

**CRITICAL AND CREATIVE THINKING IN BEPC AND BACCALAUREAT ENGLISH READING
COMPREHENSION ASSESSMENTS: ETAT DES LIEUX AND PERSPECTIVES**

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Résumé

Cet article vise à explorer les pratiques courantes en matière d'esprit critique de Bloom Taxonomy dans les évaluations du Brevet d'Etudes du Premier Cycle (BEPC) et du Baccalauréat de l'Enseignement Secondaire dans l'enseignement de l'anglais langue étrangère au Bénin. L'objectif principal est de faire le bilan des différents niveaux d'esprit critique de la Taxonomie Bloom dans les exercices de compréhension de texte au BEPC et au Baccalauréat. Pour cette fin, l'analyse des différents items qui composent les exercices de compréhension de texte au BEPC et au Baccalauréat, de 2008 à 2012, a été faite et a révélé que les aspects critiques sont très peu pris en compte dans la conception des épreuves. Se basant sur les résultats de l'analyse, les auteurs de cet article ont fait des suggestions pour une prise en compte plus effective de l'esprit critique dans les évaluations du BEPC et du BAC.

Mots Clés: esprit critique, anglais langue étrangère, Taxonomie de Bloom, BEPC, Baccalauréat.

Introduction

The main goal of education, at any level, is to help students develop thinking skills, particularly critical thinking skills (Feldman, 1999). The quality of our life and of what we do depends precisely on the quality of our thoughts through which we state our view points, make our perspectives and orientations to a purpose so as to solve a problem. All our actions are commanded by our thoughts (Smith, Ward and Finke, 1995).

Teachers themselves need to understand the principles and practices of critical thinking before engaging into any pedagogical actions. Students' ability to think critically should be a constant preoccupation for teachers if the latter want students to become responsible and independent learners. Learning to think analytically and critically is a lifelong process with applications both inside and outside the language classroom. Likewise, the ability to look at problems or tasks with fresh eyes or with creativity so as to tackle them successfully is required for learning both inside and outside of formal educational systems.

We hope to awaken and nurture these attributes no matter the direction students will be going in life. To reach this objective, one sensitive strategy is to cause students and teachers to be familiar with the basic principles of critical thinking and adopt them. We could try to find out in what ways these principles might be applied in assessment contexts. This article, after clarifying the concept of critical and creative thinking, appreciates the level of critical thinking in both BEPC and *Baccalauréat* English assessments. It then suggests, basing on current realities, what can be done to design effective reading comprehension tests.

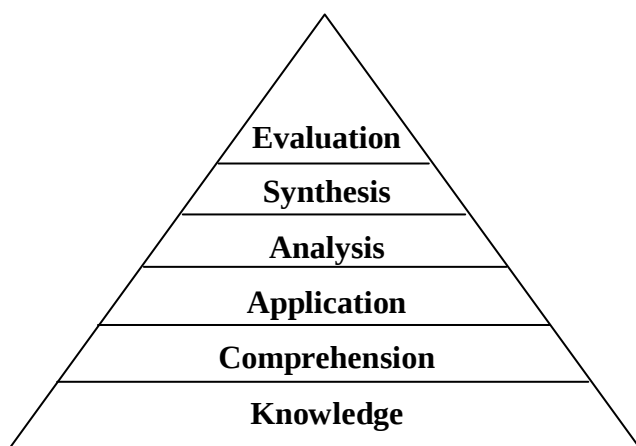
1.1 Previous work on Critical and creative thinking

Critical and creative thinking is defined as a self-conscious attempt to improve the quality and intellectual rigor of one's thought (Richard & Linda, 2005). It is an intellectually disciplined process that consists in actively and skillfully conceptualizing, analyzing, synthesizing, applying and / or evaluating information gathered from observation, experience, reflection, reasoning or communication

