bruner (1966) also said that humans construct their knowledge through three information-processing systems, which are "Enactive representation (action), Iconic representation (imagery), and Symbolic representation (language)". He explains that:

- Enactive representation (Action) refers to the belief that young children represent the world in terms of personal action. It represents past events through an appropriate motor response to segments of their environment.
- Iconic representation (Imagery) refers to the period of progression defined by the representation of world with respect to concrete metal images. It represents the spatial, temporal and qualitative structures of perceptual circumstances.
- Symbolic representation (Language) means the final stage of development when children are capable of presenting their world in absolute symbols, which include language and theoretical system.

Bruner (1996) explained the concept of knowledge construction by stating, "Reality construction is the product of meaning making shaped by traditions and by a culture's toolkit of ways of thought. In this sense, education must be conceived as aiding young humans in learning to use the tools of meaning making and reality construction, to better

adapt to the world in which they find themselves and to help in the process of changing is required".

To Bruner acquiring knowledge involved reasoning, creating and evaluating theories which rely on a special blueprint to be employ preferably than to be resolved only by the environment Bruner (1966).

2.3 Social Constructivist Theory

Piaget was more concerned about the biological development but shifted to a social way in constructivism. Bruner is famous in his discovery learning which he stated that learners will remember concepts more when they discover the concepts on their own. Vygotsky on the other hand, "said that social relation, cultural setting, and human activities will determine how and what the individual will learn about the world in which he lives. Involving in different varieties of activities and interacting with one another in the right way help internalize them to get new method and idea of the world and culture (Anita, 2004)". He asserted on this view that construction of knowledge depends on social relation and experience.

In the pedagogical college of Gomel, the psychological laboratory was established by Vygotsky in which many researched were carried out using early childhood students and school children. "These experiences were, in fact, some of the basic material for his work, on the psychology of art (Blanck, 1990)". He tried to co-opt a lot of "disparate psychological approaches of his time (e.g., nascent behaviorism and Pavlovian reflexology, Gestalt psychology, genetic epistemology) under the banner of Marxian

historical materials (Vygotsky, 1986)". Cultural psychology was one of the basic "contributions" of Vygotsky to "constructivism".

He said that "education should play the central role in the transformation of man, which he also stated as the conscious social formation of new generations (Vygotsky, 1994)". Vygotsky proved that believed in which people viewed "academic concepts" are easily develop through a series of actions that produce understanding, or via the processes of imparting knowledge to the "child academic facts" assisting the children to "assimilate" these ideas from the same level as an adult think. Vygotsky supported that mastering through the processes of memorization cannot help in the assimilation of concepts alone; the child will have to experience a high rate in reasoning. He believed "academic concepts" begin to occur and develop through the assistance of the feelings of nervousness in the activity of the child's thinking, coupled with the reality that he has reached a stage distinctive to school age. "As for concept formation more complex nature should exist between the processes of education and development (Vygotsky, 1994)". That is to say, he demands that for "teaching and learning" to be effective, more competent individuals should be involved and be present in the process of interaction.

The main interest of Vygotsky was the "social development of mind". Vygotsky asserts that "higher mental functions develop through participation in social activities (Bredo, 1997)". His concerned is pertaining to "higher mental functions" like thinking, ability and comprehension. Words as "critical thinking", "higher order learning" got it origin from Vygotsky teachings. "Development of such higher mental functions is viewed as social rather than individual processes (Light & Littleton, 1999)". As opined by these two authors (Blanck, 1990; Shunk, 1996) "Being social lies on the fact that

individuals can achieve and differ much in the guidance of an advantaged individual, which is known as the Zone of Proximal Development (ZPD)".

As can be seen above, in his sociocultural theory, "three themes become significant. The first one, individual development has its origins in social sources; second, human actions or higher mental functions regardless of being social or individual, are mediated by tools and signs called semiotics and third, individual development and human actions are examined through genetic or developmental analysis (Palincsar, 1998)".

"First, the developmental levels are phylogenetic, which is a field that distinguishes animals from human beings. Second, the cultural/historical refers to the immense impact of practices of particular cultures, or similar cultural groups in the development. Next, the ontogenetic analysis indicates how the physical or the mental challenge, age, temperament, and the fruits of individual history influence development, while micro-genetic analysis deals with the processes of interaction between the individual and his or her environment. The latter takes into account the interplay of individual, interpersonal, and sociocultural factors simultaneously (Palincsar, 1998)".

Major beliefs of his theory are "that speech is social in origin and that language precedes rational thought and influences the nature of thinking. The voiced interpersonal functions during childhood gradually become intrapersonal as their significance is grasped by children (Garton, 1992)". He illustrates by saying:

"An interpersonal process is transformed into an intrapersonal one. Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological), and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relations between human individuals (Vygotsky, 1978, cited in Bredo, 1997)"

Going by this statement shows that "learners acquire new concepts or culture when they participate in group work, and through interactions, learners internalize the effects of working together (Palincsar, 1998)". The effects of culture signify that "the society" supply the individual what he wants to achieve and "structured the methods" to get them. "Language is one of the key tools created by humankind for the organization of thinking. Language bears concepts that belong to experience and to the knowledge of humankind (Blanck, 1990)". "Dialogue emerges crucial for two invaluable tenets of constructivist practice, which are the process of collaborative learning and deep personal introspection into one's own learning process (Brooks & Brooks, 1993)". This means that "the active use of language or other symbolic tools" signify the social constructivism of Vygotsky. Beginning from the time a child come to this world, they talk and do things with adults, this lead to the socialization of the young infants into the culture of that particular society, which might involve interactions in such a way that may lead to the child understanding of their way of beliefs and life as he grows.

Based on Vygotsky, the child "utilize lower order mental processes, elementary attention, perception, and memory within a natural line of development". We will be discussing ZPD next for the purpose of getting more insight regarding the concept.

2.4 The "Zone of Proximal Development" of Vygotsky

Palincsar (1998), said, "Vygotsky introduced the construct of the zone of proximal development (ZPD) as a new approach that aims at matching the learning with the child's level of development". Meaning, "ZPD connects psychological perspective of child development with that of a pedagogical perspective on instruction (Hedegaard, 1990)". This shows how the "social environment" is significance, helping and supporting in terms of development. This comprises a high level of cooperation that involve between those that participate in the "social interactions" to achieve the main goal. "In reaching the goal intersubjectivity is allowed (Hedegaard, 1990)". This means, supporting the child succeed in tackling a problem, help the child gain knowledge on how to succeed and learn "mutuality and intersubjectivity".

Major reason for "social interactions", involve making "learning" run smoothly and effective. The participant that has upper hand "gauges the preexisting skills and the required skills for instruction, and divides the tasks into manageable components. This type of active and constantly changing collaboration allows for the development of culturally appropriate and relevant knowledge and skills so that cognitive learning may occur (Garton, 1992)". Therefore, ZPD means a sequence of the task that children can perform without the guidance and help of others and the task that he cannot do yet independently. The proponent for "constructivist learning" need to be careful, taking into consideration on how their "curriculum and instructional practices" affect learners regarding "concepts, facts, and generalizations" in a wider social environment.

2.5 The Theory of Constructivism and the Learner-Centered Environment

"How does one define a classroom as student-centered through a constructivist lens? To date, a focus on student-centered learning may well be the most important contribution of constructivism (Mvududu, 2005)". This can help us in figuring the misinterpretation on ground concerning what constructivist learning environment truly are. "One misconception is that of cooperative learning and collaborative teaching. As Mvududu (2005) points out, co-operative and collaborative teaching methods provide the opportunity for more competent students to scaffold tasks as they interact with less competent students". The opinion has a connection with the Vygotskian opinion of ZPD, which place emphasis that through the process of interactions, the less knowledgeable one benefit from the knowledgeable ones. As opined by Mvududu (2005) "that students can work in cooperative learning groups, many of which are consistent with views on constructivist learning".

The second misinterpretation has to do with learners engaging "actively and reflectively constructing". A variety of teaching practices can help in achieving knowledge construction; and these can be through "learning by experience, learning by intuition; learning by listening; learning by practice and learning by conscious reflective thinking". "By engaging in these activities, students are able to construct valuable but different kinds of knowledge. Instructors, themselves, must learn to balance these activities to meet the varying needs and goals of their students (Mvududu, 2005)".

"Constructivist classrooms must provide students with the opportunity to explore, speculate, and brainstorm in an emotionally supportive atmosphere. Students must be willing to engage in activities, participate in discussions, and write about experiences in

order to pursue topics in depth. Activities that engage students might include group projects, such as reader's theater, a process in which students write dramatic scenes from a book and present it as drama to a class (Passman, 2001)". Moreover, learners should be encouraged to always being serious in going through challenges and learn to believe that good and bad results in the course of solving these challenges are right in the process of learning. "Through this process, the teacher must act as a facilitator of every student's social and personal construction process that promotes each individual's exploration and resolution of ideas within the socio-cultural context (Myududu, 2005)".

In addition, Goolsby in his work on positive aspects of reinforcement in verbal behaviors also expounded on student-centered learning environment. There was an understanding that good instructors are not relying on "verbal instruction" like those beginning teachers who are always over-relying on it. "Furthermore, the expert teachers' communications included more positive overtones (Polk, 2006)". The above deductions facilitate learner-centered teaching atmosphere where the learner is more involved, and the experienced teacher participation in transferring of information is less, making the atmosphere safer and encouraging for learners.

Passman (2001) gives his view when applying learner-centered teaching strategies in his research on "learner-centered instruction in high- stakes assessment environment" as follows: "more time spent in group and individual inquiry discussions; more reliance on student-focused inquiry within an integrated curriculum approach; more time spent reading authentic literature from trade books; more time spent in learning to understand in depth the content being learned; more time spent in active learning, which may be noisy; more emphasis on heterogeneous grouping and inclusion groups; and lastly, more

reliance on developmentally appropriate portfolio assessment that includes teacher assessments".

