

Using Reflective Thinking Skills for Education Quality Improvement in Nigeria

Dr. Isaac A. Odiba¹ Mrs. Pauline A. Baba²

Faculty of Education, Kogi State University, Anyigba. Kogi State - Nigeria

1. Email drisaacao@yahoo.com.

2. Email: annbaba@gmail.com

Abstract

This paper focused on using reflective thinking skills for education quality improvement in Nigeria. Education was considered in this paper as a process of learning that assists in the provision of suitable skills, training the youths for economic, social cultural and political responsibilities in transmission and transformation of social, economic, and cultural structure from generation to generation. The term quality was opined as the determination of gradations based on standard of excellence beneath which a mark of inferiority is imposed or adduced and above which grades of superiority are defined. Reflective thinking involves personal consideration of one's own personal achievements and failures and asks what worked, what didn't and what needs improvement. Reflective thinking is most important in prompting learning at a time of complex solving situations due to the fact that it avails the opportunity to go backwards and think about how they actually to solve problems and how a particular set of problem solving strategies is appreciated for achieving their goals. In fact reflective thinking is a Part of the critical thinking process of analyzing, evaluating, and making judgment about what has happened. It is the recommendation of this paper that the teachers should be involved in facilitating the development of reflective thinking in students.

Keywords: Education, Reflective thinking, Quality improvement, Thinking skills

Introduction

Education simply put is the process of developing the mind through learning at school, college or university. It is the key that unlocks the doors of modernization and globalization. John Dewey in Eberendu (2004) opined that the task of education is the emancipation of man and enlargement of experience. This, then means education is the basic weapon for the elimination of ignorance and promoting one to the next level of being more productive and useful to both the society and self. Education is a lifelong process and perhaps an instrument of change, a potent equalization of life chances. Education is the knowledge and skills that are gained from being taught. Education is what has made a community to advance beyond her neighbors. Odiba (2012) provided a more comprehensive and encompassing view about education as a process of learning that assists in the provision of suitable skills, training the youth for economic, social, cultural and political responsibilities, transmission and transformation of social, economic and cultural structure from generation to generation.

Education has no substitute in any given economy, no wonder, Odiba (2004) opined that "Education is a companion which no misfortune can depress, no crime can destroy, no enemy can alienate, and no despotism can enslave. Education is at home a friend, abroad an introduction, in solitude a solace and in society an ornament. It chastens vices, guides virtue, gives at once grace, and government to the genius, without education, what is man? A splendid slave, a reasoning savage in the world of confusion and overwhelming indecision.

The actualization of educational goals in all societies is dependent to a large extent on the quality of the teaching force. The teacher according to Odiba (2004) is the center between knowledge and learning. The knowledge required to change the behavior of the learner within a given environment so as to make profound contributions to the overall development of the society can only be attained by the role of the teacher. Ukeje cited by Odiba (2004) opined that, the teachers are the hub of any educational system, for the schools cannot be better than their teachers. In fact, the teachers constitute the most vital factor in any educational system, upon their number, devotion and quality, the effectiveness of all educational arrangement must chiefly depend. This shows that no educational system can rise above the quality of its teachers.

Considering the vital role education plays as an agent of National Development and Globalization, Alaba(2010) posited that, there has been agitation for more functional and qualitative education all over the world. This according to Alaba(2010) is reflected in the inauguration of education for all (EFA) in Jomtien in 1995 and Dakar in 2000. Alaba (2010) further contended that, the effort at ensuring quality was not left to the above bodies alone, other societies like, Society for Information Technology and Teacher Education (SITE), Association for computing in Education (AACE) and the infonomics society also sponsored and organized conferences aimed at ensuring quality and access to education. No nation can afford to sacrifice educational quality on the altar of ignorance and indifference, hence nations world over spend time and resources in ensuring quality education.

According to the Federal Ministry of Education (FME, 2004), the National policy on education states that the primary education is the foundation of the Nigerian education system. No wonder, then, that most strategies to improve education quality all over the world begin from primary education. A solid foundation laid saves the building from total collapse. Suffice one to point out at this point that, the gap that exists among the nations of the world today is as a result of the kind of education they are exposed to. However, the modern view, even where lip service is being paid to education, the truth of the matter is that quality education is the right of every citizen not a privilege that the rulers may grant or withhold (Adegbesan, 2012).

