



Conference Paper

Promoting Hots and Better Literacy for EFL Students through the Cognitively Challenging Reading Material

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Abstract

This literature review presents evidence from the literature which suggests that learning a foreign language in a classroom situation need a major shifting in its teaching and learning process. Memorizing language grammar does not necessarily provide the tools for teaching a person to speak, read, write and think with the target language. Educators need to be aware that language description (the language structures or rules) is not the same with language function (communication and thinking process). Current literature review surveys books and scholarly articles which are relevant to literacy issue by providing description, summary, and critical evaluation of these works in relation to the research problem being investigated. Latest findings from cognitive psychology field stresses that language acquisition can be achieved through cognitively challenging reading material. The students will feel more engagement with reading material which is *not* specifically design to learn English; they will read a reading material which is relevant to their lives and also interesting from their point of view. The reading material also must be comprehensible to the students. By understanding the content, they will add more layers to their conceptual thinking, and this will hone their High Order Thinking Skill. This work is of great importance to teachers as it demonstrates that teachers would help students become more literate by investing their time in choosing interesting and relevant reading materials.

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1. Introduction

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In a global context, literacy has become one of the measurement subjects on human resources by various international surveys. A study conducted by Central Connecticut



State University (2016) found that Indonesia is the second-least literate nation in the world in a list of 61 measurable countries, besting only Botswana. A report of OECD program (2016) for the International Assessment of Adult Competencies (PIAAC) stated that less than 1% of adults in Jakarta, Indonesia attain the highest levels of proficiency (Level 4 or 5) in literacy, at this level, adults can integrate, interpret and synthesize information from complex or lengthy texts that contain conditional and/or competing information. And the latest result from PISA (Program for International Student Assessment) published at 6th December 2016, Indonesia is ranked 64th out of 72 countries surveyed (PISA, 2016). All these studies showed Indonesian poor position in literacy level and English Proficiency Index.

In 2015, World Economic Forum (WEF) released a report on the skills that must be mastered to face the 21st century. The skills are literacy, competence and character. This WEF document then encourages literacy to become a national issue in Indonesia [9]. The government of Indonesia through the education and culture ministry, started to change the literacy focus. The literacy is not about the ability to read (or spelling), write and to count anymore but it's about ability to comprehend the content of the reading materials, to write a logical argument, and ability to solve problem. This goal is in line with the definition of literacy on international surveys such as PISA and PIAAC.

On July 2015, Peraturan menteri pendidikan dan kebudayaan (permendikbud) number 23 of 2015 is published. This regulation concerns about character building. One of the mandatory activities listed on the regulation is reading for 15 minutes of non-textbooks every day in school, in other words, the government want to improve literacy with schools as the starting point. The implementation of literacy activities in school is divided into three stages, namely: habituation, development, and learning process. The principles of reading activity in the literacy movement are described as the following: The teacher sets a 15-minute reading time every day. School may put 15 minutes reading time at the beginning, middle or the end of school hour, depending on the schedule and condition of each school.

The practice of free reading is fully supported by Krashen (2004), he stated that free voluntarily reading (pleasure reading) have a great potential of providing optimal input for language acquisition, reading for pleasure is an excellent language lesson, and many people has acquired languages by using only this "method". Reading is a process by which the reader uses his/her language as a tool to understand the messages, concept or ideas on a page. High School students are expected to have the ability to comprehend the content or ideas from a written text. But to have this ability, the students should learn how to assess the underlying concept attached to



the text and they should be allowed to think and express their opinion whether they agree or disagree to the idea or concept conveyed by the writer of the text [2].

Unfortunately, so many high school students struggle with learning the concept of content; they do not understand what they read in text, so they stop read text altogether [9]. When the teacher gives them a reading comprehension assignment, they will not read the text but directly go to the questions at the end of that text, then answer the question by matching the questions with sentences within text. When the teacher asks them to write a book review assignment, they will ask for examples on the assignments so they can imitate or copy what they see. This is why plagiarism is quite widespread in education world because so many students have learned to copy what they read or to write down exactly what they hear and receive praise and rewards for imitating the pattern [2].

Motivation to read can be defined as the likelihood of engaging in reading or choosing to read [10], in other word, one read not because one has to but because he/she wants to. The big question is how to motivate these students to read? Furthermore, how to motivate them to read in English? In Indonesia, particularly in Medan, the most available reading material in English for the high school students is surely the text in the reading section of their English Course book.

This is the example of reading text taken from an English Course Book titled *Pathway* to English for Senior High School Grade IX; General Program, (2014) published by Erlangga.

Read this text carefully.