The ideas of Wilbert J. McKeachie in the 1940's, one of the first people to learned about Learner-centered instruction relates exactly to that of Passman (2001). An Interview with Wilbert J. McKeachie, Eric Landrum (1999) asks McKeachie to define student-centered learning. McKeachie (1999) offers the following descriptive teaching strategies: creating student trust and an environment to openly ask and express questions; emphasis on student to student discussion and less on lecture and question and answer sessions; emphasis on deeper learning rather that rote learning; more of an emphasis on student choice and intrinsic motivation; emphasis on student goals and teaching to those goals; emphasis on attitudinal and affective outcomes; and lastly, a concern about student misconceptions and working to clarify those misconceptions".

What distinguish "Constructivist classrooms" with that of the teacher-centered classroom can be view as "curriculum, learning activities, students' and teachers' roles and assessment of students' learning". These differences are summarized in a tabulated format in Table 1.0. below.

Table 1.0. The Disparities between Student-Centered Classrooms and that of Teacher Centered Classrooms.

Teacher-Centered Classrooms	Student-Centered Classrooms
Strict adherence to fixed curriculum is highly valued.	The pursuit of student questions is highly valued.
Students are viewed as blank slates on which information is etched by the teacher.	Students are viewed as thinkers with emerging theories about the world.
Curricular activities depend heavily on textbooks and workbooks.	Curricular activities rely heavily on primary sources of data and manipulative materials.
Teachers seek the correct answer to validate students learning.	Teachers seek the students' points of view to understand students' present conceptions for use in subsequent lessons.
Teachers generally behave in a didactic manner, disseminating information to students.	Teachers generally behave in an interactive manner, mediating the environment for students.
Students primarily work alone.	Students primarily work in groups.
Assessment of student learning is viewed as separate from teaching and occurs almost entirely through testing.	Assessment of student learning is interwoven with teaching and occurs through teacher observations of students at work and through exhibitions and portfolios

By Brooks and Brooks, (1993)".

2.6 Constructivist Approaches in Pre-service Caregivers Education.

In the past few years at Kaduna State College of Education in Nigeria, educators of early childhood were encouraged to always adhere to the minimum standard 'correct' procedures for lesson delivery, and the need for students to acquire essential content knowledge without giving a clear-cut single method of instruction to follow. As a result, many teachers perceived learning to primarily involve a transfer of knowledge that was to be 'passed onto' students who were not encouraged to participate in the determination of learning pathways and hence the learning process. Students' knowledge was not the focus of teaching and learning within the classroom.

Does this mean that educators of early childhood have to abandon the skills and knowledge that they have acquired if they adopt constructivist teaching-learning strategies? Not really. Much of what is used in pre-service caregivers classrooms can, and needs to be used within a constructivist approach. However, what is required is a change in the role of the teacher and student and groups of students, in the context of allowing students the opportunity to construct knowledge which is viable for them as individuals and members of a variety of social groups. The following ideas have been put together as a result of implementation and practice of constructivist approaches and are based on the work of Driver and Oldham (1986), Solomon (1987) and Prawat (1989). The ideas discussed below are centered on practical issues encountered as various attempts were, and are being made, to implement constructivist approaches as outlined by the above researchers.

2.7 Teacher's role - Facilitator

The greatest change required of teachers relates to their view of the classroom and their current teaching practices. If our teaching role is to change from a transmitter of knowledge to a facilitator of knowledge construction, what does that really mean? A facilitator creates opportunities for others to explore ideas for themselves, assists rather than tells, encourages and questions others to find solutions to worthwhile problems. A facilitator does not openly control or place judgment on a pathway taken by others. All of these qualities are diametrically opposed to a transmitter of knowledge.

A constructivist approach requires, however, that the way we think about science not to be a transmittable form of an idea which students must acquire but as a method of inquiry involving the construction of knowledge about nature. As a consequence, teaching should focus on how to learn and how to construct knowledge. "By changing roles from transmitters to facilitators, teachers begin to encourage students to become involved in the culture of a scientist rather than being exposed to context-free science knowledge from the textbook with the central focus on knowledge acquisition (Gabel, 1995)".

2.8 Classroom management

A connection has been proved, concerning "classroom management needs and teachers' ability to practice whether there is a link between them that are corresponding with the principles of constructivism: the link between these classroom management needs and concerns seems to be less severe concerning the application of the approaches of constructivism Gee & Gabel, 1996; Hand & Treagust, 1997; Whitworth (1996)".

According to Gee and Gabel (1996), found that four beginning elementary teachers in their cross-case study conducted, two had partaken in the program plan for the science elementary education create to advance science inquiry while the other two had not. The beginning four teachers result indicated that they "supported the notion of science as inquiry during interviews and in their survey responses but only one showed any true evidence of its practice in the classroom". The result indicated that management needs use to discover what normally happens in class and the decision relating to teachers or the education were order by the measure of regulation on the learners that the teachers perceived they want.

Another study by Whitworth (1996) shows a reformed side of about two preservice teachers who supported the application of the approaches of constructivist teaching strategies in science middle-class schools. Interviewing them about their teaching experience the two students showed their feelings of being confident in concentrating on the way learners learn and in promoting learner's participation, but in order to gain control and be able to manage and regulate the learners, both move away from student-centered method of instruction to that of teacher-centered method during the period of their practicum.

Eight science Teachers who involved in a one and half year in-service to begin the process of application of the strategies of facilitating learning using constructivism in a "Junior High School in Australia" were studied by Hand and Treagust (1997). The result got was "classroom management was one of the major areas of deconstruction required by teachers in order to adopt and implement constructivist approaches".

"For beginning teachers and student teachers classroom management needs to appear to inhibit their ability to practice in ways consistent with constructivism (Gee & Gabel, 1996; Whitworth, 1996)". In whatever manner, these in-service teacher that are in the study of Hand and Treagust (1997), five out of the eight were capable of modifying the way they think in "managerial roles with an emphasis on didactic transmission of information and authority figures whose major role was controlling the classroom to facilitators of learning and sharers of knowledge", and also successful in the implementation of more strategies in constructivist practices. Hand and Treagust in their process of classroom observations realized that there are some differences found in the method of instruction of this five teacher that are conceit with the descriptions of the difference they feel in themselves.

This shows a very good connection between "teachers' ability to practice in ways consistent with constructivism and classroom management concerns and needs". This also shows a strong feeling that teachers need to adopt a different way of understanding their position in the classroom that will enable them to participate in a practice that is always consistent with constructivist teaching method. Teachers may need to shift their focus as well.

Changes to teaching practice such as those suggested by the adoption of a constructivist approach in the classroom will, by necessity, create the need for change in how classrooms are managed. Emphasis on the participation of individuals cooperating in groups to construct meaning requires a different form of classroom management. "Students are given more duties for their own learning and for the determination of learning pathways and tend to respond favorably to this teaching practice" (Vance, Miller

& Hand, 1993, 1995). Less time is spent on keeping students on task because they become involved in testing their own ideas at their level of understanding rather than that of the textbook. Low achievers who get 'bogged down' in trying to cope with large volumes of notes, becoming bored or disinterested, begin to enjoy' the challenges and are able to understand science; thus causing fewer discipline problems in class. At the other end of the scale, the high achievers may know the concepts to be addressed. Such students might become peer tutors, or negotiate individual or team research projects for formal presentation to the whole class. Constructivist approaches are not panaceas for management problems in science classrooms (Gunstone, 1995). However, as a result of setting up a learning environment conducive to exploring, sharing and negotiating ideas that are valued, learning science becomes less of a chore for students and in which they can participate, construct knowledge, and begin to enjoy.

The issue of management using a constructivist approach takes on new dimensions. The Little period is used in the course discipline processes while much duration is used during the processes of teaching. The following are some issues that we have found to be important in management process: determining the next lesson plan after completing a previous one (rather than pre-planning the whole unit prior to commencement); organizing sufficient practical equipment in advance to respond immediately to changing student directions; determining how much information or help to give the students; allocating sufficient time to ensure quality results from small group work and whole class work; arranging groups, furniture and equipment.

2.9 Planning

Constructivist philosophy believed in learners constructing for themselves a perfect view of the universe, in this construction, concepts must be comprehended, like in science, "the scientific community accepts as being true". Science teachers challenge now is "the provision of individual private knowledge construction" and must be sure that the "private knowledge" has a relationship with the scientist's general approved knowledge construction. Prior to the introduction of constructivist approaches, science teachers have been designing curriculum and planning lessons in such a manner as to provide the maximum opportunity for students to receive and understand science concepts. Demonstrations and practical activities have been conducted to focus on the production of 'correct' results. As a consequence science teaching has generally been teacher centered and controlled. The overall unit plan, including individual lessons, has been devised and controlled by the teacher. Under the pressure of timetable and syllabus constraints, teachers have been forced to ensure that they control and direct the flow of each lesson, thus confirming their pivotal role within the classroom (Gabel, 1995).

Teachers must permit student's active participation in negotiating the unit of work, that is, students must be given the chance to have input into what is learned and how the learning is to take place. No longer can teachers be the sole arbitrators of what is to be learned, and how, why and when that learning is to occur. In adopting facilitative roles, instructors must be willing to adjust towards the response of the needs of students. As Tobin, Briscoe and Holman (1990) have pointed out, the lack of flexibility adopted by teachers has resulted "in classroom practices [where] teachers and students have a view of learning that is very different from constructivism".

Conclusively, taking a look at constructivist theories and history that led to the development of what exist today as its definition, it seems easy to say that "constructivism is not without its faults". Nevertheless, the theory is viable and gives an open door towards further studies in achieving the desired goals while implementing it in pre-service caregiver's education learning environment. Pre-service caregivers' educators that wish to shift from traditional method of instruction to learner-centered method will definitely gain in many ways from using constructivist strategies in their teaching profession. Despite the fact that it is hard to change someone style of teaching, things that involved will give learners wealthy experience, an in-depth knowledge and individual approach to learning.

