



CRITICAL THINKING PATTERN OF POST-BASIC EDUCATION STUDENTS AS A CASE FOR THE USE OF CIVIC EDUCATION CURRICULUM FOR SOCIETAL RE-ENGINEERING IN OGUN STATE

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Abstract

Decision making is a crucial aspect of any nation's development. To make proper decisions, critical thinking cannot be overlooked. Results of things done in our society today seem to show an obvious reflection of a lack of critical thinking. This situation is expected to be tackled formally in schools by the use of various curricula such as Social Studies and Civic Education with students being the immediate recipients. This study, therefore, examined the critical thinking pattern of post-basic education students as a case for the use of civic education curriculum for societal re-engineering. The study adopted the descriptive survey research design. Post basic civic education students made up the population of the study. Multi-stage and simple random sampling techniques were employed in arriving at the sample size of 500 students. Students' Critical Thinking Questionnaire ($r=0.76$) was used for data collection. Data was analysed using descriptive statistics of simple percentage, mean and standard deviation. The study showed that the pattern of critical thinking of post-basic students conforms to critical thinking skills they have been exposed to in the Civic Education curriculum which are necessary for societal re-engineering. Based on this finding, it was recommended that mandatory exposure to critical thinking skills should not stop at the post-basic education level but be repeated in form of seminars, workshops, conferences and continuing professional development programmes.

Keywords: Civic Education, Critical thinking, Critical thinking skills, Curriculum and Post-basic education

Introduction

The world today has become a global village basically because of the existence of great technological advancements that have set the pace for developments in the economic, social, educational, philosophical, financial, health and even political spheres of many nations. For instance, anyone who is not accustomed to the use of the automated teller machine (ATM) in this age is in for a shocker when carrying out bank transactions. Ever since man stepped on the moon, societies have kept on re-inventing themselves in terms of technological advancements. Consequently, any society that wants

to remain relevant cannot shy away from the essence of societal re-engineering.

The word societal re-engineering consists of two words which are 'societal' and re-engineering'. Societal which is derived from the word society refers to or pertains to large social groups, or to their activities and customs among others. Re-engineering, on the other hand, is derived from the word engineering, in this context; it implies the practical application of technical and scientific knowledge to commerce or industry. Placing the two words together, societal re-engineering could then be described as the application of scientific



knowledge to inventing and re-inventing sustainable development in a society.

However, societal re-engineering cannot take place without critical thinking because a good product requires good thinking. This aligns with the finding of Yarker and Park (2012) that equipping individuals with critical thinking skills help to change many other forms of knowledge in a society. Considering the level of manifestation of the dearth of critical thinking among the populace of the Nigerian society today, there is a serious need for research in this area. It is against this backdrop that this paper investigated critical thinking pattern of post-basic education students as a case for the use of civic education curriculum for societal re-engineering. This article will first review relevant literature, then the methodology and results followed by a discussion of findings and finally, conclusions will be drawn.

Research Review

The literature on critical thinking shows that it is rooted in the two academic disciplines of philosophy and psychology (Lewis & Smith, 1993). Sternberg (1986) also noted that there is the third root of critical thinking which is within the field of education. These separate academic disciplines have helped shape the definition of critical thinking over the years. Lewis and Smith (1993) and Thayer-Bacon (2000) maintained that the philosophical approach focuses on the hypothetical critical thinker; the qualities and characteristics of the person rather than the behaviors or actions the critical thinker can perform. On the other hand, the psychological approach views critical thinking from two dimensions. First, it focuses on how people actually think as against how they could or should think under ideal conditions (Sternberg, 1986). Second, it focuses on critical thinking by the type of actions or behaviours critical thinkers can do. To this end, quoting Willingham (2007) critical thinking is "seeing both sides of an issue; being open to new evidence that disconfirms your ideas; reasoning dispassionately; demanding that claims be backed by evidence; deducing and inferring conclusions from available facts; solving problems, and so forth" (p.8). From the approach of the field of education, critical thinking is deeply connected to classroom activities and is reflected in the three highest levels of Bloom's taxonomy (analyze, evaluate and create).