A mobile phone, known as a cell phone in North America, is a portable telephone that can make and receive calls over a radio frequency link while the user is moving within a telephone service area. The radio frequency link establishes a connection to the switching systems of a mobile phone operator, which provides access to the public switched telephone network (PSTN). Modern mobile telephone services use a cellular network architecture, and, therefore, mobile telephones are called cellular telephones or cell phones, in North America. In addition to telephony, 2000s-era mobile phones support a variety of other services, such as text messaging, MMS, email, Internet access, short-range wireless communications (infrared, Bluetooth), business applications, video games, and digital photography. Mobile phones offering only those capabilities are known as feature phones; mobile phones which offer greatly advanced computing capabilities are referred to as smartphones.

The common components found on all phones are:

1. A battery, providing the power source for the phone functions.



- 2. An input mechanism to allow the user to interact with the phone. These are a keypad for feature phones and touch screens for most smartphones.
- 3. A screen which echoes the user's typing displays text messages, contacts, and more.
- 4. Basic mobile phone services to allow users to make calls and send text messages.
- 5. All GSM phones use a SIM card to allow an account to be swapped among devices. Some CDMA devices also have a similar card called an R-UIM.
- 6. Individual GSM, WCDMA, iDEN and some satellite phone devices are uniquely identified by an International Mobile Equipment Identity (IMEI) number.

Adapted from www.wikipedia.org

Reading for getting main ideas

- 1. In what paragraph can you find the following idea?
- * The common components on all phones.
- * The definition of hand phone
- * Variety of hand phones
- * Features in mobile phones

Reading for specific information

- 2. Who provides a cellular network?
- 3. The other name for a mobile phone is _____
- 4. A wide variety of other services on all mobile phones includes
- 5. What is the function of the following components?
- A battery A keypad A screen SIM card Text message

Reading for detailed information

6. When is a hand phone called a smart phone?

(Pathway to English 2 p.168-170)

Krashen (2004) categorized above text as compulsory reading, the students do the reading and then answering questions of content, or reading as preparation of discussion or writing assignment. According to him, to make reading an English text have an optimum impact for language acquisition, the reading should be: enjoyable and voluntarily done by the students, the material is comprehensible, interesting and



relevant, it is not grammatically sequenced, the students have the time and place to read, and if the text include some dialogue, it may also provide the tools to manage their conversation in target language.

2. Reading Material

We must take care that children's early encounters with reading are painless enough so they will cheerfully return to the experience now and forever. When reading a book is equal with replicated painful experiences, we will never create a lifetime reader [17]. In the last 20 years, advances in theory and research have refined our comprehension of the complex reading process. Each reading researchers surely have their own theories about the exact nature of the processes involved in reading skill, but it is commonly agreed that the most important elements in reading skill are word recognition and comprehension (Krashen, 2011). The biggest challenge to engage adolescent readers is finding the appropriate reading material, they need to find books that is comprehensible and interesting and it's not easy to find book that are both comprehensible and interesting (Krashen, 2004).

2.1. Language learning and teaching

The starting point of all language teaching should be an understanding on how people think (Hutchinson and Waters, 1987: 39). Language is best understood as a mirror of human thinking processes. Language learning is conditioned by the way in which the mind observes, organizes and stores information. In other words, the key to successful language learning and teaching lies not in the analysis of the nature language but in the understanding the structure and processes of the mind. So, if we wish to improve the techniques, methods, and content of language teaching, we must try and base what we do in the classroom on sound principles of learning (ibid).

By using interview, Beh (1997), conducted observation and surveys to examine the English language instruction provided to 1265 third year students in four provinces by the Institute of Education, Malang, Indonesia (UPI Malang). She concluded that ELT (English Language Teaching) in Indonesia has been unsuccessful for a number of reasons despite the introduction of a new English curriculum and the provision of inservice training for the Indonesian National teachers of English. She also stated that eighty-five per cent of the students' English spoken and written proficiency is 'less than good'.



Educators should be aware the differences between language function and language description [2]. Teachers should teach students to use language functions that match the way students' learning system creates concepts, students do not necessarily learn the function (to find and learn about what others write) by doing the exercises at the end of a chapter [8].

2.2. High order thinking skill

The teaching goal behind any of the cognitive taxonomies is prepare students to be able to do transfer. Anderson and Kratwohl (2001: 63) stated that 'two of the most important educational goals are to promote retention and to promote transfer (which when it occurs, indicate meaningful learning) ... retention requires the students remember what they have learned, whereas transfer requires student not only to remember but also to make sense of and able to use what they have learned'.

Many teachers use the phrase "What are you going to do when I'm not here?" this reflects teachers' appreciation of the fact that their job is to prepare the students to go into the world ready to do their own thinking, in various context, they are on their own, no teacher will give them a homework to do. Life outside of school is better characterized as a series of transfer opportunities than as a series of recall assignments to be done [7].