CHAPTER 3:

METHODOLOGY

3.1 Research Design

The design of my studies as suggested by Denzin and Lincoln (2000), "describes the guidelines used to connect the theoretical perspective to the strategies of inquiry and gives the methods for collecting the empirical material". In the act of connecting, I focus on putting proper attention in observing, interpreting and making an analysis of events in the process of constructing what actually happens. "A research design is to a researcher as a road map is to a vacationer or a blueprint is to an architect or contractor; it tells the investigator how to proceed (LeCompte 1999)". This study put me within the culture of my research design where I am both the researcher and the subject of investigation as I give detail of my experiences.

"The purpose of this auto-ethnography is to detail, explain and make meaning of my experiences (Ellis 2004)". The procedures help in giving me and the reader more knowledge during the manner and the changing nature of the subject investigated. As a teacher, my actions can be felt in diverse manner base on the observer and the one who receives these actions. In this research, explaining how I approach and implement constructivist teaching strategies and shifting away from traditional to learner-centered on my experiences, I was always watching, recalling, journaling my practices. Furthermore, the receivers of my action who happens to be my students expressed their opinion in regards to my actions during the process of making effort to implement learning

effectively. Their opinions really help and add more values in interpreting and analyzing my conduct as an educator.

Lesson plans were also organized by me using Brooks and Brooks 12 characteristics to incorporate constructivist teaching strategies from "In Search of Understanding: The Case for Constructivist Classrooms". The frameworks for the lesson development were the following descriptors which help in lesson comprehension, implementation and analyzing constructivist philosophies. These descriptors include:

- a) "encourages and accepts student autonomy and initiative,
- b) uses raw data and primary sources, along with manipulative, interactive, and physical materials,
- uses cognitive terminology such as classify, analyze, predict, and create when framing tasks,
- d) allows student responses to drive lessons, shift instructional strategies, and alter content,
- e) inquires about students' understanding of concepts before sharing their own understandings of those concepts,
- f) encourages students to engage in dialogue, both with the teacher and with one another,
- g) encourages student inquiry by asking thoughtful, open-ended questions and encouraging students to ask questions of each other,
- h) seeks elaboration of students' initial responses,
- engages students in experiences that might engender contradictions to their initial hypotheses and then encourage discussion,

- j) allows wait time after posing questions,
- k) provides time for students to construct relationships and create metaphors,
- nurtures students' natural curiosity through frequent use of the learning cycle model. (The learning cycle model consists of discovery, concept introduction, and concept application) Brooks and Brooks (1993)".

Presenting these lessons to the pre-service caregivers who are my target audience, I will use teacher observation in gathering their responses, documentation of my personal experiences with the lessons and the philosophies of constructivism strategies, taking reflective note and searching for solutions for the questions of my research.

3.2 Research Approach

Auto-ethnography "is a form of ethnography which makes the researcher's life and experiences the focus of the research (Reed-Danahay 1997)". Studies in ethnography approach have to do with research that centered on studies in "social and cultural life of communities, institutions" etc. The way individuals behave in constructing and making sense around their environment is referred to as ethnography. "The product of ethnography is an interpretive story or narrative about a group of people (LeCompte 1999)". Also Ellis (2004) comment by saying that, "ethnography is a research approach which describes people and culture". "In auto-ethnography, the researcher is the subject, and the researcher's interpretation of the experience is the data (Ellis and Bochner 2000)". There is an easy way of getting the primary data source and that way "makes the researcher's perspective a privileged one over other researchers in data collection and analysis (Chang 2008)". Nearly two decades, the commencement of auto-ethnography, its

idea and the act of applying it has developed slowly. "Auto-ethnography is also described as personal narratives, narratives of the self, personal experience narratives and self-stories first person accounts and personal essays (Ellis-Bochner 2000)".

Auto-ethnography "is self-reflexive research delving into the self and the social (Reed Danahay 1997)". Autoethnography is a different kind of qualitative studies in which the investigator hopes to avoid any form of personal prejudice in his writing which is expected to be "first person voice". The richness gave an account of the first person in describing meaningful circumstances, human cultural norms, and their races. Those who reads auto-ethnographical written works step into the inside active functioning of "social context" and they are bid to mix together with the author's ideas and their own experiences. In his own description, Patten (2004) depicts that, "this experience as somewhat of a collaborative journey between the reader and the author". The research scrutinizes and depicts my journey of transitional experiences as a preschool teacher educator and the approaches used in implementing constructivist teaching strategies.

"Auto-ethnography is research, writing, story and method that connect the autobiographical and personal to the cultural and social (Ellis 2004)". All the activities that took place during the culture of my learning environment which involve social interaction were achieved by applying my own personal philosophy of learning in constructing my identity as a pre-service caregiver educator. Auto-ethnography was also described "as a genre of writing and research that connects the personal through multiple layers of consciousness Denzin and Lincoln (2000)". As an auto-ethnographer, this permits me to take time and go through an auto-ethnographic lens which gave me an ample opportunity to direct my attention toward sociocultural matters and detailing my

own experiences. Equally, I was open ended making myself vulnerable in the process as I interpret. The "vulnerability" suggests in giving an explanation, expressing and examining my thought, I face challenges in my characteristics and experiences that may face criticism. In giving my detail explanation, auto-ethnography gives open door to this vulnerability to criticism to a great number of scholars. Further, Ellis (2004) said that "auto-ethnography is writing about the personal and its relationship to culture. Because culture is comprised of self and others, auto-ethnography is not a study simply of self alone". Chang (2008) also describe Auto-ethnography as "a study of self as the main character with others as supporting actors in the lived experience". This research gave an account of my approach to constructivism and changing my teaching strategies from traditional to the learner-centered mode of instruction as a pre-service caregiver educator. This change will be incomplete without the assistance of my students who play a central role in achieving the study. "Chang (2008) poignantly states that auto-ethnography has become a powerful source of research for practitioners in the fields of humanistic disciplines such as education, counseling, social work and religion. The nature of the writing of auto-ethnography lends itself to appeal to readers' more than conventional scholarly writing because the author's voice resonates from the page". Thought sharing and ideas through auto-ethnography writing allows those who read to comprehend better of themselves, provide the person who writes the ability to understand the true nature of self and others in a very clear way. Transformation can take place during this writing in the lives of the reader and writer in the course of exchange of ideas. The lives of those reading my experiences can perhaps link their experiences with mine and go through a complete transformation.

"For this dissertation, auto-ethnography is the choice of the methodology because I tell a story of change, combine experience and theory, use narratives with explanations, hoping for readers who will bring the same careful attention to my words in the context of their own lives (Lewis 2007)". "In choosing auto-ethnography, I am asking readers to feel the truth of my story and to become co-participants, engaging in the storyline morally, emotionally, aesthetically and intellectually (Ellis 1996)".

3.3 Data Collection and Analysis

The main aim of data collection is to help in gathering adequate information that will give results to those research questions that seek answers. On this account, my data collection strategies adopted came as a result to address these research questions. With regard to research method, Reed-Danahay (1997) "acknowledges auto-ethnography as a valid research method that is marked by its dichotomy. As auto-ethnography concentrates predominantly on the researcher's self and understanding that self within a certain culture, it is the researcher's personal memory that becomes the primary source of data". In whatever way, "memory alone cannot be a single sufficient tool for collecting data as researchers' objectivity can be challenged (Holt, 2003)". Because of that, the memory was back up with data from my written observation, audio and video recording and self-reflective.

I am the primary data source in this autoethnographic study. "The experiences for this study of my approach to constructivist teaching strategies are recounted by memory, self-observational, self-reflective, and external data (Chang 2008)".

3.4 The research Participant

In an auto-ethnography, the researcher is studying self. Therefore in this research, the primary participant and subject is me. My experiences will be documented using preservice caregivers students in the department of early childhood. The institution is a socially diverse with different gender and ethnicity distribution located in Gidan Waya, Kaduna State of Nigeria. The data of this research is gathered through teacher observation, recording, and journaling my practices while facilitating learning with 200 levels students of early childhood department in the college. A representative sampling is here presented using the population of the student for a demographic perspective of the school.

TABLE 1.1 GENDER DISTRIBUTIONS

GENDER	NUMBER	PERCENTAGE
MALE	23	22.5%
FEMALE	79	77.5%

TABLE 1.2 ETHNICITY DISTRIBUTION

ETHNICITY/TRIBE	NUMBER	PERCENTAGE
Kagoro	25	24.5%
Kataf	5	4.9%
Bajju	15	14.7%
Marwa	15	14.7%
Jaba	7	6.9%
Attakar	6	5.9%
Yesque	5	4.9%
Chawai	4	3.9%
Others	20	19.6 %

3.5 Research Process

I discovered in my journey of ten years (10) now as a teacher has been filled with achievements and dissatisfactions. A different method of teaching as really made me examine my effectiveness as a teacher throughout my teaching career and equally seek for ways on how to become better and improve in my teaching profession. People in several occasions do ask me these two questions:

- i. "How do you do what you do?"
- ii. What does it take you to be successful as a teacher?"

In all these occasions, I had never had an adequate response to these two queries. Nevertheless, these two queries pose to me had really stirred a lot of reflection concerning my journey in my teaching career. After this ten (10) year in teaching, I knew something has happened because I am not the same compared to when I was a beginning teacher. A lot of development has taken place and those developments came as result of my desire to improve in my teaching profession.

My research came as a result of my desire to learn and how to improve in other teaching methods. My desire was further aroused by my advisor during my discussion with him concerning the choice of my dissertation topic. Thought used to came to me about how can one "facilitate learning and improve what I am doing as a teacher"? In answering these questions, I realize is my responsibility, having it at the back of my mind also the thought of those teachers that have the same resemblance of what I am facing especially here in Nigeria.