Putting together these approaches, critical thinking could be defined as the type of thinking that

examines questions about existing knowledge on issues which are not clearly defined and for which there are no precise answers. Lai (2011) noted that critical thinking involves both cognitive skills and dispositions and it includes the component skills of analyzing arguments, making inferences using inductive or deductive reasoning, judging or evaluating, and making decisions or solving problems. Furthermore, research findings in the area of critical thinking have revealed a poor state of critical thinking in most educated adults. For instance, Halpern (1998) concluded that many, if not most, adults fail to think critically in many situations. Van-Gelder (2005) also concluded that many adults still lack basic reasoning skills. More recently, Ijaiya, Alabi and Fasasi (2011) also made serious complaints about the quality of teachers being produced, especially because of their lack of knowledge and skills.

Although adults often display deficient reasoning as shown by literature, developing critical thinking competencies at a very young age is beneficial. Empirical evidence supports this claim. For example, Koenig and Harris (2005) demonstrated in a study that 3 and 4-year-old children will differentiate the credibility of various sources of information. In particular, the 4-year-old children appeared to prefer the judgments of adult participants who had a history of being correct over those who were purposefully inaccurate. This finding has been replicated in a number of studies (Jaswal & Neely, 2006; Lutz & Keil, 2002) and found to be consistent. In this regard, it thus implies that formal education serves as the major platform to achieve the initial development of critical thinking and the school its primary medium. The practice in the informal education setting was the use of games, folklores, rhymes, age grade/group system and cultural rites like an initiation into adulthood among others to develop critical thinking skills. However, compartmentalization of subjects in the formal education setting has structured some subjects to be specifically dedicated to developing critical thinking.

In Nigeria, though all subjects in the formal education curriculum have topics that stimulate the development of critical thinking, the subject 'Civic Education' (whose contents were derived from the existing social studies education curriculum) has been structured at the secondary school level to primarily develop critical thinking. NERDC (2009) stated that the civic education curriculum was



designed “as a result of bringing the reality of everyday societal living to students at their age of critical thinking and reasoning about the events happening around them” (P.6). Civic Education curriculum comprises themes that stimulate critical thinking such as values, emerging issues, citizenship, human rights, responsible parenthood and relationships among others. As stated by NERDC (2009), the objectives of teaching civic education are as follows:

- i. Promote the understanding of the inter-relationship between man/woman, the government, and the society.
- ii. Highlight the structure of government, its functions and responsibilities of government to the people and vice-versa.
- iii. Enhance the teaching and learning of emerging issues.
- iv. Inculcate in students their duties and obligations to the society.

When these objectives are critically examined, one would realize that it helps stimulate thinking which has a purpose and develop reflective judgement or in other words, the objectives seem to be suitable to help challenge students to use reflective, reasonable and rational thinking to gather, interpret and evaluate information in order to derive a judgment which would, in turn, propel societal re-engineering. Mansoor and Pezeshki (2012) in this regard maintained that critical thinking involves deep reasoning and a consideration of what we received rather than a forthright acceptance of different ideas.

However, the reverse seems to be the case when one takes a closer look at the level of critical thinking in our society at large and specifically at the post-basic level where the students are a direct recipient of the contents of the subject - Civic Education. To this end, Uzuntiryaki and Capa (2013) found that critical thinking among students of civic education is not at the desired level and this may be partly connected with the quality of education received at the basic education level. This finding is consistent with that of Kurum (2002) and Gedik (2013) but the reason was attributed to be partly connected to lack of activities promoting students to think, question and investigate during their schooling. Similarly, in the field of mathematics, Osarenren and Asiedu (2007) also submitted that the reason for the continued poor performance of students in Mathematics could, among others, be attributed to the students' inability to think critically and analyze mathematical concepts

systematically. It is thus, obvious that there is a disconnection between what is being taught and what is being manifested.

In this regard, studies have been carried out to see if this problem is as a result of the level of implementation of the civic education curriculum. For instance, Mohammed, Gengle and Kabiru (2015) noted that the level of implementation in Adamawa State, Nigeria is very high though there are not enough and qualified teachers. Idowu (2015) also noted that there is no problem with the level of implementation of the civic education curriculum among post-basic students because it is very high. However, Idowu noted further that when teaching civic education, teachers focus more on learners' knowledge acquisitions and place less emphasis on developing skills and dispositions due to inadequate school extracurricular programmes and teachers' lack of civic content knowledge and pedagogical skills. This he noted may, therefore, be where the problem lies because in essence, students have good possession of civic knowledge but when it comes to handling realities of life, they lack the skills of analyzing arguments, making inferences and using inductive or deductive reasoning.

