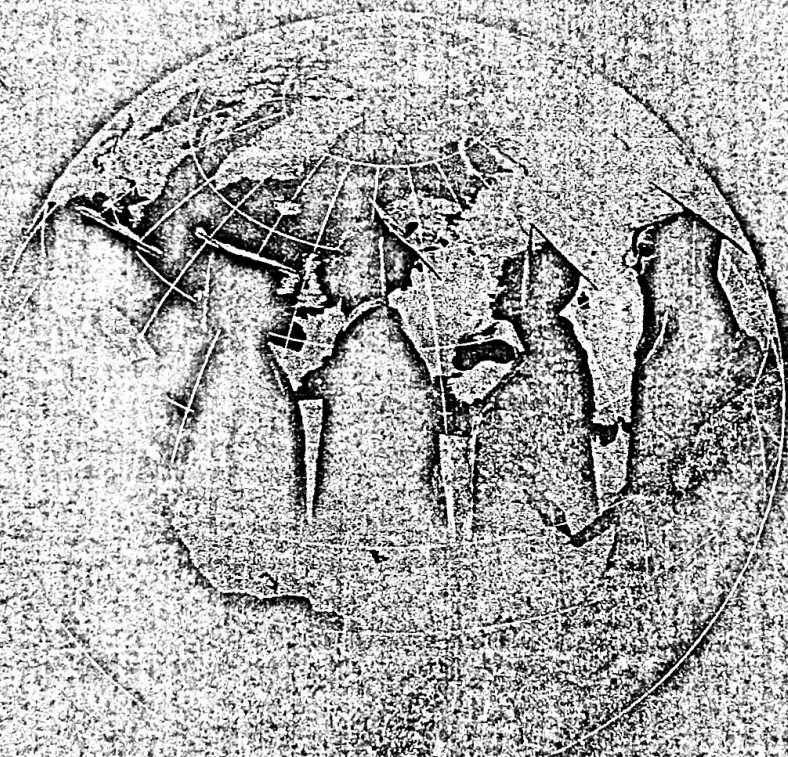


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Enhancing Critical Thinking in Higher Education through Effective Reading Instruction

OLAJIDE, B. Stephen

Introduction

Thinking, plays an important role in learning and living, and language is a crucial tool for thinking. Psychologists, linguists, and applied linguists mostly agree that a learner with inadequate language power would not be able to think and perform any notable intellectual tasks. (Abiri, 1983; Unoh, 1983; Chauhan, 1985; Lawal 1993a). The normal teaching-learning process thrives on effective thinking and communication, by which the teacher and his learners are required to command the language of instruction.

No matter how expertly the teacher may have selected the learning experiences, learner's behaviour would not change positively enough unless the teacher implements the experiences in appropriate language, thereby, causing the learner to respond by exploring and applying the cognitive resources available to him. Parker (1986), in line with Piaget (1954), Vygostky (1934), and Malinowski (1972), asserted that thinking is an intellectual activity, while Paul and Elder (2002) described critical thinking as the most significant force behind learning through which the thought of the individual could be accessed and measured. Critical thinking is applied (steady, probing, reflective and dispassionate) thinking, a process that could blossom when contextualized in reading. As observed by Lawal (1993b) and Olajide (2009), reading is central to the development of all language skills, and by its cognitive underpinning, it converges with thinking.

It is also common to find course book writers, especially for secondary schools in English as a Second Language (ESL) context, posing summary questions that are intended to make the teacher and the learners THINK. The emphasis on thinking may be explained in the importance attached to promoting it in school learning (FRN, 2004). Effective critical thinking in particular belies national development and progress. Hence, most nations strive to develop it in formal education (Spache & Spache 1973; May, 1988). Incidentally, critical thinking is a psycholinguistic activity that is socially and genetically motivated; scholars (Vygostky, 1941; Piaget, 1954; Chomsky, 1968; 1972; May, 1988; Nuttal, 1988; Lawal, 1993a; and Olajide, 1996a) suggested that through it, intelligence can be measured. While thinking tends to be general, fluid and casual, critical thinking is sophisticated and discerning.