The methodology of my studies is auto-ethnography, and this kind of method is always group under "qualitative research approach". "A qualitative research approach is one in which the inquirer often makes knowledge claims based primarily on constructivism, post-positivism, pragmatism or advocacy/participatory perspectives or a combination of these (Creswell 2003)". (Denzin and Lincoln 2000) also opined that "a qualitative research approach involves an interpretive, naturalistic approach to the world which indicates that qualitative researchers study things in their natural settings". The aims of research under "natural setting" have to do with explaining the meaning of facts or events the way individuals make their experience in their environment. Based on the work of Creswell, (2003) "some characteristics of a qualitative approach are (a) the data

is collected as words, (b) the outcome is a process rather than a product, (c) the focus is how the participants make sense of their lives and experiences, and (d) the language is expressive". "The qualitative researcher's goal is to better understand human behavior and experience (Bogdan 2007)". In conducting qualitative research using autoethnography, is "a burgeoning form of research and writing about the self (Ellis 2004)".

This research process will cover month of July and August as the timeline fix for the study to take place. This will approximately cover a length of eight (8) weeks during the course of conducting the study.

CHAPTER 4:

RESULTS AND DISCUSSION

4.1 Results

Auto-ethnography Recording

The following section is the detailed process of how my research data are recounted day by day through teacher observation (videotaped lessons), and self-reflection (journaling) (Chang, 2008) while facilitating learning with 200 levels students of early childhood department in Kaduna state College of education.

The recounting of data today the 4th of July, 2016 was the first day I began the process of writing my auto-ethnographic study with 200 level pre-service caregivers' of early childhood department, Kaduna State College of education in Nigeria. I am really nervous about how this journey may end seeing that I am just starting. To be true I am a bit inquisitive about the kind of result this research will reveal. Placing one's self under the microscope is a very difficult task; whatever way, I realize that this study will serve as a catalyst in making me improve and become better in my teaching profession. Discussing my research proposal with my advisor in February concerning the topic and what method to be used; it took me so many days to come to a final conclusion. At an earlier stage, I was thinking of using mixed method (qualitative and quantitative research) on the management of behavioral problems among preschool children before the intervention of my advisor who advised me to conduct it on constructivism.

Since then, my attention has only focused on searching what constructivism is all about and how can I incorporate it into my teaching practices that will improve and make me a better teacher. As I continue my search for a change from a traditional model way of instruction, my desire was to gauge learner's response, but what was more important to me was myself, because I realized the research is more centered on me than about my students. So my desire was to gain an understanding concerning my own responses to these changes. After a careful thought, I decided to consider auto-ethnography research as a means of data collection which I was not really sure whether my advisor will or not accept it. When I approach him concerning the method and realized that I had chosen the right method; a sigh of relief came over me and now my goals which I seek can be fulfilled with this research.

Would the changes bring joy to me? Would it bring a positive impact and be effective? What of if I lose the ability to manage and taking charge over my classroom by allowing more tasks to my students? Would the teacher directed be more effective than learner-centered? How would the effect be if it happens that I dislike the procedure? What happens if the school management would not accept this idea of the change? These are all the queries that surround my thought regarding these changes as I set to start my research study.

I was taught using the teacher directed way of instruction; so I am a product of that same method (teacher centered); and, I depend on it very much base on my experiences in the past. I grew up in Kamuru Ikulu, a village in the rural South of Kaduna State of Nigeria, I can still remember when I used to be in my classrooms all through the entire period of my schooling time with chairs and desk in rows, you dare not talk or say

a word without the teacher permitting you during the time of instruction. Punishment always awaits those that broke these rules. Throughout my teaching and all my classroom observations, I had been in so many classrooms that are enough for me to know that there is a new trend in the operation of schools today than when I was in the system as a student.

My First Lesson – 08/07/2016

I started my lesson with 200 level pre-service caregivers'. I began by giving background knowledge about what constructivism is all about and then proceed to introduce the topic of the course (production and use of instructional materials) which will involve hands-on lesson activities mostly, and the method I am about to adopt in teaching this course; including discussion of the meaning and types of instructional materials. As I stood in front of my desk, I started having a metal view of the class away from the traditional point of view. I realize that this is an avenue that should not be allowed to slip till another day.

Standing in from of the class will make it look like a lecture method, as a result of that I will have the students to carry out their task in groups. I shared them into groups without delay to begin to find out the meaning and types of instructional materials using the department resource room to know most of the things we are about to discuss. Also, I will have students to classify these instructional materials mentioned according to their groupings. Here we go as I begin to implement the first step of incorporating my changes to facilitate learning using the student's centered mode of instruction.

Adopting a different method of teaching for the first time in life make me humbled. To be honest with myself in facilitating learning, I had to confess areas of weakness and accept my mistakes in process and tactics that I intend to follow because I know that the first thing I need to progress in life is sincerity and humility. The method of implementing another strategy is not static, but rather a process that is continuously and the extent of my instruction is beyond perfection, and for that reason, my total change will be a step by step process.

In my first attempt to shift from the traditional method to learner-centered was a total failure. I made the students to sit and carry out their task in groups on their desk, but immediately I realize one big problem that was glaring. The number of students in a seat was much and as a result, seating becomes a problem. How can I handle this situation? In a few moments, a thought came to me to relocate to a larger class. Here, there is enough seat and space to work comfortably in groups and conduct even the practical aspect of the course without much problem.

I started the lesson by introducing the topic to them; I told them to maintain their groups as they would be carrying out their task together in finding the meaning and types of instructional materials and also classify them according to their groups. I instructed students what to do in case they need something in the resource room, then I decided to stand at the back of the class to enable me to have a better view of what they will do, their responses and reactions of each group. Without a waste of time, problems began to arise during the lesson concerning class control. What really occur was; I instructed them to find out the meaning of instructional materials and mention the types of instructional materials and also classify them according to their groups. Giving them this opportunity

to make their contribution as they work in groups, they started misusing this opportunity and start making a lot of noise and causing a distraction in the class which almost disrupts the lesson. Also, some students were not really active in the group discussion because this is their first time to this kind of teaching method. Only a few of the students were fully involved in the learning process. Not that they did not understand what we were doing, but some are really shy and cannot be able to communicate and creating new ideas in the presence of their teacher and colleagues.

I realize that to succeed well in this kind of processes, then I have to really plan very well. The planning I did was not properly done and well executed in the lesson. So I got myself in a problem which I ended up wasting a lot of time in the lesson because I understand they did not comprehend what I think they should. I stopped the students for a while because time was against us already and the students were having a lot of difficulties and problems. "What am I supposed to do?" "Should I start implementing the process gradually?" These are some of the phrases I got myself entangled with during the class lesson.

At the inception of the class lesson, the notion I gave them was to work and assist one another by coming together as a team to solve critical problems posed to them using their past and present experiences. As I patrol around observing them during the course of the lesson, there was not much discussion as expected. Realizing this, I decided to take over the class and started to quiz them on the process after my wasted twenty-five frustrated minutes, most of them invariably had an idea about what we are discussing. Now how can I convince and make these students come together and share ideas in their

various groups and educating one another during the lesson? If this has to happen then there must be a process that facilitates learning to work this way.

My Second Lesson – 14/07/2016

Today I began my lesson with the students at about 10:00 am. The weather is a bit cloudy and the atmosphere really conducive for learning. All my students were already seated in their respective groups and without wasting much time, we started the lesson in earnest. Remember last week; when we talked about the meaning and types of instructional materials and their classification. You're going to figure out the characteristics of instructional materials and what a teacher needs to be guided by when using instructional materials today.

The feeling of wanting to learn today really gave me a great confidence that things will work out as expected regarding the background information and the method I adopted in the lesson.

I decided, rather than giving instruction on how to answer the question pose to them; I would allow them the choice of the process on how to solve and answer them. I realize giving them alternatives is an additional task on their side. Whenever an instruction is giving by me for the students to follow and they decided not to adhere to, the result of their actions does not normally turn out well. In facilitating learning I have come to understand that for students to fail, it is acceptable and as a teacher, I may equally set some objectives and standard and they may not meet those standards and objectives but that does not show that they have not achieved anything. Sometimes, students gain knowledge through failure and yet they still achieve something. As a

teacher, sometimes you cannot make decisions and control the needs of the learner. The best to do is to make sure they are guided towards achieving their goals.

Right from the inception of the lesson, students find difficulties in answering questions pose to them, and at the same time go beyond what I really expected from them. The only thing still lacking in the lesson is interacting together in such a way that ideas are been shared among them with others and equally giving assistant one to another. Facilitating this process is the only desire I am so curious about at the moment.

In one of the groups, they were really working hard on how to figure out some of the characteristics. Glancing through their work, I noticed there were some errors which prompted me to stop and assist them. Students from other groups started coming to watched what is going on between me and the group. Immediately I was through with the group, Zakka from the next group raised his hand and asked me to equally shed more light on them. Away I went, instructing them from one table to another table. The more effort I am putting in my lesson to incorporate the strategies of constructivism, I began to realize that "there is an organic component to this philosophy". Allowing events sometimes to unfurl in the lessons need to be put into consideration.

My Third Lesson – 20/07/2016

Students got seated in their respective group as the lesson was about to begin. In our last lesson, we talk about characteristics of instructional materials but today we want to get into the main practical aspect of the course today - an improvisation of instructional materials. After giving them the background information concerning improvisation, I insisted that students were to decide what to improvise by themselves. I

employed interaction as the class began the lesson activities due to the changing nature of asking questions and the way the students are working hard and producing good results. My intercourse with the students becomes mutual as a result of our discussion, but before in my teaching practices where the medium of instruction was direct and teacher centered, there was no room for discussion and this makes learning difficult.