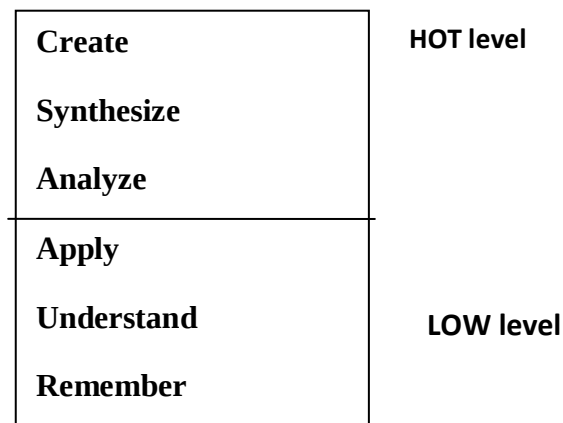
used then as a guide to belief and action (Scriven and Richard, 2005). Critical thinking is a technique for evaluating information and ideas, for deciding what is to be accepted and believed. It means correct thinking in the pursuit of relevant and reliable knowledge about the world (Moore and Parker, 1986). It is a reasonable, reflective, responsible, and skillful thinking that is focused on deciding what to believe or do (Schafersman, 1991). Critical thinking is the process of looking at issues from different perspectives, to challenge current opinions about the issues, to explore possible alternative solutions.

This is important because it makes students use higher levels of thinking and helps them to learn more in class and to develop into better thinkers and leaders. A person who thinks critically can ask appropriate questions, gather relevant information, efficiently and creatively sort out this information, reason logically from it, and come to a reliable and trustworthy conclusion. True critical thinking is higher-order thinking that may, for example, enable a person to serve a murder trial jury; access the consequences of global warming, etc. It enables an individual to be a responsible citizen who contributes to society development, and is not merely a consumer of society's distractions. For Norman (1980), "It is strange that we expect students to learn, yet seldom teach them anything about learning" while Lochhead (1980) says, "We should be teaching students how to think. Instead, we are teaching them what to think."

Bloom (1956) headed a group of educational psychologists which developed a classification of levels of intellectual behaviour that are important in learning. Lorin (1990) updated Bloom's taxonomy to reflect relevance to the 21st century. The two graphics below show the original and the revised taxonomies.



Old version (Bloom, 1956)



New version (Lorin, 1990)

Bloom (1956) identifies six levels of critical thinking, ranging from knowledge to evaluation. As for Lorin (1990), he also identifies six levels of critical thinking, ranging from 'Remember' to 'Create', the first three levels that he identifies as LOW levels being 'Remember, Understand, and Apply', while the other three that he calls HOT level are 'Analyze, Synthesize, and Create.' The following definitions are given of the six levels of the original version, Bloom's taxonomy:

Knowledge: remembering, memorizing, recognizing, recalling

Comprehension: interpreting, translating from one medium to another, describing in one's own words.

Application: problem-solving, applying information to produce some results.

Analysis: subdividing something to show how it is put together, finding the underlying structure of a communication, identifying motives.

Synthesis: creating a unique, original product that may be in verbal form or may be a physical object.

Evaluation: making value decisions about issues, resolving controversies or differences in opinions (Richards, 1992).

Critical thinking can be presented or emphasized in all classroom areas: lectures, homework, term papers and examinations. We will examine in this article how critical thinking, especially Bloom's levels of critical and creative thinking, can be used in reading comprehension tests, at both *BEPC* and *Baccalauréat* levels.

1.2 Data for this Study

So as to check whether the use of creative and critical thinking is effective in *BEPC* and *Baccalauréat* reading comprehension assessments, we have had to analyze the Reading Comprehension evaluations of both examinations. Such an analysis has enabled us to appreciate the level of critical thinking in the two examination subjects in order to contribute, if necessary, to the improvement of the quality of instructional questions in reading comprehension tests.

1.3 Findings

The tables display what has been revealed about the different levels of critical thinking in *BEPC* and *Baccalauréat* reading comprehension exercises over the period, 2008 to 2012.

1.3.1 The case of *BEPC* examinations

The table below gives an overview of the results revealed by the analysis of the *BEPC* reading comprehension exercises over the five years regarding critical thinking applicability.