In spite of the importance of critical thinking to the growth of society, Onyewotu (1991) reported its neglect by all categories of teachers in Nigeria. Fear is also that not much attention is given to it in institutions of higher learning across the world. This worrisome situation may have partly accounted for the problem of non-employability of graduates in most modern economies. If critical thinking, like reading, can be taught, it has implications for curriculum planning and development in language education and national progress. Language educators need to pay greater attention to the critical thinking content of the curriculum as advocated by Lawal (1993a) and Olajide (1998). Both authors shared the view that without a strong language base, teacher preparation may be an ineffective effort. Lawal (1993b) specifically canvassed the integrative approach to language education curriculum, proposing reading as the fulcrum.

Thus, critical thinking and reading are interwoven and both should receive vigorous and steady attention in any programme of higher education, especially in any country where education is aimed at producing citizens that would think fast, relate well with others across cultures, and launch the country into the world of effective science and technology.

Reading and Critical Thinking as Nexus of Intellectual Activities

Reading has been defined differently by scholars. As such, it may be impossible to offer an absolute definition of the skill which Lawal (1993a), May (1988) and Nuttal (1988) regarded as being central to the language arts. The role reading plays in intellectual and national development has been adequately explained by Unoh (1983) who attributed very slow pace of national development to different shades of illiteracy. Most nations use formal and non-formal education programmes to promote literacy among their citizens (Unesco, 1978). For example, the Federal Republic of Nigeria (2004) is categorical that the country's education should develop the learner's linguistic potentials at every stage of learning. In order that the development of language skills may not be haphazard among the learners, the country's National Policy on Education (FRN, 2004) provides for how to use language in classroom instruction. In so doing, the multi-lingual nature of the country and her desire to access the larger world through English, especially, are reflected. The learner's mother tongue is accorded some place in the process, giving an impression that the nation's government appreciates the role of the mother tongue in the acquisition of knowledge. Indeed, one's world view is considerably influenced by the way one was opportune to acquire the language skills. Whorf (1941) found that one's pattern of thinking is concomitant with how one views the world around one with language acting as an unavoidable catalyst.

Reading and critical thinking are related, the latter accounting for the psychological realities that not only distinguish man from other animals, but induces him to behave variedly across cultures. Language experts have devoted considerable attention to examining the link between language and thought, coming up with illuminating and fascinating propositions. For example, Chomsky (1968), after investigating the role of

the human mind in meaningful syntactic analysis, suggested that language has intricate and categorical link with thinking. He agreed with Piaget (1954) that language and thought have structures that may help to explain human intelligence. Chomsky, therefore, advocated a closer and regular study of language and thinking.

If a nation desires learners that would grow to be rational thinkers and efficient nation builders (evidence from available literature tends to suggest that thinking not translated into appropriate language power is puerile (Olajide, 1996a)). She needs to ensure the classroom inculcation of the right language skills. A skill that permeates language, reading should be the focus of such inculcation. Student teachers, irrespective of their teaching subjects, would seem to need appreciable knowledge of reading to learn and learning to read through which they could derive the abilities to promote efficient critical thinking in their post-training classroom practices.

Reading is purposive, often embarked upon in order to achieve a goal. For instance, in this paper, reading for the acquisition of rational, critical thinking that can engender national development and integration is envisaged. Such reading may result from reading to pass an examination, teach well, entertain, persuade, carry out a research study, operate-complex gadget, and so on. The effective reader reads in order to meet an expectation. Reading is the same thing as comprehension, at least, theoretically. The one is mechanical while the other is mental and synthetic (Olajide, 2009). In order to appreciate the nature of comprehension, it may be imagined as a song put on tape. The tape is inside the cassette and can be accessed, but you cannot extract the song tucked in it ordinarily. The tape and cassette can be likened to the physical exercise of reading, while comprehension reflects the mental operations going on inside the head as you read. This analogy can be extended to the computer, where the hardware (equivalent to the physical exercise of reading) contains the software which, in turn, contains the programme (comprehension). However, in practice, reading and comprehension are used interchangeable to mean the same thing.

Besides, reading can be intensive or extensive. The former type of reading is slow, steady and reflective, applying in the study situation where the reader aims at, say, passing and examination based on his/her comprehension of the target text. The latter type of reading is affected when the reader desires only fair familiarity with the structure and tone of the text (Olajide, 1996a). Reading can also involve skimming and scanning which Olajide (1999) likened to intensive and extensive reading types respectively.

Like reading, critical thinking is schematic, hierarchical and fluidly bound in such a manner that its upper limit radiates some of the properties of the next higher schemata. Piaget (1954) observed that an individual may not assume the next schemata without having fully attained any one schema. Applying genetic principles in a study of thought, he found that thinking develops in three stages involving logical, concrete and formal operations. Critical thinking leads to informed interpretation and judgment based on the information processed. It is driven by theoretical basis and disciplinary and/or professional source of target communication.