As I navigated among the groups, Martins' from one group call my attention to assist them. They were really making an effective application of the task before them as they discuss, I was impressed and I did not want anything to distract them, my desire for them was to continue the discussion. The students wanted to improvise a pre-writing activity plates using straw and chipboard and were uncertain on how to begin. I drew closer and started explaining to Martins' and his group on how to first cut it into a rectangular shape and then use pencil and ruler to draw straight lines. Lastly, I showed them how to cut through the lines they draw without affecting the edges of the board then glue before attaching it. Before I finished the explanation to that group, almost all the other groups in their various tables were already waiting for me to do same to them so that they can equally complete their pre-writing activity plates without facing many problems. Looking at Martins group I said, it is your duty now to do what I just did to you to other groups on how to improvise your pre-writing activity plates, now go and help other groups get started on their pre-writing activity plates. Without any waste of time, up they went and did as I do to them. Perfectly, that was a job well done! I said. Martin's group had a remarkable duty explaining to their colleagues in another group on steps to follow as I did to them. "We want ours to look original," said a student in one of the groups. "If that's the case," I said, "you must put a masking tape to seal up the edges

so that it will look smooth." A query came up as a result of the above experiences, "Can students be taught to assist one another?" from my experience as a teacher, I know education was more of autocratic in the way things were done in the past. The teacher passes the information to the learner and the learner is expected to solve the challenge posed to him by the teacher. Being a newly emerging teacher in constructivism, I know that it is significant for learners to be independent in their work and also dependent working one with another.

The foregoing event of how learners help others in the process of learning was a good example, and I realized this was a step forward in achieving the objectives of this study.

My Fourth Lesson – 29/07/2016

I began working with the students today on improvisation again. I have started a lesson on the production of pre-writing activity plates. Today, we will look at how we can be able to improvise dolls locally. Students helped to distribute some work on improvisation of instructional materials and we looked at examples of how they were improvised. We also discussed the processes to follow in other to improvise dolls. This arouses student's interest on how to start the processes of designing the dolls as I can see the mood and happiness in their faces. All the group were given a large piece of fabrics and also some group got carbon paper on which to draw the pattern of the doll they want to design before placing it on the fabric for tracing and cutting. These fabrics were bought in a local shop in the market at a cheap price. As the carbon paper is being shared, I was alarm because I understand that the carbon paper will not be enough to circulate the

groups. What came to my mind at that moment was, "this could be a problem," and without delay, the issue was resolved but I still encouraged the student that does not have the carbon paper to do their best and draw the pattern on the fabric without the carbon paper. They were not really happy as I made that statement, but there was nothing I could do at that moment. Going round the class as I observed, I noticed those students doing their work without carbon paper cutting their pattern not well. I take note intending to make a correction for the group that will come for the next lesson, but I realized I am not the type that waste resources, and for that reason, I concluded to continue with the incoming lesson without making any corrections I intended to make earlier as part of the instruction.

I know the entire 200 level students of Preschool department is being introduced to the basic design of drawing a pattern on fabric by their creative art teacher. Having this knowledge at the back of my mind, I decide to distribute the fabrics and carbon paper for tracing and cutting the same as before with some students getting the fabric and the carbon paper and some only got the fabric. During my demonstration on beginning of how to draw the pattern using the carbon paper, I brought up the issue of those without the carbon paper. "Some of you have fabric and carbon paper and some only the fabric," I begin. "How would you draw your pattern on the fabric without using the carbon paper to trace it with? I asked. This was a question that had stumped me earlier on with the other set of the students. "How would you draw the pattern on the fabric without using the carbon paper?" By carefully thought and effort on my part, I devise my own solution to use pins to hold the edges of the fabric to avoid shaking so that to get the pattern drawn without any problem in tracing it. I succeeded in this method I adopted but what about

the students? Will they succeed as I do? These are the phrases that keep coming to my mind. I decided to allow them to tackle the problem on their own because I was inquisitive to see whether the learners have their own way of solving the problem. This instruction is connected with the constructivist first rule "Constructivist teachers encourage and accept student autonomy and initiative."

Surprisingly, as I came out with the question, the students started hollering out answers possible for solving the question. "Some of us will stretch the fabric on the table and one of us will draw the pattern," one said. "We will use UHU gum to glue it on plywood, and then cut our pattern using blade" offered another. My reply to all of these was, "How would you know that you will cut the pattern correctly in such a condition?" Danladi came out with a reply that had never occurred to me. "Once the fabric did not squeeze or move, you will cut the pattern you desire to get," he said. "Exactly," I replied. He gave an answer that had never occurred to me. "Attentions please" are my words to calm them down because of their excitement, as I show them another method of getting it done correctly. The class looked as I pin all the edges of the fabric drew and cut the pattern perfectly. "That's how I solved the problem; however, is there more than one solution?" "Yes," replied the class. I became vulnerable to that effect that very moment, of course, I realize something has taken place and trodden on the unfamiliar ground because of allowing myself without all the solutions. I stood gazing as I watched with admiration how the students in their groups provide answers that really offer a working solution.

My Fifth Lesson – 03/08/2016

I thought it will be good for me today to go back and refresh myself by continuing reading the book that is guiding me to incorporate these constructivist strategies in my study "The Case for the Constructivist Classroom". This book is interesting and really assisting me in planning my classroom within the constructivist curriculum. I find this book very interesting because it dictates the way we teachers work and lays the background information on the way learning process should be interpreted by the learners. The learners are also trained to seek for a solution that the teacher has already in mind. Guessing incorrectly by the learner, the teacher replied "not correct" and he continues, searching to get the right answer for the problem. Reflecting on my classroom strategies, I seek to understand a concept; the book said we should not relent as teachers to take every chance in the learning process to understand where the learners are. That means in every response of the student, whether correct or incorrect should be an opportunity for us teachers in the learning process to explore and know their position. As stated in the book "one must ask questions of the students, probing their brains for knowledge and connectivity to the lesson (Brooks & Brooks, 1993)". This is where their educational attainment can be achieved with great stride, instead of running around "playing leaf frog" looking for the right solution. Taking reflection, I do realize how I should be careful enough not to make my students get a bad feeling in proffering solution, whether good or bad. Encouraging and giving support to them even when the solution they gave is not right.

I was benefiting a lot especially the last chapter where the author is talking about the way teachers many times are "overwhelmed" in trying to shift away from direct instruction to "constructivist teaching strategies". I felt the same, "overwhelmed". Many rational were giving behind the motives of why some decided to remain on their current standard: "they are too invested in their careers and current system of performance; loss of control in the classroom; disapproval from the administration; and above-average performance from students with the current system (Brooks & Brooks, 1993)".

Some of these worries are not truly applied. Whatever the case, some of them are really true when I was going through the passage. My greatest of all in the passage is; "fear of loss of control in the classroom". Sometimes there is a feeling in me as if I do tread on the dangerous path during the class experiences. Experiences that foster creativity and a sense of belonging are my desire for my students.

My Sixth Lesson – 08/08/2016

Today's lesson, we will continue from where we stop on how to improvise dolls locally. Today we will look at the process of stitching the cut pattern of the fabrics and how to stuff it using pieces of textile clothes, cellophane bags or pieces of form.

I was delightful seeing all my students are already engaging with the task in their various groups. Being a hands-on lesson, it involves everyone in the class. I was just moving from one group to another to assist any group that had some challenges in either stitching or stuffing their dolls. The dolls designs are mostly simple patterns to make the work easy for the students. The students need a lot of exposure and understanding the process rather than making a perfect work that deserves exhibition

I was listening with interest hearing from the students discussing an issue concerning sewing being done by girls only. Whenever I heard the students discussing

this issue, I question their view about the issue. "Boys can't sew," was my question? They answered; "Yes" truly, they can sew.

The outcome of the lesson was very good. Students face difficulties but at the end of the lesson they gain a lot of experience. Some students were not able to complete their task but yet it was ok so long they involved in the class process.

My Seventh Lesson – 12/08/2016

Zakka, a student from one of the groups, brought in a doll fish perfectly sewn with good finishing work done by all his group members. The work was done on a black and white dotted piece of fabric he and his group cut during our previous lesson in sewing/stitching. They did a very good work using that piece of fabric to create a doll fish design. They were very happy and proud of what they did. As I stood in front of the class to display it before them, I call all the group members to come for a round of applause for a good job well done. All came out smiling broadly because it was a sign of approval that what they did was worthy of praise. As I usher them back to their seat, I realize how the experience was extremely valuable to them. I began to question my interest in the finished work they did.

Looking at this scenario, one can easily relate the experiences encountered with the current trends now in education that only put its attention on "high-stakes testing". The stakeholders of education need to take a look at what took place in this scenario because they seem to only focus on the end product (test score). Is the significant part missing in the journey? In Addition, "how does constructivist education challenge this?" Based on my little knowledge in constructivism, in educating the child, the process seems

to be more effective than the product. Allowing students to explore and build on previously held knowledge are a significant component in constructivism. Can I say I have succeeded in this with Zakkas' group? As I held up that black and white dotted fabric decorated as a doll fish, I began to think, "Has this students had this experience before in another lesson?" that is what I cannot answer, what I can say concerning this is that I involved students in the process of facilitating learning that inspire and brought enthusiasm. I realized that I have been a source of encouragement to my students to be independent and begin to rely on guidance from their classmates and not me. But certainly, they still asked for help when the need arise especially in their group work. "Sir please, can you come and help me?" This phrase is always common whenever a lesson is going on in the class. "It looks like Martins have it; you can ask him for help." The event took place the other day in my lesson.

My Eighth Lesson – 15/08/2016

Teaching seems to be less stressed and I am gaining more understanding and relaxing regarding class control within my class environment. This shift in instructions from direct teaching to constructivist teaching strategies is becoming glaring in my classroom lessons with a great indication that seems to have a positive impact on learners.

