PRAGMATIC APPROACH TO TEACHING THE ADULT LEARNER IN THE 21ST CENTURY IN NIGERIA: THE DIMENSION OF GUIDED DISCOVERY INSTRUCTIONAL STRATEGY (GDIS)

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Abstract

Adult education is a practice in which adults participate in methodical and organized activities through which they can facilitate their understanding and learning. It encompasses the entire range of formal, non-formal and informal learning activities which are undertaken by adults. Hence, the extent to which adult learners explore their full potentials and achieve the real essence of learning is dependent on the instructional delivery strategy that actively and participatively engages the learners and allows them to take full responsibility for their learning while the adult instructor assumes the role of a facilitator. This work therefore, centered on pragmatic approach to teaching the adult learner in the 21st century in Nigeria: The dimension of Guided Discovery Instructional Strategy (GDIS). This work discussed intensively the concept of guided discovery instructional strategy as explicated by different scholars. The historical perspective of guided discovery instructional strategy was also discussed. Also discussed herein were the procedures for employing or utilizing guided discovery instructional strategy, importance of guided discovery instructional strategy and the challenges of utilizing guided discovery instructional strategy. Conclusion and recommendation was also offered herein.

Keywords: Pragmatic, Approach, Adult Learner and Guided Discovery Instructional Strategy (GDIS).

Introduction

An adult learner is one who is characterized by self-concept, rich in experience, readiness to learn, orientation to learning and motivation to learning. Adult Leaners are typically considered to be in a state of transition; trying to improve themselves. The expectations of adult learners are greater than those of traditional students; as they have a better idea of what they want and what they expect from their education. Although, they also have higher level of anxiety and pressure to fulfill the required expectations in a shorter amount of time while navigating other responsibilities (Knowles, 1984 cited in Peterson, 2018). Merriam, Caffarella and Baumgartner (2010) admitted that adult learners have more life experiences and when confronted with new

knowledge or an experience, they construe new meaning based on their greater life experiences. In the opinion of Knowles (1984) cited in Sabatini (2015), an adult learneris self-directed/autonomous, utilizes previous knowledge and life experiences, goal-oriented, relevancy-oriented, lead in his/her own learning, questions everything, thinks for his/herself and is driven by interests.

Therefore, the nature of an adult learner is very unique; as he/she is often characterized by maturation, self-motivation to learn, self-confidence, more practical, purposeful, self-directed, application of experience and receptive to change. Since adults' orientation to learn is problem-centered rather than subject-centered and their readiness to learn is linked to their reasonable expectation that the knowledge they gain will help them further their goals, solve practical daily challenges and make them maximize their potentials in full, the instructional delivery strategies usually employed by adult instructors must be collaborative, problem-solving and learner-based. Adopting pragmatic and learner-centered instructional delivery strategies for adult learners afford them the opportunities to develop new knowledge, improve their confidence and well being as well as interact positively with people from different backgrounds. It also offers adult learners the opportunity to take personal responsibility for their learning and engages them through their interests in a very relaxed, interactive and friendly class that contribute to social inclusion; thereby helping them realizes and maximizes their full potentials.

Hence, one of such very pragmatic, purposeful, problem-solving, participative, collaborative, knowledge generative, enquiry-based, activity-based and learner-centered instructional delivery strategy that could suit the nature of an adult learner; thereby shifting the role of adult instructors from source of knowledge to facilitators is the Guided Discovery Instructional Strategy (G-DIS) of instruction which places adult instructors/teachers as the overseers/facilitators of learning. In applying this strategy, learning takes place in problem-solving situations where the learners use their own experiences and prior knowledge to learn.

Concept of Guided Discovery Instructional Strategy

The term guided discovery instructional strategy has been explicated in different ways by different scholars. According to Garuma and Tesfaye (2012), it is an intentional learning through which the learners are actively and participatively engaged in a problem-solving exercise or situation but under the guidance or supervision of the teacher. In the view of the Garuma and Tesfaye, the role of the teacher under this situation of learning, shifts from being the source of knowledge to being just a facilitator or moderator; thereby allowing the learners explore and generate knowledge by themselves. This instructional strategy is very suitable and useful to adult learners because adults' orientation to learn is problem-centered rather than subject-centered and their readiness to learn is linked to their reasonable expectation that the knowledge they gain will help them further their goals, solve practical daily challenges and make them maximize their potentials in full.