In line with Piaget (1954), Guilford (1970) proposed an operation – based model of thinking. He identified five operations, (cognition, memory, divergent production, convergent production and evaluation), each involving a linguistic product. Guilford's Model is relevant to this paper because of its efforts at more rigorously relating cognition to grammar and writing, two other components of language. Piaget's (1954) genetic ideas of thinking appear to have involved language only generally, while Chomsky's (1968) proposition would seem to have been rather narrow, treating a perceived interface between syntax, semantics, and psychology (Cownie, 2006). The language arts (or holistic) approach adopted in this paper has been partly motivated by the Guilford model, even though the model has given little or no attention to reading that is a major focus of the writer.

Thus, available views on the meanings, natures and scopes of reading and thinking have presented them as intellectual activities that involve the cultivation and utilization of ideas in stages that are not only interrelated but goal – oriented. Both activities are also linguistically motivated.

Theoretical and Empirical Justification for Curricular Integration of Thinking and Reading

According to Lawal (1993b), '...integration is germane to the curricular micro process of selecting and organizing content, experiences and materials for language teaching' (p.61). He, alluding to certain philosophical and psychological postulations, believed that it is natural to integrate language curriculum and education. He posited that such integration would advance the frontiers of knowledge. By extension, integrating Critical Thinking in a Reading-related higher education programme could be of immense benefits, especially because learners, teachers, parents and governments across the world have always desired genuine reading improvement through well – directed classroom activities (Olajide, 2007). Unoh (1983) urged that, for purposeful general intellectual development, reading should be "a concern of national significance, a matter for all enlightened and progressive forces" in any society (p.6).

Spache & Spache (1973) supposed that critical thinking skills could be translated to specific behaviour, so that it could be clear that reading is a cognitive process. The translation, they argued, is possible, if readers are encouraged to detect word meaning, explore relationships of ideas, and seek an appraisal of the psychological demand of the target texts. Comprehension, the goal of reading, is a complex of activities; critical thinking is also made of no less complex structures. Both are inextricably and simultaneously involved in the process of reading. Spache & Spache (1973) reported that advanced learners, rather than think critically and creatively while reading, tend to resign themselves to retaining, recalling and inferring from the facts explicitly stated in texts. The implication is that reading instruction should be so planned as to allow learner/ readers to think along desirable lines.

It would be futile to neglect critical thinking in reading instruction because only faster thinkers can make faster and more efficient readers. By fusing critical thinking and reading, intellectual deficits may be redressed most effectively. Every level of comprehension involves a measure of reasoning, although Onyewotu (1991) suggested that the literal level does not involve much thinking. There seems to be an eternal relationship between critical thinking and reading. Critical and creative thinking abilities in particular help general reading comprehension. According to Onyewotu:

Students who are able to think critically are probably able to achieve a satisfying level of communication with the writer of a given text, and it is this perfect communication which enhances intellectual development. Students do increasingly more reading as they advance in class and therefore need this (critical thinking) skill in order to be able to cope with learning and understanding what they read (p.68).

Jegede's (1991) study of the relationship between reading and thinking in the science curriculum of Nigerian secondary schools may be of interest, here. He randomly selected nine passages from three books. All the passages contained activities which were analyzed on the basis of what thinking skills they focused. He found that the activities mostly targeted the development of logical thinking, critical analysis, critical questioning and detection of bias. He acknowledged the need to develop critical thinking which he found to have been neglected in the textbooks he investigated. One would expect the textbook for the final class of the senior secondary school to have targeted a bit of critical thinking, since the products of that class might be proceeding to the university, the highest level of learning that should most vigorously promote advanced thinking. Exposing the students to critical thinking would seem to prepare them for University learning.

Based on the assumptions that reading is integrated thinking and that advanced teacher trainees might have been deficient in thinking skills, Olajide (1996a) investigated the cognitive pattern of reading in English among students of Nigerian Colleges of Education. He randomly selected six hundred (600) students from 200 Level in ten (10) randomly selected Colleges of Education. He administered a researcher – made instrument comprising a test of comprehension passages and questionnaire to the subjects. The specific thinking skills the passages were meant to tap included recognition, deduction, analysis and synthesis which were equated with the literal, inferential, evaluative, and creative skills of comprehension respectively. Using the multiple regression analysis and chi – square as appropriate, he found that most of the learners did not reflect much of the higher order skills of thinking, which tended to confirm the finding by Spache & Spache (1973) that most advanced learners lacked advanced thinking skills. From the theoretical and empirical evidences so far adduced, it would seem that reading and critical thinking are like two

sides of the same coin, and that both can be integrated for the enhancement of learner intellect, not only in the language classroom, but across disciplines.