Today, we would be looking at the flash card and how to improvise it. The beginning of the class lesson was a bit slow; to begin our investigation regarding flash card the students and I sat down. I began by asking, "What comes to your mind when you hear the words flash card?" "Nursery school," exclaimed a student. "Yes, exactly," was

my reply. "Where else have you heard the terms?" another student exclaimed "Children's Park". I deduced all that they said and used it in introducing the topic. I put more attention to hearing what they are discussing, and the way they understand and think about the flash card. I was walking round also to assist and reinforce their effort, encouraging them to discuss in more details about what they are doing. After going through the first stage of the lesson, I began sharing to the students' markers, pencils, carbon papers, rulers, and scissors. I called their attention to measure and then draw lines in square or rectangular shape on the carbon paper depending on which shape the student like and as many as they can. I then directed them to observe and use their pencils and rulers to draw any five letters on those carbon papers cut in rectangular or square shape. "But isn't that just easy to draw any kind of letter," one student retaliated. "Yes, however, it's easy when you take your time and draw carefully." "You're looking at it in a different way," I said. I forged ahead going round the class observing how the students are getting along with their task. It was very easy for me to tell whenever a student needs assistance.

Comparing what was going on in my class lesson with constructivist philosophy, my thought was, is there anything different that I do? To answer the question, I started by examining myself on what I did in the lesson; I did encourage and had an honest discussion with them in the class, I was open and supportive to their previous knowledge to develop the lesson. I did not try to seek a good result and get the students busy to know that I am supporting and including them in any class discussion. More also, I called their attention not to rely on the "end product" but to look at what they are doing based on a full comprehension of the problems involved.

I am full of confidence that I had moved forward as a "constructivist teacher" in my lesson today. Moreover, I am giving up control of what I think a lesson should be. The lesson is the fourth lesson on improvisation and I have been seeing improvement and progression during the lesson throughout. I encouraged them to add originality in their work by adding colors using different colors of marker. The suggestion was open which some accepted and do as I said while others decided not to accept. Based on my judgment that is okay and acceptable because in my opinion improvisation should not be relied on copying people's work, but should be based on "reflection of personal experiences". That is why I hate those lessons that in the name of improvisation, students will sit and only think of copying others work.

My Ninth Lesson – 22/08/2016

Today, I had achieved and made a lot of progress as a "constructivist teacher" in the making. The 200 levels students are working on improvising another instructional material. I had beginning to work to reduce any discussion at the starting of my lesson. The class today look very attractive as the students begin their work. Clearly, they all have a working knowledge of "Matching". I only gave few directives on how to start. I can begin to see some of them had started tracing and cutting their chi-square in rectangular shapes, created. Many students are using rulers for measuring and drawing their rectangular shapes.

I had observed permitting learners appropriate time to carry out their task; they do put more attention and carefully handle their work well but whenever I took a long time in an attempt to explain to the students how to go about working out the task, they got

tired and bored in the process. Focusing on these attempt to alter and change my method of instruction always bring improvement on my part for the better. Now I am giving them enough time to concentrate and solve those challenges pose before them. I realized that the change is positive because I do have a preconceived idea about the learning outcomes. But unavoidably, this anticipation is not always happened. The gains of the study I realized is the process, rather than the product that is significant. My aims are; to instill in them the ability to solve problems and handling task through creative abilities continually. I am not of the idea that production and use of instructional materials lesson should be applying a particular instruction on how to arrive at the same result at the concluding part of the class lesson; but should be concerned with creating good work without copying the work of others, reflecting self-expression, creative abilities, and My desire is to create in students the ability to discover and explore the world around them. Adopting traditional approach known as the teacher-centered method stand as a hindrance to these achievements. We have so many approaches that can help in achieving these goals. "Little ideas, built over time, become big ideas".

My Tenth Lesson – 29/08/2016

The lesson today was extremely excited because of what transpired. I was just thinking of what material to use that would inspire me for my next lesson. A thought came to me; "instead of trying to figure out what to use, why can you just inform the students to come along with whatever material they can lay their hands on". To my greatest surprise, what the students brought shock me. Some brought straw, empty cartons, empty bottle water, carbon papers, straw-board, empty tins and so forth. I looked

at all the materials display, unable to think clearly on what to use them for. All this while, I was looking for a way to try something different and today could be that opportunity.

I started the class by telling the students that today's lesson is going to be spectacular because of the varieties of materials we have. I then asked them, "What could you improvise using all these materials?" "A model car," exclaimed a student. "Or a house," another replied "O.K., I am not going to tell you what to improvise. Please have your seat while I distribute the materials," that was my instruction to them. As they move to take their seat according to each group, the students already had what they want to improvise and without wasting much time, they are into a discussion concerning the possible ways in achieving their task. I started following and distributing to each group the different materials. Having what they intend to improvise already at the back of their mind; the students immediately started working on what to improvise. I can see some designing and cut empty cartons to improvise cars while some houses. Two boys, Danladi and Jacob makes a lot of noise in the class and are fun of distracting students during lesson were the center of attraction to me mostly. In fact, since the class began they were too busied carrying out their task that you hardly notice them today. I was so happy and impressed with this new development. Danladi was making a complicated fancy house round with a high wall fence using the straw, while Jacob was seen busied manipulating to make a guitar using straw-board and carbon paper in their different groups. The attention of another boy in one of the groups was captured with an idea of making a motorcycle called "Vespa using the empty cartons, some were constructing musical instrument using the empty cans.

Going round the class from one group to another, I noticed a lady name Agnes producing jigsaw puzzle with straw-board. Are you through? I asked, "Yes" she replied, I said but there is one thing left, she answered can you assist me, sir? Of course, "yes" was my replied. I then called her attention and show her how to color and make it look beautiful, and she did just exactly what I said. These marvelous ideas keep flowing and unfolding to me as the lesson continues. One thing that baffles me today was, I did not even sat and plan this lesson the way I do but yet it really works out well. The lesson continues and I decided to pick up Agnes Jigsaw puzzle and questioned the students what would they want to achieve in their lesson using jigsaw puzzle. One student offered, "Cognitive development". "Yes," I replied. It marveled me hearing that resounding replied. The concept I thought will be a bit confusing to them, but notwithstanding, the comprehend it. My approach to facilitating learning has begun to change because I had developed more confidence now than before as a constructivist teacher. I think surrendering control is paramount because I am satisfied looking for solutions from the learners.

4.2 DISCUSSION

I completed gathering my data within the period of eight weeks during the process of facilitating learning. I was observing, journaling and recording through auto-ethnography. Twelve constructivist descriptors in the section of methodology were listed to be applying as my framework in facilitating learning. When originating lessons, I employ these constructivist descriptors for my research purpose; and for drawing my conclusion, I will use these descriptors to analyze my data to my research questions.

First Lesson: Meaning and types of instructional materials;

My expectation was the learners will be up to the task of involving themselves in discussing the meaning and types of instructional materials, having it in my mind that the terms presented in the lessons, at least most of them have a "working knowledge" about it. My aim was to create an atmosphere that students will use the department resource room as a guide to handling task collectively. My capacity in the class lessons was not to serve in a direct role but to act as a facilitator in the learning process.

During this lesson, my expectations was to

- i. "encourage students autonomy and initiative (Descriptor 1) by making them work collaboratively;
- use raw data, primary sources, and interactive materials (Descriptor 2) using department resource room;
- iii. encourage the student to student engagement (Descriptor 6) in discussing meaning and types of instructional materials; and

iv. encourage student inquiry with teacher and peers (Descriptor 7) (Brooks & Brooks, 1993)".

Confusion was the outcome of my lesson as students were faced with a lot of challenges that look like they cannot be able to handle. But with the help of the materials in the resource room, they were able to locate and find the meaning of instructional materials. Moving to the resources room to locate the materials presented a problem as there were many groups in the classroom moving and discussing which cause a lot of noise and almost disrupt the lesson. I only observed few students that had an actual discussion about the lesson. Others were not really involving in the class interaction as expected; and for this reason, going back to the previous method will be the only solution for me to take control of the class easily. I quickly made the decision of using the direct method of instruction in completing my lesson and end the collective work of the students. I was able to create a dialogue regarding these instructional materials and their types and even the processes of classifying them. Hands were risen up by the many students to give their experiences concerning what instructional materials are all about when I applied the teacher-centered teaching method.

Considering what really happened in the lesson, I realized that all the experiences occur for a purpose. On my side, I did not really prepare for the lesson the way I should; it was just a last minute work done to include these constructivist teaching strategies. Despite the fact that I prepared ahead, my effort in considering some variables like inspecting the resource room is not properly done. Example, instructional materials, and books in the resource room to be used by students were not enough because most of them got burned as a result of fire incident that took place in the department recently. In

addition, it was too early for me to withdraw myself from the process and the challenges pose to them were oversimplified. Had it been I plan and structured my lesson well incorporating the constructivist principles, I could have achieved my aim and objectives.

Second Lesson: Characteristics of instructional materials;

In the course of delivering this lesson, the following are some of the constructivist teaching strategies employed in order to achieve my objective in the learning process.

My expectation was to:

- i. "Encourage student autonomy and initiative (Descriptor 1);
- ii. giving learners' the opportunity to dialogue and come out with answers (Descriptor 6) and
- iii. to encourage student inquiry with their peers (Descriptor 7)" during the process of figuring out the characteristics of instructional materials.

I was expecting some challenges from the students' in the process of figuring out some of the characteristics of these instructional materials.

Going round the class supervising to see how the students are progressing, there were challenges that students were facing in creating ideas. Instead of rendering immediate help, I choose to give them enough time to carry out their task. Definitely, I knew some students will not be able to meet up with their task due to previous experiences in our last topic. I noticed many students in their groups that were finding it very difficult in formulating ideas that might help in getting these characteristics of instructional materials. Quickly, I called their attention concerning the errors they are making and I left them to continue. With keen interest, I watched students that learn to

find out other means in getting these characteristics. For instance, a group in their table devised a means of using the word features (synonym of characteristic) since they are conversant with it in formulating their ideas. One group was having difficulty in understanding the principal that a teacher needs to be guided by in using good instructional materials; I approached and rendered assistance to them. Another group at close range watched the way I help out the other group in solving their problem and equally follow the same steps I gave in solving their own challenge. Something happened similar with a group but I decided to apply a different approach in tackling the situation. When I was through, explaining to them things they need in getting the problem solved, others close to that group called my attention in the similar situation. What I did was to call the attention of the other group that I just assisted and asked them to show this other group on how to go about it. They did exactly just that, and when I turn to observe them what they were doing later, I realized all of them busy discussing and formulating ideas in solving the problem before them.