Improving the Quality of Education in Nigerian Educational Institutions

It is abnormal to describe education as anything that lacks quality. Reacting to the views of people on the state of education in Nigeria, Fafunwa (2006) opined that:

People say the standard has fallen. But I want to say that the standard has not fallen. It is the pattern that has fallen. Teachers are not as well trained as they used to be, and even when they are, they are poorly paid. Infrastructure is poor and there are no materials to work with. And these are some of the problems that should be addressed instead of worrying ourselves about some nebulous standards, which we have set. Even a primary school pupil can differentiate between a fail, pass or average (p.10).

At this point, one would want to posit that the conceptualization of the term quality is fret with ambiguities. For instance, Arikewuyo in Adegbesan (2010) opined that, quality serves as determination of gradations based on standard of excellence beneath which, a mark of inferiority is imposed or adduced and above which grades of superiority are defined. Also, Fadokun in Adegbesan (2010) viewed quality from three perspectives viz:

- Efficiency in the meeting of its goals.
- Relevance to human and environmental conditions and needs
- Something more that is the exploration of new ideas, the pursuit of excellent and encouragement of creativity.

Quality significantly pertains to changes in the system itself, in the nature of its inputs, objectives, curriculum and technologies in it's socio-economic, cultural and political environment. Quality education is the education that best fits the present and future needs of the particular learners in question and the community, given the particular circumstances and prospect. The quality concept also has to embrace the development of the potential of every member of each new generation. Again, quality education is an education that provides students with the tools to deal with and find solutions to the challenges confronting mankind.

Quality assurance is the weapon for quality improvement of our educational system. It then means that quality assurance is the mechanism used to evaluate the efficiency and appropriateness of teaching and learning in our educational institutions in order to ensure the delivery of high quality education. It is also a holistic method of identifying and resolving problems within the education system in order to ensure continuous quality improvement (Alaba, 2010). According to Bateman in Alaba (2010), quality assurance includes defined standards of achievement, documented procedures for all identified processes, established ways of responding to issues and clear accountability for outcomes. This view is in line with the contentions of Ajayi and Adegbesan (2010), that quality assurance is related to accountability both of which are concerned with maximizing the effectiveness and efficiency of educational systems and services in relation to their contact, missions and state objectives. Quality assurance in our educational system should be sustained on a continuous basis. Bateman in Alaba (2010) opined that, some of the benefits associated with consistent quality assurance and continuous quality improvement measure in education include:-

- The establishment of high standard academic excellence which will go a long way to enhance the school's reputation and image.
- Improve communication across the school system
- Improvement of outcome so that the policies and procedures are constantly revisited through analysis and the delivery of teaching and learning.
- Identification of system strengths and weaknesses
- Determination of the programme effectiveness and tracking of its integrity and;
- Increase in capacity to secure funding and retirement service delivery

In Nigeria, the Minister of Education has the responsibility among others to maintain standards and quality if education. According to the Federal Ministry of Education (2004), the National Policy on Education, the National Minimum Standards on Education and establishment of institutions act 16 of 1985; the ministry of education was saddled with the responsibility of maintaining education standards and quality. The Ministry of Education through its agencies or parastatals performs these functions. Fr instance, the inspectorate department of the Ministry of Education at all levels is fully saddled with this function. There exist a legal backing for ensuring quality assurance and improvement at the basic function, or activities of the inspectorate department of

the Ministry of Education. For quality assurance and improvement in Nigeria, education systems moved from form of school inspection that is characterized by fault finding (snoopervision) to consistent and continuous supervision in the form of monitoring, evaluation and quality improvement method that is geared towards instructional improvement in both teaching and learning. The F.M.E.(2004) posited that the National Educational Quality Assurance policy revolves round the following:-

- Learners achievement and standards
- Learners welfare and participation
- Care, guidance and support
- Leadership and management
- School community relationship
- Learning environment
- Teaching and learning aid
- Curriculum and other activities

The aforementioned components of the quality assurance policy of Nigeria should not be taken for granted, since the need for quality assurance and improvement of our educational system cannot be over stressed. For the avoidance of doubt, the need for quality assurance in Nigeria schools was fathomed by Adegbesan (2010) as:

- To serve as indispensable component of quality control strategy in education.
- To ensure and maintain a high standard of education at all levels
- To assist in monitoring and supervision of education programmes
- To determine the level of adequacy of the facilities available for quality control aids.
- To ensure how the financial resources available could be prudently and judiciously utilized.