Level Items	knowledge	Comprehension	Application	Analysis	Evaluation	Creativity
Item 1	100%	100%	12%	00%	00%	00%
Item 2	100%	90%	40%	00%	00%	00%
Item 3	100%	90%	40%	00%	00%	00%
Item 4	100%	100%	10%	00%	00%	00%
Item 5	100%	100%	00%	00%	00%	00%

Table I showing the percentage of use of Bloom Taxonomy levels of critical thinking in *BEPC* examinations from 2008 to 2012

A cursory look at the above table shows that the level of analysis, evaluation, and creativity of Bloom Taxonomy of critical thinking are hardly reached.

1.3.2 *Baccalauréat* examinations

Table I gives an overview of the results revealed by the analysis of *Baccalauréat* reading comprehension evaluations over the five years as far as critical thinking applicability is concerned.

Level of application Items	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
Item1	100 %	20%	00%	00%	00%	00%
Item2	100 %	100 %	20%	00%	00%	00%
Item3	100 %	100 %	00%	00%	00%	00%
Item4	100 %	100 %	00%	00%	00%	00%
Item5	100 %	100 %	00%	00%	00%	00%
Item6	100 %	100 %	00%	00%	30%	00%
Item7	100 %	100 %	55%	00%	00%	00%
Item8	100 %	100 %	00%	22%	10%	00%

Table II showing the percentage of use of Bloom Taxonomy levels of critical thinking in *Baccalauréat* examinations from 2008 to 2012

Table I indicates that the highest levels of critical thinking reached in the *baccalauréat* 2008, 2009, 2010, 2011, and 2012 are the ones of knowledge and remembering. As for the level of application the highest percentage reached is 55%.

1.4 Discussion

The highest percentage of Bloom taxonomy levels used in these assessments is the knowledge level (100%) and the understanding level (100%). The other Bloom taxonomy percentage levels range from 10% to a peak of 40% seldom reached (only one occurrence!). These results show that apart from Bloom taxonomy critical thinking level one and level two, the other levels are poorly assessed from 2008 to 2012 in *BEPC* exams. The same remark could be made regarding the *Baccalauréat* assessments from 2008 to 2012. The highest percentage of Bloom Taxonomy levels in these assessments over the five years is the level of knowledge (100%) and the one of understanding (100%).

On the whole, the two tables show that all the reading comprehension exercises submitted to students from 2008 to 2012 fell into lower order thinking category. The analysis of these tables reveals how much *BEPC* and *Baccalauréat* reading comprehension exercises lack activities that aim at making students think critically. The current situation is that test developers seldom provide assessment items that will expose the learners to challenges and stimulation of thoughts (Freire & Macedo, 1985). The tables also indicate how important it is for teachers as well as test developers to reorganize the reading comprehension questions so as to propose more and more high order thinking exercises in the examination subjects.

1.5 Implications

“Critical thinking skills should be embedded in the subject matter and woven into the curriculum” (Mirman and Tishman, 1988). It is extremely vital that teachers and test developers take critical thinking into account when designing assessment questions. They should be prepared to ask questions that enable to enhance the cognitive development of learners. Teachers’ beliefs and attitudes about themselves and their roles in language classrooms have momentous implications for learners’ ability to think creatively and critically. If teachers think that their primary roles are to teach and provide answers and information to students’ questions, learners will be exposed to the culture of “spoon feeding”. In this case, the latter’s ability to look for answers and solutions, to inquire, to decide, to question, to reject or to accept ideas will negatively change.

The main issue, which most Beninese EFL teachers tend to ignore, is the capabilities of their learners. Teachers should facilitate and encourage creative and critical thinking skills by viewing their learners differently. Teachers and assessment developers need to change their pedagogical views and adopt a more flexible attitude towards their questioning practices. Teachers are not providers of knowledge but learning facilitators (Holec, 1981, 1992, 1996; Cotterall 2009; Little 1991; Little, Ridley & Ushioda 2002; & Fanou, 2009, 2011) who constantly think of what could be done to encourage creative and critical thinking in their learners. They have to use precise terminology to encourage thinking. The table below elaborates more on the different questioning verbs that can be used at every level of Bloom taxonomy.