This lesson was successful based on the believed of constructivist principles for many reasons. The first reason, I formulated a situation that gave the learners opportunity to "explore and discover" their own knowledge. I realized giving them the opportunity to make choice in the learning procedures was significant in their achievement. The feeling of interest in how they carried out task was really impressive. My second reason was, the lesson plan encourage students to work collaboratively. On several instances, I watched students with keen interest on how they rendered help and give possible solutions on how these challenges could be tackled.

Third Lesson: improvisation of pre-writing activity plate

This lesson was on the improvisation of pre-writing activity plate. My aim in this lesson was to seek ways of incorporating these constructivist teaching strategies as follows:

- i. "encourage student autonomy and initiative (Descriptor 1);
- ii. encourage student inquiry with teacher and peers (Descriptor 7);
- iii. provide time for construction of relationships (Descriptor 11) (Brooks and Brooks, 1993)".

After giving them the background information concerning improvisation, I insisted that students were to decide what to improvise by themselves. In the beginning of the task, I employed interaction due to the changing nature of questioning and their collaborative work. My intercourse with the students becomes mutual as a result of our discussion, but before in my teaching practices where the medium of instruction was direct and teacher centered, there was no room for discussion and this makes learning difficult.

As I navigated among the groups, Martins' from one group call my attention to assist them. They were really making an effective application of the task before them as they discuss, I was impressed and I did not want anything to distract them, my desire for them was to continue the discussion. The students wanted to improvise a pre-writing activity plates using straw and chipboard and were uncertain on how to begin. I drew closer and started explaining to Martins' and his group on how to first cut it into a rectangular shape and then use pencil and ruler to draw straight lines. Lastly, I showed them how to cut through the lines they draw without affecting the edges of the board then

glue before attaching it. Before I finished the explanation to that group, almost all the other groups in their various tables were already waiting for me to do same to them so that they can equally complete their pre-writing activity plates without facing many problems. Looking at Martins group I said, it is your duty now to do what I just did to you to other groups on how to improvise your pre-writing activity plates, now go and help other groups get started on their pre-writing activity plates. Without any waste of time, up they went and did as I do to them. Perfectly, that was a job well done! I said. Martin's group had a remarkable duty explaining to their colleagues in another group on steps to follow as I did to them. "We want ours to look original," said a student in one of the groups. "If that's the case," I said, "you must put a masking tape to seal up the edges so that it will look smooth." A query came up as a result of the above experiences, "Can students be taught to assist one another?" from my experience as a teacher, I know education was more of autocratic in the way things were done in the past. The teacher passes the information to the learner and the learner is expected to solve the challenge posed to him by the teacher. Being a newly emerging teacher in constructivism, I know that it is significant for learners to be independent in their work and also dependent working one with another.

Fourth Lesson: improvisation of Dolls;

For the 200 level lessons on improvisation, the following are the strategies I incorporated during my fourth lesson. To get the picture of things clearer, here are the strategies used and their explanation as it all happened during the learning process. My aim was to:

- i. "encourage student autonomy and initiative (Descriptor 1);
- ii. use raw data, primary sources, and interactive materials (Descriptor 2);
- iii. allow student responses to guide instructional strategies (Descriptor 4);
- iv. first, inquire of student comprehension of concepts (Descriptor 5);
- v. encourage student inquiry with teacher and peers (Descriptor 7);
- vi. seek elaboration of student responses (Descriptor 8);
- vii. challenge students' initial hypotheses and encourage discussion (Descriptor 9);
- viii. allow wait time after posing questions (Descriptor 10); and lastly,
- ix. to allow for the construction of relationships and metaphors (Descriptor11) (Brooks and Brooks, 1993)".

As the lesson progressed, changes in the learning process occurred. Being an academic staff of early childhood department on study leave; I was not having the actual time table of the lesson as when I was not on study leave, I only managed to have a lesson one day in a week just for the purpose of this research.

When I structured my lesson, I realized as I guide to the learners towards achieving the necessary skills needed on improvisation of dolls, I planned to use textbooks on instructional materials as "primary source" in which students can observe information on skills that are needed to improvise these dolls. I will also need to employ the strategies of constructivist approach from the beginning of my lesson to the end.

From the start of the lesson, I will inspire them to always involve in dialogue on ways to consider in taking steps towards improvising dolls. There was a bit reluctant on part of the students after they went through the textbook to get background information.

For them to get into the rhythm of the lesson it took me some time to motivate them, and eventually things work out well to some extend the students were even giving and discussing example of steps to be taking in improvisation of dolls such as measuring and cutting the fabric, stitching and stuffing it with form or cellophane bags. Whenever I presented a question to them, I do try to be sure I "allow wait-time" before the question is answered. Anytime opportunity is made to give them enough time before responding, the students normally responded well. A problem was noted when the students began their improvisation of dolls. Most of the students did not get the carbon paper shared for cutting and tracing the pattern on the fabric to get the doll shape. I asked students without the carbon paper how they would be able to cut the doll pattern on the fabric without using the carbon paper; I wanted to know more about how the will go about proffering ways to resolve the problem, surprisingly, they began to shout out possible solutions.

Surprisingly, as I came out with the question, the students started hollering out answers possible for solving the question. "Some of us will stretch the fabric on the table and one of us will draw the pattern," one said. "We will use UHU gum to glue it on plywood, and then cut our pattern using blade" offered another. My reply to all of these was, "How would you know that you will cut the pattern correctly in such a condition?" Danladi came out with a reply that had never occurred to me. "Once the fabric did not squeeze or move, you will cut the pattern you desire to get," he said. "Exactly," I replied. He gave an answer that had never occurred to me. "Attentions please" are my words to calm them down because of their excitement, as I show them another method of getting it done correctly. The class looked as I pin all the edges of the fabric drew and cut the pattern perfectly. "That's how I solved the problem; however, is there more than one

solution?" "Yes," replied the class. I became vulnerable to that effect that very moment, of course, I realize something has taken place and trodden on the unfamiliar ground because of allowing myself without all the solutions. I stood gazing as I watched with admiration how the students in their groups provide answers that really offer a working solution.

I was always looking for the slitless opportunity to incorporate these teaching strategies, and a good illustration of this is an example in which most of the students did not have the carbon paper shared for cutting and tracing the pattern on the fabric to get the doll shape. Before starting the class lesson, already I had my own idea on how to go about resolving the situation by using pins to hold the edges of the fabric to avoid shaking to get the pattern drawn without any problem in tracing it. Surprisingly, when I came out with the question on whether there is a possible solution in resolving the challenge, "Yes" was there replied loudly in the class. Here, I succeeded in arousing learners "initial hypotheses" through my interaction with them on several ways of resolving the challenge of cutting these fabrics without the carbon paper. The solution given could have not really work, but giving them chance to dialogue we succeeded in arriving at possible solutions. Enough time was also given to "construct relationship" in knowledge acquired during their learning activities. As a constructivist teacher, it is vital in bridging and supporting learning that cut across the planned activities.

Eighth Lesson: Improvisation of Flash Card

In this improvisation of flashcard lesson, my aim was to:

i. "first inquire of students' comprehension of concepts (descriptor 6);

- ii. encourage engagement in dialogue (Descriptor 5);
- iii. encourage student inquiry with teacher and peers (Descriptor 7);
- iv. seek elaboration of student responses (Descriptor 8);
- v. challenge students' initial hypotheses and encourage discussion (Descriptor 9);
- vi. allow wait time after posing questions (Descriptor 10); and, lastly,
- vii. allow time for construction of relationships and metaphors (Descriptor 11) (Brooks and Brooks, 1993)".

I began the lesson by asking students, "What comes to your mind when you hear the words flash card?" they started interacting by making connections of their ideas on flash card with Nursery schools and Children Parks. I succeeded in achieving most of these teaching principles with the above discussion. At the beginning, the first thing I did was to ask the understanding of the students and from there; I create an atmosphere of intercourse where I began to advise them on dialogue. Most of the students' contribution is what I utilized and built on as they were actively involved in the class interaction while my duty was only to guide. Permitting the students "wait time" when I ask a question was my priority. This gives them an opportunity to bring out the best out of them and make opinions that will create a positive impact in the learning process. If students fail to answer a question correctly about the flashcard, I appreciate them for their contribution then change the path of our dialogue to a more applicable way of understanding it.

Starting the practical aspect of the class lesson, students were giving instruction to measure and cut five square or rectangular shape of carbon paper depending on which shape the student like. I then directed them to observe and use their pencils and rulers to draw any five letters on those carbon papers cut in rectangular or square shape. Going

around from one group to another to observe how students are progressing, I could easily tell if someone needs help.

I corrected those that need to be corrected, encouraging them to take their time and work carefully. I always remain calm with them, permitting the students' time so that they can be able to understand which will lead to the construction of the relationship between what they learn during a discussion with the practical aspect of the work to do.

Tenth Lesson: improvisation of instructional materials

I employed the following constructivist teaching strategies in delivery this lesson:

- i. "encourage student autonomy and initiative (Descriptor 1);
- ii. use of interactive materials (Descriptor 2);
- iii. use of cognitive terminology (Descriptor 3);
- iv. encourage student inquiry with teacher and peers (Descriptor 7); and
- v. allow time for construction of relationships and metaphors (Descriptor 11) (Brooks and Brooks, 1993)".

I decided to build a lesson by informing the students in our previous lesson to bring whatever material they can lay their hands on within their environment in our next lesson. Some brought straw, empty cartons, empty bottle water, carbon papers, straw-board, empty tins and so forth. Having different varieties of materials at our disposal, I simply took a decision within myself that I will allow the students to choose whatever material they want to use to improvise teaching aids of their choice. I had never conducted any lesson like this one; so I will not know what to expect how the lesson

would be. My concerned now became whether students would really be fascinated with the materials available.