Sachs (2018), perceive guided discovery instructional strategy as a teaching and learning environment where students are actively involved in the discovery of knowledge. The cardinal essence of this strategy is to actively engage the learners and facilitate deep learning and understanding. The fundamental principle underpinning this learning strategy

is that if the learners can discover or generate the knowledge by themselves, they will in the process have created and added to their own understanding.

In the view of Akinbobola and Afolabi (2010), guided discovery instructional strategy is a method through which teachers provide illustrative materials for the learners to study on their own. The teachers' role in guided discovery strategy is basically to act as facilitators of learning and as such, encourage the learners to be responsible, autonomous and construct their own understanding of the concept or subject matter being exposed to. Hence, the process of learning using this strategy is basically learner-centered, democratic, interactive, collaborative and knowledge generative. Acero, Javier and Castro (2015) see guided discovery instructional strategy as an inductive method of guiding learners to identify, discuss, organize ideas and process the ideas by themselves in order to generate knowledge and enhance their understanding of the subject matter under discussion.

In applying this instructional approach, the learners involved start with a small piece of information that they can connect to a more general information by activating their previous knowledge and experience to build up concepts. It generates interest and excitement around a topic by cultivating curiosity. The teacher provides examples of a language item and helps the learners to find the rules themselves. Garuma and Tesfaye (2012) maintained that during guided discovery instructional strategy, the teacher invites students to initiate discussion and to react to other students' opinions. Learners' background knowledge and understanding of what is expected of them are very important consideration for effective use of this strategy.

In the same vein, Casad and Jawaharlal (2012) admitted that in applying guided discovery instructional strategy, the learners will have formulate and evaluate some hypotheses or assumptions, reject those that do not seem to suit their views, confronted misconceptions, encounter surprises and finally come to a common consensus and understanding what is being discussed. Thus, by engaging in deep thought and discussion, the learners will progress in knowing how to create new knowledge; as real learning occurs when learners are critically immersed in thinking about situations and are allowed to figure out the solutions.

Guided discovery instructional strategy according to Bricknell-Holmes and Hoffman (2015) is characterized by three main attributes. i. Exploring and problem-solving to create, integrate and generalize knowledge. ii. It is highly student-driven. iii. It also interest-based activities in which the students determine the sequence and frequency and activities to encourage integration of new knowledge into the learner's existing knowledge base. Corroborating the view of Bricknell-Holmes and Hoffman (2015) on the attributes of guided discovery instructional strategy, Ogunbiyi (2012) maintained that learning under guided discovery strategy is collaborative, activity-based, knowledge generative, participative and active rather than passive.

Historical Dimension of Guided Discovery Instructional Strategy

The history of guided discovery instructional strategy can be trace back to the efforts and works of several scholars in the past. Generally, guided discovery instructional approach to learning evolved as a result of the argument that learners construct knowledge out of their experiences which is associated with pedagogical approaches that promote learning by doing or active learning. This according to Akinbobola and Ado (2010), is in line with constructivist teaching which is based on the fact that skills and knowledge acquisition are

do not involve just passively receiving information and rote learning but involves active participation of the learners through knowledge construction, hands-on and minds-on activities.

Thus, guided discovery strategy has its root from the work of Jean Piaget (1896) which focused on how human beings make meaning in relation to the interaction between their experiences and their ideas. His views tended to focus on human development in relation to what is occurring with an individual as distinct from development influenced by other persons. Guided discovery learning strategy can also be linked to the work of **John Dewey (1859)** who states that knowledge emerges only from situations in which learners have to draw out of meaningful experience. **Dewey** sees the classroom as a social context where learners can take part in manipulating materials and thus form a community of learners who construct their knowledge together. Dewey also believed that students thrive in an environment where they are allowed to experience and interact with the curriculum. Hence, the primary responsibility of teachers/educators is to serve as partners in the learning process whose guidance and assistance help learners to construct their learning and independently discover meaning within the subject area (Wikipedia, 2011).

Guided discovery instructional strategy is also linked to the work of Jerome Bruner (1915) who was a cognitive theory Psychologist. Bruner viewed human beings as information processor, thinker and creator of ideas, whose cognitive development occurs through the interaction and exploitation of the environment. Bruner believed that learning is effective when learners are given the opportunity to discover facts by themselves. He thus laid emphasis on discovery learning. Bruner sees the acquisition of knowledge as an active process and thus encouraged learner's autonomy and personal involvement in the learning process. To Bruner, learner's independence fostered through encouraging students to discover new principles on their own accord lies at the heart of effective education. Bruner advocated for a spiral curriculum which can enable students to build upon what they have already learnt.