Spache & Spache (1973) advocated the teaching of reading and critical thinking together in the language classroom. They posited that for a reader to effectively detect the meaning implied in a target text, he or she should be able to engage in higher order skills of thinking involving insinuating, reminiscing, deposing and objecting, based on acquired experiences. A suitable curriculum of reading must thus aim at fostering the various types of thinking. Onyewotu (1991) urged that "teachers should direct their attention to critical thinking as a neglected area" (p.63). She argued that society cannot realize the ambition of producing efficient-readers if the readers can not think. In promoting thinking in higher education, teachers would need to appreciate the role that grammatical and semantic components could play. Learners that cannot process complex syntactic structures in comprehension passages are likely to have their critical thinking and understanding processes impeded (Dascal, 2003; Osisanwo, 1993).

Strategies for Teaching Reading-related Thinking

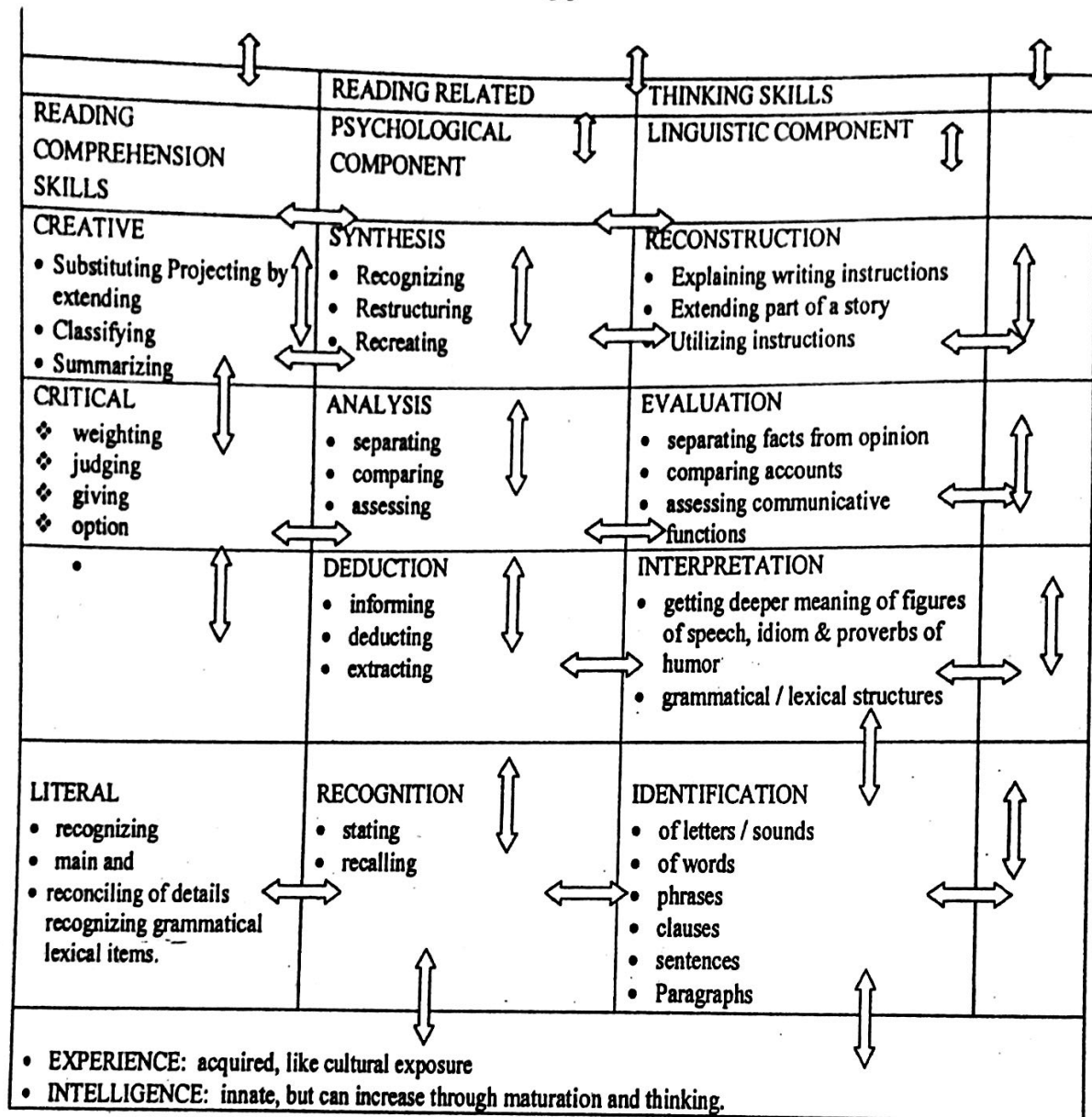
If reading and critical thinking can be integrated and taught at higher levels of learning, specific strategies should be offered as to how to go about the teaching. The teacher could first engage in theme-storming, by which s/he selects ideas that are general enough to permit the learners to create relevant sub-themes. In so doing, the teacher should consider the cultural background of the learners. The more culturally relevant the theme, the faster and more critical the learners would be about it. When a related text is eventually implemented to them, the learners would process it more efficiently, utilizing their pre-reading, brainstorming and evaluative skills. Spache & Spache (1973), Kumbin (1991), Onyewotu (1991) and Glassman (2002) emphasized the need for the teacher of critical thinking to take cognizance of the learner's culture in providing learning experiences. While brainstorming involves the teacher in requiring the learners to tell him / her what they already know about the topic of the target text, thinking storming tasks the learners to tell the teacher what they (the learners) think about the thematic topic or sub-topic.