I did not even sat and plan this lesson the way I do, so I became apprehensive how it will be. Notwithstanding, one thing that I do know is that my implementation of these constructivist principles in the lesson had brought confidence in me that success can be achieved with determination. I became more incline to surrender class control to my students while committing more trust and responsibility to them.

Students brought a lot of materials; I introduced them and informed them that today they would be using them to improvise teaching aids they want. The prospect of the lesson as I noticed, make students excited. As I continued walking and observing as they engage actively in the creative procedures in the class, I noticed the students working independently and others working in groups as they continue to improvise different types of instructional materials. Two boys, Danladi and Jacob make a lot of noise in the class and are fun of distracting students during the lesson, were the center of attraction to me mostly. In fact, since the class began they were too busied carrying out their task that you hardly notice them today. I was so happy and impressed with this new development. Danladi was making a complicated fancy house round with a high wall fence using the straw, while Jacob was seen busied manipulating to make a guitar using straw-board and carbon paper in their different groups. The attention of another boy in one of the groups was captured with an idea of making a motorcycle called "Vespa" using the empty cartons, while some were constructing musical instrument using the empty cans.

Going round the class from one group to another, I noticed a lady name Agnes producing jigsaw puzzle with straw-board. Are you through? I asked, "Yes" she replied, I

said but there is one thing left, she answered can you assist me, sir? Of course, "yes" was my replied. I then called her attention and show her how to color and make it look beautiful, and she did just exactly what I said. These marvelous ideas keep flowing and unfolding to me as the lesson continues. The lesson continues and I decided to pick up Agnes Jigsaw puzzle and questioned the students what would they want to achieve in their lesson using jigsaw puzzle. One student offered, "Cognitive development". "Yes," I replied. It marveled me hearing that resounding replied.

To speak the truth, these principles of constructivist teaching strategies I am using beforehand were never on my part "conscious decision". Reflecting on this last lesson, I had developed a lot of confidence unlike before, applying these principles naturally without much struggle in my lesson. Without a doubt, I "encouraged student autonomy" when I choose to allow them to use materials and produce anything of their choice and working with those discarded things as "interactive material". I used "cognitive terminology" when I told the learners to improvise or create anything of their choice. When the learners responded to those items displayed new thoughts for "instructional strategies". Learners carried out task collectively and also independently, exploring and searching for ideas myself and them. As learners were carrying out the task with materials, I permitted them time "for the construction of relationships and metaphors".

Lastly, this is a lesson that I can say I effectively implemented using constructivist philosophies. Unlike before when I was struggling to follow the principles one after the other, this time I am now doing it naturally.

Using the descriptive indicators of this constructivist strategy, objectives of learning were formed which raised learners' inquiry, teacher to learner deliberation, peer

assistance, and autonomous activity. Students were influenced positively; the proof can be seen by the excitement and active interest they put during the lessons.

CHAPTER 5:

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion and Recommendation

The study helps me in providing a detailed account of my transitional approach from the traditional method of instruction to constructivist teaching strategies and also in Planning my lesson to integrate the philosophies of constructivism, applying those twelve constructivist characteristics described by Brooks and Brooks' in teaching strategies. My teaching approach completely changes from depending on the traditional way of instruction to student-centered. I shifted from the strictly way of instructing approach by giving the student the freedom of finding a solution to a given task.

My performance as a teacher was positively influenced during the process of implementing these teaching strategies. Additionally, there was a positive respond from my students because of the modification in the teaching method that I made.

"In what ways may constructivist approaches to teaching facilitate a shift from a teacher-centered learning environment to one that is student-centered?" This was my first research question. The question was answered by showing the students the way constructivist teaching strategies function to bring out an effective learning method that centered only on students learning atmosphere.

I address this, giving special attention to the methods/strategies in the lessons in my class; I succeeded in giving them a mental view of my actions as a tutor. I gain an understanding of motivating and encouraging learners to be independent and be able to

initiate things themselves, and that is one of the ideas that form the basis of constructivist strategies. Always emphasizing and encouraging on students learning and motivating them on autonomous thought, assisting one another and creating new ideas. My aim was always to shift totally from the traditional method of lesson delivery to that of learner-centered where I will only act as a facilitator and not the active keeper of information. Always strive hard not to have answers to every problem but to create an atmosphere where learners get the answers to themselves that I had no idea and even occurred to me. Going back to memory lane during my school days, I usually thought that all teachers have all the answers. This philosophy was all along with me, incorporating this dynamic within my teaching practices.

At times, I do face some scenarios that called for a shift from learner-centered to traditional method approach of instruction to enable me succeeds in achieving my aim. Things started unfolding to me and I realized that symbiotic kind of relationship exists between the traditional method and student-centered learning atmosphere, this helps me to understand that it is very vital for the two to partner in harmony in a learning environment. Determination of which approach to use now become solely my responsibility and I understood the method I use to succeed in teaching one lesson might not work in another lesson. This was evident in some instances where I have to shift from the strategy I started with to another in order to achieve my objective.

"How do constructivist teaching strategies positively impact student learning?" this was my second research question. As I observed, this manifested in several ways. Learners were influenced positively because of the shift of my teaching method to constructivist teaching strategies and were actively participating in solving the critical

problems pose to them. There was no more normal routine from me in trying to proffer solution to every problem pose to them and for that reason, their interest in the lesson increased. This came to my notice when we were having our group work and class discussion. A good example happened during my lesson with the students on improvisation of dolls where some of the students got both the fabric and the carbon paper for cutting the pattern while others only got the fabric. Noticing this, I realize that this is a good way for the learners to invest more in their lesson since I am seeking for different avenues to co-opt the strategies of constructivism, I realizing students who were happy and thrill about offering solutions to these problems. I became different since I began applying constructivist teaching strategies in my lessons, and this has really influenced the learners positively. I had surrendered controlling my lessons, permitting the learners the liberty that I am not giving before. Everything becomes simple and easy in the lessons and I decided to always pay attention in helping them out in any problem encountered and not merely making them solve challenges I gave them, limiting them to particular methods that I wanted. Active involvement of the learners in the class really influences them positively in the lessons.

There is no amount or degree of students learning that happened throughout the entire period of this research except my personal observations. Future research should be conducted on the way teaching strategies in constructivism might augment other methods in lesson delivery, applying the qualitative method of research in measuring data. In addition, a recommendation for research can also be carried out on learner's attitude to measure behavior expectations in a constructivist learning atmosphere.

Moreover, a cross-examination can be taking of how I used the descriptors of constructivist strategies in my lessons. During my lessons, a lot of strategies appear several occasion; those that appear multiple times includes descriptor one, regarding autonomy and initiative, descriptor seven, which involved inquiries through questioning, descriptor two, which talks about raw data and primary sources; and the eleven descriptor which is concerned about relationships and metaphors. I term these 4 descriptors as the foundational concepts that influence the shift from traditional to learners centered method of instruction. Their generality in scope is another rationale for appearing many times and can also be applied more easily to more than one situation. Considering this, plus characteristics that overlap from other descriptors, you will see the reason of it appearing more than once.

The first Descriptor was my major focus which pertains to learners' initiative and autonomy. Moreover, when facilitating learning, the influence of this descriptor assist me to instruct the learner when they are in control of the lesson during learning. A good example of this happened in our tenth lesson on improvising instructional materials where the learners make their choice on how to start, what to produce and the discarded materials to use in improvising anything of their choice. Descriptor 7 also "encourages student inquiry through open-ended questions and asks students to question one another". Using this descriptor in my lesson really influence students positively during the process of learning. Their answers to questions were made based on the open discussion that was facilitated by the way of open-ended strategies of questioning. Moreover, learners were inspired to ask one another questions by the means of peer support.

In addition to the above, there is an intimate relation that exists between 7, 6, 8, and 10 Descriptor. These descriptors overlap sometimes as I mentioned earlier. The sixth (6) descriptor look for "student engagement with dialogue". Descriptor eight (8) seeks student elaboration of initial responses. And lastly, Descriptor 10 asks that teachers allow wait time after posing questions". When I was implementing the component of the three (3) earlier mentioned descriptors, I might have focused much on descriptor seven (7). This might be likely the reason descriptor seven (7) show up often in the lesson.

"The use of primary sources and manipulative, interactive and physical materials" is descriptor Two (2) and it appears in three different lessons. As an early childhood educator, taking a practical course on instructional materials, I am always exposing learners to interactive and instructional materials. In addition, I do integrate "raw data and primary sources" during the introduction of concepts at the start of my lesson. On account of this study, I gave special attention in doing that. A good example of this is giving the learners access to the resource room to view already made materials. Making this avenue for additional materials in the resource room had influenced the students positively during learning. My transition happened by pursuing and taking reflection in ways that can help learners to actively involve with materials without any direct influence on my part.

Descriptor 11which states that "teachers provide time for students to construct relationships and create metaphors" is the last most used one. I try my best and create a conducive atmosphere for learning in which I was acting as a guide to learners in the process of making their inquiry. This descriptor almost proof difficult to observed; but notwithstanding, I was able to achieve a lot as I watched students keenly on how they

succeeded in making the connection of their newly acquired knowledge to their prior experiences in the lesson. For instance, in lesson 2 on characteristics of instructional materials, a group in their table devise a means of using the word features (synonym of characteristic) since they are conversant with it in formulating their ideas. When incorporating these descriptors, it was very important that I formulate experiences that linked learners to previous knowledge and equally give room for the creation of "metaphorical relationships" through dialogue.

The use of constructivist strategies in facilitating learning can benefit future educators in the quest to improve their method of instruction. At the same time, merely adding these strategies is just a step forward. I realized that one should learn to be open and continually remain steadfast to these ideas in the process of facilitating your learning. Just like one of these strategies show us that "student responses guide instructional strategies". If opportunities are giving to teachers and be exposed on how to realize them, I believed the sky will be their limit, and the learners will immensely gain a lot.

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