Procedures of using Guided Discovery Instructional Strategy

There are different procedures which have been outlined by different scholars for the effective usage of guided discovery instructional strategy. Markaban (2016) pinpointed six basic steps that are involved in the application of guided discovery learning strategy as stated thus:

i. **Formulation of the problem to be given to students**: In applying this strategy to teaching the adult learners, the facilitator needs to first identify a problem or task which will be presented to the learners for discussion. The subject matter must be relevant to the learners in order to arouse their interest and attention.

ii. **Students' preparation and engagement in mental processing:** Under this phase, it is expected that the facilitator has informed the learners what is expected of them. At this point, the learners are expected to individually internalize the situation or problem presented in the class. Each learner tries to explore his/her previous knowledge and bring his/her experience to bear on it. In-depth thought is highly involved in this phase; as the learners try to analyze and generate knowledge.

iii. The students draw up a conjecture of the results of the analysis done: At this point, each learner is expected to document what he/she thinks of the problem or the solution(s) to the problem posed. In doing this, no collaboration or discussion among the learners is allowed. This is to ensure that every learner thinks deeply and comes up with ideas on the subject matter.

iv. The facilitator goes round to inspect the conjecture of every learner in order to have a better understanding of who is doing what either correctly or incorrectly. The inspection by the facilitator is also accompanied by giving assistance to those who may be struggling to grasp the problem and come up with solutions. Thus, the responsibility of the facilitator here is to give such learner (s) clues on how to solve the problem on ground.

v. Open verbalization of conjectures by the learners: It is at this level that interactivity is allowed by the students. At this stage, every learner is meant to openly discuss his/her solutions or understanding of the problem as the case may be. Productive arguments are encouraged at this point for others to learn too.

vi. The teachers should provide clarity the learners so that they know whether their findings were true or not: This is the point where the facilitator tries to clarify areas of confusion, doubts and disagreement. The facilitator is expected to ensure no learner is castigated for not getting it right. The facilitator is at this point meant to assess or evaluate the learners in order to ascertain their individual level of weakness and strength.

In the same vein, Jem and Lean (2016) identified six phases of guided discovery instructional strategy such as: stimulation, problem statement, data collection, data processing, verification and generalization.

a. Stimulation: This stage is aimed at providing the conditions of learning interactions that can develop and assist the learners in exploring materials that will enhance their understanding. This could come inform of using questioning technique. That is, asking the learners questions in order to expose the students to the internal conditions which encourage their exploration.

b. Problem Statement: This phase involvesgiving an opportunity to the learners to identify many problems/issues as possible which are relevant to them; of which one of the problems is selected and formulated in form of a question for critical examination by the learners.

c. Data Collection: When the exploration is ongoing, the facilitator/teacher also gives learners the opportunity to gather as much information as possible. In this stage, the teacher asks learners to write down a list of their experiences and likely answer or solution to the problem or question posed earlier.

d. Data Processing: This is critical thinking phase where the learners tries to apply his/her previous knowledge and experience. It is the activity of analyzing the information and knowledge gained in thepast and trying to relate them to the present problem; thereby coming up with solutions. The teacher at this point asks the learners to write all their possible solutions or ideas down for further discussion and verification.

e. Verification: At this stage, the facilitator examines each learner's solution/answer to prove whether he/she got it right or not. Where a learner tends to be getting it right, the

facilitator tries to guide and engage the learner in deep thought. Verification is intended to make the process of learning run well and creatively. Hence, a facilitator/teacher should always provide opportunities for learners to have better understanding through examples that might be encountered in their lives.

f. Generalization: This is the conclusion stage and it involves drawing a conclusion which can be used as a general principle and can be applied to the same problem with regard to the verification. This is where the facilitator tries to make the learners understand why the answer to the earlier problem is as verified.

Importance of Guided Discovery Instructional Strategy to Adult Learning

The application of guided discovery instructional strategy to the teaching and learning of adult education in Nigeria cannot be over accentuated; as it tends to actively engage the adult learners in the learning process; thereby helping them generate their knowledge and promote retention. Ogunbiyi (2012) maintained that learning under guided discovery strategy promotes learning by doing, eases remembrance of what is learnt, removes abstract learning as well as makes learning participative, interactive and active rather than passive. According to Bruner (2011) guided discovery approach to learning ensures that the learners end up solving a problem at the end of the lesson. It also helps learners to think more critically rather than just relying on the information given by the teacher.