Consequent on the findings examined, it is obvious that there is a problem of critical thinking among post-basic students despite the fact that they are exposed to critical thinking concepts in civic education and this does not speak well for societal re-engineering. This situation makes it necessary to first examine the critical thinking pattern of these students so as to make a case for the use of the civic education curriculum in societal re-engineering.

Research Question

What is the critical thinking pattern of post-basic students in Ogun State, Nigeria?

Methodology

The study employed the descriptive survey research design. Post-basic civic education students in Ogun State made up the population of the study. Multi-stage sampling technique was used to split the existing twenty local governments in Ogun State into three clusters (across the three senatorial zones) from which three local governments were randomly sampled. Simple random sampling technique was also used to select ten schools from the three selected local governments. A sample size of 500 students was arrived at using simple random sampling to select 50 students from each selected



school. Students' Critical Thinking Questionnaire (SCTQ) was designed to solicit responses on the critical thinking pattern of the respondents. It was made up of two sections which elicited information on respondents' bio-data and twenty statements on critical thinking pattern which were rated on a 4-point Likert type scale of Strongly Agree, Agree, Strongly Disagree and Disagree. SCTQ was tested for reliability using Cronbach Alpha analysis and a reliability coefficient of 0.76 was obtained. Data was analysed using descriptive statistics of simple

percentage, mean and standard deviation. A mean score average of 2.50 was used as the decision rule.

Results

Research Question: What is the critical thinking pattern of post-basic students in Ogun State, Nigeria?



Table 1: Responses on Respondents' Critical Thinking Pattern

S/ N	Statements	SA	A	D	SD	Mean	Std. Dev
1.	Changing your mind at random is a sign of weakness	260 (52)	65 (13)	25 (5)	150 (30)	3.12	0.09
2.	A person should always consider new possibilities	342 (68.4)	110 (22)	33 (6.6)	15 (3)	3.52	0.10
3.	Feelings are the best guide in making decisions	160 (32)	218 (43.6)	54 (10.8)	68 (13.6)	2.96	0.08
4.	If I think longer about a problem, I will be more likely to solve it	300 (60)	140 (28)	40 (8)	20 (4)	3.40	0.09
5.	People make bad choices when they listen to lots of different opinions	290 (58)	118 (23.6)	42 (8.4)	50 (10)	3.31	0.09
6.	The way to fix a problem is to think about the best answer not to stand around and wait for the problem to fix itself	330 (66)	95 (19)	20 (4)	55 (11)	3.47	0.09
7.	It is okay to be undecided about some things a times	88 (17.6)	92 (18.4)	72 (14.4)	248 (49.6)	2.39	0.89
8.	Wise people make fast decisions	355 (71)	95 (19)	16 (3.2)	34 (6.8)	3.57	0.10
9.	I see myself as someone who is curious about many things	182 (36.4)	203 (40.6)	55 (11)	60 (12)	3.02	0.08
10.	I see myself as someone who is ingenious	240 (48)	175 (35)	50 (10)	35 (7)	3.21	0.09
11.	I see myself as someone who values artistic and aesthetic experience	200 (40)	150 (30)	70 (14)	85 (16)	2.96	0.08
12.	I see myself as someone who prefers routine work	165 (33)	115 (23)	85 (17)	135 (27)	2.72	0.08
13.	I see myself as someone who likes to play with ideas	148 (29.6)	60 (12)	110 (22)	182 (36.4)	2.49	0.08
14.	Nobody can change my mind if I am right	340 (68)	70 (14)	50 (10)	40 (8)	3.40	0.09
15.	People who criticize me do not really know me	310 (62)	92 (18.4)	50 (10)	48 (9.6)	3.32	0.09
16.	If everybody in a group has too many different ideas, such a group will break	265 (53)	170 (34)	30 (6)	35 (7)	3.34	0.09
17.	It really makes me angry when someone cannot accept that they are wrong	240 (48)	140 (28)	55 (11)	65 (13)	3.13	0.09
18.	I do not like people who do not stand for anything	129 (25.8)	168 (35.6)	100 (20)	103 (20.6)	2.65	0.08
19.	Though freedom of speech is a right, it is still necessary to withhold freedom from certain political groups	190 (38)	175 (35)	75 (15)	60 (12)	2.96	0.08
20.	I do not like people who jump into conclusion rather than careful analysis of a situation	268 (53.6)	137 (27.4)	45 (9)	50 (10)	3.25	0.09