Barahal (2008) define high order thinking as critical thinking, it is an ability to reason, reflect, and make sound decisions. Wisdom in judging credibility of a source is always an important skill but newly emphasized in the cyberspace era. Identifying assumptions is also a very relevant skill today. School and society become increasingly diverse, and to be able to see assumptions behind different point of view (to see where a person coming from), is a true life skill.

Arvianto and Faridi (2016) measured the compatibility of reading exercises with Bloom's Revised Taxonomy and 2013 curriculum (A Case of English Textbook Entitled Bahasa Inggris for Grade XI Published by Department of National Education 2014. The study concluded that there were only three cognitive processes found: Remember, Understand and Evaluate; two knowledge dimensions found: factual knowledge and metacognitive knowledge imply that the knowledge dimension offered is not varied; the reading materials also promoted more Lower Order Thinking Skills than Higher Order Thinking Skills. One limitation from this study is the study only focus to the reading exercises and not to the reading material itself. High Order Thinking Skills is not to be confused as a form of questions. A good story too is able to hone the students' high order thinking skill.



A study related to HOTS conducted by Yoke et al (2015) entitled: Innovating with HOTS for the ESL Reading Class. This study investigated how HOTS can be integrated in the ESL reading classroom and to what extent students perceives this idea as applicable for them to develop critical thinking skills. The study describes The Malaysian government's effort of introducing thinking skills in the Malaysian Education Blueprint (MEB) 2015-2025 is still at its initial stage and the idea of how and why thinking skills should be introduced is yet to be addressed. But the study is lack in that it was not explain clearly what reading material used in the research, and in what kind of task actually the high order thinking skills emerged.

The goal of teaching is equipping students to be able to identify and solve problem in their academic work and in life. This include solving problems that are set for them (the kind of assignment in school) and solving new problems that they need to define themselves then, creating something new as the solution.

2.3. Cognitively challenging reading material

Students are intrinsically motivated to read when the reading assignment and activities are interesting and relevant to their lives. When students are able to make connections between the material they are reading and their lives, they will be more involved and engaged in understanding the content of the text [18].

One aspect of an effective reading material is the assignments and activities that advance, but not overwhelmed the reader. If the text is too hard to comprehend, the reader is more likely to stop reading altogether. On the other hand, if the text is too easy and the students need no effort to read it, they are more likely to become bored. A moderately challenging reading material thought provoking stories or such material which require some effort from the reader, will motivate the students to read. Their accomplishment from this advance material is giving the students a good self-esteem. And the feeling of "I can do this" will result in increased feelings of competence and motivation [2].

According to Hutchinson and Waters (1987) learning of a language is an emotional experience, and the feelings that learning process evokes will have a crucial effect on the success or the failure of the learning. A good and appropriate course will produce the kind of positive learning cycle. The story above is interesting from the high-schooler perspectives, the story is not grammatically sequenced nor specifically designed to learn English. This is a good example of a cognitively challenging material.

Ionescu and Vasc (2014) study found that human cognition is fundamentally grounded in sensory-motor processes and in our body's morphology and internal



states. This paper points on the need to reconsider the way our education being conduct nowadays. Our education program is far from efficient, and to have an effective education program, it's important to base crucial decision on cognitive psychology, the science of how actually our brain do the thinking process. Only then, optimal educational settings for the development of thinking can be developed. This study was giving an important insight on how our education should be conducted based on how our brain is working.

3. Conclusions

Reading material should achieve impact. The impact will be achieved when the materials have a noticeable effect on learners. A good material should not teach [14]; an effective reading material should be perceived by learners as relevant and useful.

Nagayar et al. (2015) stated that children of middle school age are recognizing and beginning to struggle for their individuality and to be seen as persons distinct from others in their families. Bodies change rapidly and interests broaden. Most critically, peers take on new importance to these students. How they cope with these social aspects of life often influences much about the future of these students. Young adolescents' abilities to observe situations and make decisions concerning those observations become important mediators of their social and academic. One particularly available and valuable source of such situations is found in fictional and nonfictional literature written for the adolescent age group.

The reading material in English text book used by adolescent students in Medan was not designed well to make student become a skillful reader. The topic in the present material is often far from relevant from the students life, the post-reading activity is mainly recall information from the text they just read (lower order thinking). The presented material is not authentic in the sense that the text was written solely for learning English. The text also is not an excerpt from good fiction or non-fiction literature. Language teacher should see reading material as a great entry point to create a positive language learning cycle. We can't teach all complexity in language use in a constricted time in a class room, but the teacher is surely can ignite the student's intrinsic motivation to learn by themselves by reading an interesting and cognitively challenging reading material.



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