When learners read through activities that they generate, or through those created by the teacher who has identified and assessed their (the learners') intellectual needs, they gain greater comprehension by thinking more relevantly. Only that the teacher must monitor how the learners are engaged in such activities very closely, so that learner attention does not drift. Learners should be encouraged to share the works they produce, to enrich their experience and foster the cross-fertilization of thinking. The teacher is also expected to continue to generate the opportunities that could promote the utilization of various reading-related thinking materials.

A functional language curriculum must meet the aspirations of the learners. Also, it must empower the learners for meaningful life beyond their classroom practices (Tyler,

1949; Lawal, 1993b; Olajide, 1998). In that connection, any instruction on reading that would not cause the learner-reader to think critically beyond the written text and classroom should not be given. On this, Aliyu (1997), Kumbin (1991) and Onyewotu (1991) agreed that the linguistic components of texts should impel learners to engage in higher order thinking which has been neglected but which is the crux of genuine human development and progress. In the same vein, Spache & Spache (1973) and Olajide (2009) counselled that teacher questions tap learner thinking as appropriate. The teacher should prepare the learner to anticipate ideas, and withhold judgments based on personal prejudices until they have read, comprehended and sufficiently reflected on the text. While reflecting on the ideas of the text, the learner should be encouraged to be associative because, as found by Lawal (1997), associative critical reading increases critical thinking (the teacher must not disrupt the learner's thinking patterns). Nuttal (1988) specifically cautioned the teacher against the cultivation of disruptive learner behaviour.

The following model of reading-related thinking proposed by Olajide (1996a) may be of help to the teacher in selecting, sequencing and implementing critical thinking experiences across levels of higher learning.



Adopted from Olajide (1996a)

The model presents reading-related critical thinking as a function of experience and intelligence, split among intermingling linguistic and psychological devices. The four levels of comprehension recognized by Lawal (1994), Abe (1991) and Olajide (1991) and their relevant sub-skills are shown against the corresponding cognitive and linguistic skills and sub-skills. The different arrows show that all activities interflow. A deep understanding of how the model works may also aid the teacher in evaluating critical thinking instruction.

Conclusion

Thus, critical thinking is an essential tool of intellectual development, needed for purposeful higher education. It has structure, and has striking affinity with reading comprehension. Most scholars of psychology and language agreed that language and critical thinking are intertwined, and that one could promote the latter through the former. Thinking can be taught via reading comprehension by following particular strategies. Serious efforts should be made to promote reading-related instruction in critical thinking, particularly in advanced teacher education programme. Available literature, while underscoring the relevance of critical thinking, suggests that it is a neglected aspect of higher education. A carefully evolved and implemented reading-related curriculum of critical thinking at that level should enhance creative productivity across disciplines and lead to more employable graduates who can undertake greater national development and ensure greater international understanding.

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