Note: Percentages (%) are in Parenthesis ()

Weighted Average Mean = 3.10



Table 1 shows that all responses of respondents to the constructed statements on their pattern of critical thinking met the mean score average except for item 7 (It is okay to be undecided about some things a times) which recorded a mean score of 2.39 and item 13 (I see myself as someone who likes to play with ideas) which recorded a mean score of 2.49. This implies that respondents pattern of thinking corresponds with the critical thinking skills and dispositions they have been exposed to except that the respondents are not of the view that it is okay for an individual to be undecided over some matters and do not see themselves as one who likes to experiment many ideas. The weighted average mean score of 3.10 further strengthens the connection between respondents' critical thinking pattern and actual exposure.

Discussion of Findings

The finding of this study showed that post-basic education students examined have the right pattern of critical thinking in line with the contents of the civic education curriculum they have been exposed to. This shows that there is no problem with the level of critical thinking of post-basic education students as against the findings of Kurum (2002), Uzuntiryaki and Capa (2013) and Gedik (2013).

However, the fact that the result from the study also showed that the same students who had a sound pattern of critical thinking felt positively disposed to being undecided about some things and liked to play with ideas, aligned with the finding of Idowu (2015) that the level of implementation of the civic education curriculum among post-basic students is very high but civic education teachers focus more on learners' knowledge acquisitions than relevant skills development and students turn out eventually to have a good possession of civic knowledge but lack the requisite critical thinking skills when faced with real-life situations.

Implications for Societal Engineering

The finding from this study showed that post-basic education students examined have been found to possess the right pattern of critical thinking because the level of implementation of the contents of the civic education curriculum is very high. The implication of this is that such a trend is good for sustainable development in the society because no form of societal re-engineering can take place without critical thinking being in place.

The finding from this study also showed that respondents felt positively disposed to being undecided about some things and liked to play with ideas despite having a sound pattern of critical thinking knowledge. The implication of this to societal re-engineering is that there might be a slight disconnect between knowledge acquired and what is displayed in the face of real life situations. A society that wants to be re-engineered must display the same level of critical thinking knowledge as critical thinking skills.

This observation aligns with the findings of Idowu (2015) that the level of implementation of the civic education curriculum among post-basic students is very high but civic education teachers focus more on learners' knowledge acquisitions than relevant skills development and students turn out eventually to have a good possession of civic knowledge but lack the requisite critical thinking skills when faced with real-life situations.

Conclusion and Recommendations

The objectives of the civic education curriculum no doubt is capable of causing good decisions inspired by critical thinking to be made which in turn can lead to credible societal re-engineering. This study which was carried out on post-basic students in Ogun State to examine their critical thinking pattern has shown that there is no problem with the level and pattern of critical thinking among post-basic students. However, the finding that the respondents also felt positively disposed to being undecided about some things and liked to play with ideas, raises some form of concern and seem to suggest, just as Idowu (2015) pointed out, that though the level of implementation of the civic education curriculum among post-basic students is very high, civic education teachers focus more on knowledge acquisitions than relevant skills development.

It is, therefore, recommended that for the civic education curriculum to be effectively used for societal re-engineering, the level of implementation should not be dropped. In the same vein, studies need be carried out to adequately establish if there is any connection between Civic Education theoretical teachings and the development of critical thinking skills. It is also recommended that mandatory exposure to contents on critical thinking should not stop at the post-basic education level but be repeated at the higher levels of education in form of seminars, workshops, conferences and continuing



professional development programmes if sustainable societal re-engineering is to be attained.

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