According to Marzino (2013), guided discovery instructional strategy enables students to actively participate during the learning process. It also instills as well as foster an attitude of inquiry in the learners since they are allowed to think very critically; while relating their past knowledge and experience with the present problem. The instructional strategy also supports students' problem-solving skills. It provides a space for interaction among the students as well as the teachers in order to train the students to communicate their idea properly and correctly.

In the same vein, Samuel (2016) posited that students derive other cognitive benefits when guided discovery instructional strategy is implemented in class. Thus, the instructional strategy encourages analytic learning because the learners are deeply engaged in critical and logical thinking about the subject matter under consideration; thereby improving their analytical skills. It also exploits learners' cognitive skills as well as involves students in problem solving tasks. Guided discovery instructional strategy also helps learners become aware of their ability and articulate their mental process. Learners are made to actively involved in the learning process. It facilitates learners' understanding and enhances better remembrance what they have work out for themselves.

Guided discovery instructional strategy is also considered to be an alternative solution to making the learning process more meaningful by minimizing rote learning tendency. It encourages analytic learning and students' cognitive skills are exploited. It makes learning memorable since learners are actively involved in the process (Naufal, 2019). Accro, Javier and Castro (2010) maintained that guided discovery learning strategy improves students' academic performance compared to the conventional lecture method, enhances students' level of comprehension and retention, promotes active-based and activity-based instruction which makes the learners to generate their knowledge and solve practical life situations.

Bohonos (2012) as well as Merriam and Brockett (2017) posited that guided discovery instructional delivery strategy afford adult learners the opportunities to develop new knowledge, improve their confidence and well being as well as interact positively with people from different backgrounds. It also offers adult learners the opportunity to take personal responsibility for their learning and engages them through their interests in a very relaxed, interactive and friendly class that contribute to social inclusion; thereby helping them realizes and maximizes their full potentials. It also engages the adult learner in critical thinking while trying to apply his/her previous knowledge and experience in solving the task presented before him/her.

Challenges of using Guided Discovery Instructional Strategy

Basically, guided discovery instructional strategy as relevant as it may seem, has certain challenges when it comes to its application/implementation in the classroom. Asrat (2017) identified some of the challenges to include the following: difficulty in being used in large class size, scarcity of learning resources, curriculum materials are not usually prepared in way that can facilitate guided discovery instructional approach, teachers' reluctance to apply the strategy, teachers' weakness to coordinate, supervise and evaluate instructional process continuously, teachers less confidentiality in their mastery of the subject matter, teachers lack of knowledge and skill in using guided discovery approach , teacher pedagogical preference students' unwillingness to learn cooperatively and scarcity of allotted time to carry out active learning in greater depth.

In the same vein, Alnajdi (2013) posited that application of the guided discovery instructional strategy is usually confronted with some obstacles, such as: teacher's inability to effectively design and appropriately plan the learning activities using guided discovery instructional strategy. It needs a lot of teaching aids that clarify and support the educational situation of guided discovery instructional strategy. The prolonged period of using this strategy may not be feasible. It is not every topic guided instructional strategy could be used.

Murphy, Malloy and O'Brien (2010) highlighted some difficulties of applying the guided discovery instructional strategy as thus. The strategy is not easy to implement; as variation in learners' needs and cognitive abilities makes it more challenging for the teacher to cope. The strategy is most successful when students have the prerequisite knowledge and undergo some structured experiences. That is, students must have basic knowledge about the problem and must know how to apply problem-solving strategies; without this knowledge and skill, they will flounder and grow frustrated. Huge cognitive overload constitutes potential problem if there is no initial framework is available. Measurable performance is worse for most learning situations. Hanafi and Suhana (2009) in the same way maintained that guided discovery strategy is based on the assumption that there is always readiness to learn which may not always be correct. The strategy is more suitable for developing understanding while developing aspects of concepts, skills and overall emotions received less attention.

Conclusion

Since adults' orientation to learn is problem-centered rather than subject-centered and their readiness to learn is linked to their reasonable expectation that the knowledge they gain will help them further their goals, solve practical daily challenges and make them maximize their potentials in full, there is need for adult facilitators to employ guided

discovery instructional delivery strategy among others with a view to making the learning process more meaningful by minimizing rote learning tendency, encouraging analytic learning and exploitation of students' cognitive skills. Therefore, considering the whole benefits derivable from using guided discovery instructional strategy as explicated in this work, it can be concluded that guided discovery instructional strategy has the tendency to engage the adult learner in a more active and collaborative learning process if properly employed. Thus, adult facilitators should get themselves familiarized with the procedures of using the instructional strategy in order to constantly engage the adult learners in a more robust teaching-learning process.

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