Reflective Thinking Skills and Education Quality Improvement

The conceptualization of reflective thinking is rife with ambiguities. Reflective thinking according to Dewey in Moon (1999) is an active, persistent and careful consideration of a brief or supposed form of knowledge, of the grounds that support that knowledge and the further conclusions to which that knowledge leads. By this therefore, one can adduce that Reflective Thinking (RT) refers to the process of analyzing and making judgments about what happened. This is in line with the earlier definition by Boyd & Fales (1983) who saw RT as the process of creating and clarifying the meaning of experience (past and present) in terms of self in relation to self and self in relation to the world. This again suggests that RT is a part of the critical thinking process referring specifically to the process of analyzing, evaluating and making judgment about what has happened.

Given (2002) contended that RT involves personal consideration of one's own personal achievements and failures and ask what worked, what didn't and what needs improvement. It asks the learner to think about her own thinking. RT therefore, requires the continual evaluation of beliefs, assumptions and hypothesis against existing data and against other plausible interpretations of the data.

The major activity in RT is Reflection. Reflection is the key that unlocks the door to understanding oneself in relation to core ethical values (Beland, 2003). Reflection can occur in response to academic work and as a follow up to a cooperative activity when Learners are asked to reflect upon how well their group did or did not work together. It can also be used to review the day's activity, as a follow up to class meetings as part of goal setting and as part of a service learning activity. RT as mentioned earlier is most important in prompting learning at the time of complex - solving situations due to the fact that it avail the Learners the opportunity to go backwards and think about how they actually solve problems and how a particular set of problem solving strategies is appreciated for achieving their goals (Halpen,1996).

A Conducive Environment for Reflective Thinking

The individual teacher can create an enabling environment for effective reflective thinking activity to take place. According to Lin, Hmelo, Kinzer & Secules (1999), the following are the characteristics of environments and activities that prompt and support reflective thinking:

- Provide enough wait - time for students to reflect when responding to inquiries.
- Provide emotionally supportive environments in the classroom, encouraging re-evaluation of conclusions.
- Prompt review of learning situation, what is known, what is not yet known and what has been learned.
- Provide authentic tasks involving ill-structure data to encourage reflective thinking during learning activities.
- Prompt student's reflection by asking questions that seek reasons and evidence
- Provide some explanations to guide student's thought processes during exploration

- Provide a less structured learning environment that prompts students to explore what they think is important.
- Provide social-learning environments such as those inherent in peer group. Works and small activities to allow students to see other points in view.
- Provide reflective journal to write down student' positions, give reasons to support what they think, show awareness of opposing positions and the weaknesses of their positions.

From the above, it is evident that creating an enabling environment aid in fostering reflective thinking. Reflection is an indispensable aspect of learning. The students are at the centre of the entire teaching and learning process and the main actors of reflective teaching. Are the students so important in our present dispensation? The answer to this question will wet out quest for reflective thinking.

Why reflective thinking?

The following reasons according to Lin, et al (1999) account for why reflective thinking is important.

1. Modern society has become more complex so much, so that, information is becoming available and changing more rapidly, prompting users to constantly rethink, switch directions and change problem solving strategies.
2. It is important to prompt reflective thinking during learning so as to help learners develop strategies to apply new Knowledge to the complex situations in their day to day activities.
3. Reflective thinking helps Learners developed higher order thinking skills by prompting Learners to:-
 - a. Relate new knowledge to prior understanding
 - b. Think in both abstract and conceptual terms
 - c. Apply specific strategies in novel tasks
 - d. Understand their own thinking and learning strategies
4. Reflective thinking assists the Learners in their transition from one stage of development to another (At this time, the adolescents witness major changes in intellectual, emotional, social and physical development).
5. Reflective thinking provides Learners with the needed skills to mentally process learning experiences, identify what they learned, modify their understanding based on new information and experiences and transfer their learning to other situations
6. Reflective thinking helps the learners to become more aware of:
 - a) their learning progress,
 - b) choose appropriate strategies to explore a problem and
 - c) identify the ways to build the knowledge they need to solve the problem.