Remembering: can the student recall or remember the information?	define, duplicate, list, memorize, recall, repeat, reproduce, state
Understanding: can the student explain ideas or concepts?	classify, describe, discuss, explain, identify, locate, recognize, report, select, translate, paraphrase
Applying: can the student use the information in a new way?	Choose, demonstrate, dramatize, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write.
Analyzing: can the student distinguish between the different parts?	appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test.
Evaluating: can the student justify a stand or	appraise, argue, defend, judge, select, support, value,

decision?	evaluate
Creating: can the student create new products or points of view?	assemble, construct, create, design, develop, formulate, write.

Table III showing different questioning verbs in Bloom taxonomy level of critical and creative thinking. (Slightly adapted from Bloom, 1956)

Conclusion

Richard (2005), citing Dewey, states, “If we teach today’s students as we taught yesterday’s, we rob them of tomorrow”. The future rests in the education of our youth and only good teaching practices could help in this. Today educational institutions must reinvent themselves to engage students successfully and provide them with skills needed to compete in an increasingly global technological and online world. Critical thinking should with no condition be implemented and worked on in assessment contexts. Critical and creative thinking is an efficient tool to enhance students’ performance in tests as well as to prepare them for life. Teachers and assessment developers need to change their pedagogical views and design test subjects that could make learners use their potentials effectively. They should be thinkers who constantly think of what could be done to encourage creative and critical thinking in learners.

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Appendix

A sample of BEPC subject used during the investigation (BEPC 2011)

I-Compétence disciplinaire n°2

Test :

Interviewer: Dr BADOU, You work at the University Teaching Hospital in Cotonou and you have something to tell us about AIDS in Africa. How serious is AIDS?

Dr BADOU: It is very serious. Millions of Africans are HIV positive. That is, they are infected with the Human Immune-Deficiency Virus and will almost certainly suffer from AIDS one day.

Interviewer: Some hospital practitioners think that figures about AIDS are too high and we should not believe all of them.

Dr BADOU: On the contrary, AIDS remains a very serious problem. In some areas it is increasing by as much 2 per cent a year. You can calculate the total percentage over a period of ten years if nothing is done to stop it.

Interviewer: Should people still take precautions against contracting AIDS?

Dr BADOU: This is essential. Young men must not take the attitude that taking precautions spoils their enjoyment.

Interviewer: Some people think that if it is their fate or destiny to get AIDS, they will get it. Otherwise they won't get it. They believe that nothing they can do will make any difference.

Dr BADOU: This is another dangerous attitude. People can avoid AIDS. They mustn't think they are fated either to get it or not to get it. They must realize it is in their power to help themselves. They must protect themselves against it.

Adapted from GO For English 1 ère
(Teacher's book) pages 37 -38

Vocabulary:

Fated: condamné

Item 1: Are these statements True or False according to the text?

- 1- People who are HIV positive usually suffer from AIDS later.
- 2- According to the text, figures about AIDS are not always correct.
- 3- Some analysts think that AIDS is not so serious.
- 4- Catching AIDS is a question of destiny

Item 2: Answer the following question according to the text.

- 1- Where does Dr BADOU work?
- 2- How many people are HIV positive in Africa?
- 3- Why does Dr BADOU think that catching AIDS is not a matter of destiny?

Item 3 : Select from the words in brackets to fill in gaps

- 1- You protect yourself or you contract AIDS. (neither, either, nor).
- 2- AIDS is very dangerous I have to be faithful (so, because, but).
- 3- people are HIV positive today (very, little, lots of, much).
- 4- Young men avoid having many sexual partners (shouldn't, ought to, need)
- 5- Everyone must be careful nobody recognizes an HIV positive physically. (Because, so, either).

Item 4 : Turn these sentences into either direct or indirect speech

- 1- "AIDS remains a very serious threat", the doctor said.
- 2- The AIDS officer advised me to share my toothbrush
- 3- The interviewer said that he met Dr BADOU at the hospital the day before.
- 4- "I hear of someone who got it from a blood transfusion", the woman told us.

Item 5 : Find out the opposites of the following words in the text.

- 1- Negative (paragraph 2)
- 2- Low (paragraph 3)
- 3- Decreasing (paragraph 4)
- 4- In favour of (paragraph 5)