Reflective thinking requires the continual evaluation of beliefs, assumptions and hypothesis against existing data and against other plausible interpretations of the data (Boyd & Fales, 1983). Reflection around which the entire reflective thinking revolves could be done through journal writing, keeping of daily, essay writing, drawing and even talking in pairs. Again, it requires the activities of a reflective teacher to effectively impact thinking among the Learners. By the time reflective thinking is in place in an individual learner, the three stages of intellectual development have been accomplished. These stages of intellectual development are:-

- Dualism: in this stage the young perceive the world around them in polar terms (e.g. Black and white, good and bad, etc). The Learners at this state are self-centred in terms of reasoning. They exhibit some elements of cognitive egocentrism, thus they find it hard to believe other people's point of view.
- Relativism: At this stage the students come to understand that there is no single answer to a problem and that some questions have no answer.
- Reflectivism: As students develop through the period of relativism, they will certainly come to appreciate that some opinion or arguments are better than the others. They will begin to be interested in what makes one argument or opinion better than the others. Students at this stage learn to evaluate the point of view of others and their own personal views.

The Teachers' Role in the Development of Reflective Thinking among Learners

The realization of the development of reflective thinking among students could be superb if teachers play their contributory roles. Note that in the school system, the teacher is not only the hub of our educational system, but also the centre between knowledge and learning (Odiba, 2007). The teacher according to Vezzuto (2005) should incorporate scaffolding strategies into the learning environment to help students develop their ability to reflect on their own learning. For example:

1. Teachers should model metacognitive and self-explanation strategies on specific problems to help students build an integrated understanding of the process of reflection.

2. Study guides or advance organizer should be integrated into classroom materials to prompt students to reflect on their learning.
3. Questioning strategies should be used to prompt reflective thinking, specifically getting students to respond to why, how and what specific decisions are made.
4. Social learning environments should exist that collaborate work with peers, teachers and experts
5. Learning experiences should be designed to include advice from teachers and co-Learners.
6. Classroom experiences should involve enjoyable, concrete and physical learning whenever possible to ensure proper attention to the unique, cognitive, affective and psychomotor domain development of the students
7. Class activities should be relevant to real-world situations and provide integrated experiences
8. The teacher's lesson plans should include various components that encourage student's reflective thinking during the learning process. In this case, the lesson plans irrespective of the subject matter should provide:-
 - a) Teacher questions designed to encourage Learners to isolate and explain overall and subordinate problems
 - b) Many avenues to involve Learners in collecting data in order to find out causes and solutions
 - c) Concrete ideas and activity sheets to aid Learners evaluate properly the data so gathered.
 - d) Questions that encourage Learners to choose possible alternatives and the consequences of their choice.
 - e) Questions and activities that encourage Learners to make conclusions out of the evidence that is available to them and also proffer solutions.
 - f) Opportunities for Learners to make choice and make use of the best alternative.
 - g) Opportunities for Learners to monitor and also re-evaluate their outcomes and findings throughout the whole unit.

Recommendation

It is the recommendation of this paper that the teachers at all levels of the Nigeria education system should be involved in facilitating the development of reflective thinking among students. The teacher's position as both the centre between knowledge and learning and the hub of any educational system cannot be over stressed. Maintaining adequate classroom activities that will utilize reflective thinking process is crucial to the improvement of education quality in any giving economy.

Conclusion

Educational quality improvement is the sincere song of development. Quality assurance is the weapon for the actualization of societal goals. The teaching method adopted by the teacher in the classroom goes a long way to speak on the type of Learners to be produced. The development of reflecting thinking in students makes educational development functional, thereby exposing the products of our educational system to the overall transformation of the economy. No nation can afford to sacrifice educational quality on the alter of ignorance and indifference. The development of the generic skills generally and reflective thinking skills (critical thinking) specifically, will help to nurture our education quality.

In the words of Huainanzi cited by Ale(2012), opportunities are changing ceaselessly. Those who get there too early have gone too far, while those who get there too late cannot catch up. As the sun and the moon go through their courses, time does not go along with people. Therefore, sages do not value huge jewels as much as they value little time. Time is hard to find and easy to lose. Let us therefore as stakeholders in education, encourage the development of reflective thinking in our students.

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