

The Influence of Teachers' Schema in Teaching Reading on Students' Understanding

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Abstract

This paper tells about teachers' schema in teaching reading. Based on some articles that the writer given, there are teachers who success in teaching reading and who are failed. The one of the cause why they are failed is because they did not apply the complete activities (pre-reading activities, while-reading and post-reading) in teaching reading. The types of reading activities are also explained to give a point of view for readers how to be a successful teacher in teaching reading.

Keywords: Teachers' schema, students' schema, teaching reading, schema theory, reading activities, reading types, students' understanding

1. Introduction

In teaching learning process, schema is very important to assist students' understanding in a lesson. Teachers have their own schema to teach the material or introduce a topic for them. Barlett (1932) stated that schema is a term to explain how the knowledge that we have about the world is organized into interrelated patterns based on our previous knowledge and experience. Rea and Mercuri (2006) state that, "A schema is the mental framework by which we organize concepts...Teachers encourage schema building...by helping students build background knowledge,...access the background knowledge,... and use it as a bridge to new learning (p. 47). Mc Carthey and Charter (1994), Cook (1997) and Nunan (1999) all provide accounts how this background knowledge can influence the comprehension process. Comprehension process means, 'we interpret what we read in terms of what we already know, and we integrate what we already know with the content what we are reading' (Nunan, 1999:256) (Mc Donough, Christopher in Material and Methods in ELT).

Schema theory itself is one of the theories that have been applied to explain the mental comprehensive process by cognitive psychologists, which was first proposed by psychologist Kant in 1781. He pointed out that meaning exists only when concept is related to personal known information (Liu Yu-hui1, Zhu Li-rong, Nian Yue, Vol. 6, No. 1, 2010, pp. 59-65, CANADIAN SOCIAL SCIENCE)

For English teachers, in teaching four skills (listening, speaking, reading, writing), generally, schema theory model that used for students is the same. Teachers at the beginning of the lesson should **activate students' existing schema** and **building their new schema** (Zeng Ya-Jun Jun 2007, Volume 4, No.6 Serial No.42 Sino-US English Teaching, USA). Activating existing schemata applied by teachers through pre-listening activity, pre-speaking activity, pre-reading activity, and through pre-writing activity. For example a topic which want to be taught is the robbery with a text entitled "What happened to the store" to describe about recount text. In teaching listening, speaking, reading and writing, activating students' existing schemata could be done by giving some questions about their unforgettable moment in their life, giving a picture about one event of the robbery. When teaching reading and writing it could be done by showing some examples of recount text and students are asked to compare in group or individual, by giving an oral story and students would be asked some questions about that story, etc. Then to build students' new schema could be done by teachers while they are doing the process when a topic taught. For example still in the same topic, recount text. When it is taught, teachers stimulate students schema about the meaning of recount text. Teachers ask questions, give pictures and some texts about it, so students a little bit understand about recount text. Up to this stage, teachers have been success to activate students' existing schema, and the next step, teacher start building students' new schema. Teachers in this activity give new knowledge to the students about the details of recount text, the sequences of it, and grammar focus used in recount text which is simple past tense.

According to the writer, good teachers must apply **activate existing schema** and **building new schema** to reach the goal of a syllabus, because with combination of both, students could have perfect knowledge about the topic. Before topic is taught, students have their own schema, and when it is discussing, students could add schema they have. With that new schema also assist students in giving confirmation whether their previous schema they have is correct or wrong.

In some schools in Indonesia, teachers' schema in teaching English is not appropriate with the syllabus. They do not apply the complete stages (pre, while, post) because he/she is lazy.

In this paper, the writer tells about teachers' schema in teaching reading and whether it influences students' understanding or no. The writer chooses the reading skill because in English lesson, reading has the first priority to be taught. It could be seen in most textbooks that reading activities are more than any other skills. For example in English Unlimited Intermediate Coursebook published by Cambridge. In teaching reading, that textbook offers some activities, pre-reading activity (giving questions before discussing the topic), while-reading (the key vocabularies, tenses, etc) and post-reading (teachers ask question to review what is taught today), but when discussing activities in listening, speaking and writing is just limited activities.

2. Discussion

Schema theory as stated before is one of the theories that have been applied to explain the mental comprehensive process by cognitive psychologists, which was first proposed by psychologist Kant in 1781. He pointed out that meaning exists only when concept is related to personal known information (Liu Yu-hui, Zhu Li-rong, Nian Yue, Vol. 6, No. 1, 2010, pp. 59-65, CANADIAN SOCIAL SCIENCE). According to schema theory, text in teaching reading does not carry meaning itself but rather provides hints to allow readers and listeners to create meaning from prior knowledge; the text triggers and builds on existing schemata (Perason-Casanave, 1984). Carrell (1984) explains that schema theory is an interactive process between text and background knowledge. Anderson's (1994) research stresses that more than one interpretation of text is possible; the schema that is activated is based on the culture of the reader.

When teachers give pre reading activities before discussing a text, it is very good point to activate students schema, all students have different schema. Sometimes, the schema is not developed well because students' culture is different with the text makers' culture. So in this case, that is the reason why teachers needed. They play an important role to guide students into the right schema and help to give schema that students do not have. The difference between writer intention and reader comprehension is most obvious where readers have had different life experiences to the writer's 'model reader'. Readers sometimes also feel that they comprehend a text, but have a different interpretation to the author (see Hudson 1982:187). As Carrell and Eisterhold (1983:80) point out, "one of the most obvious reasons why a particular content schema may fail to exist for a reader is that the schema is culturally specific and is not part of a particular reader's cultural background. For example there is a difference schema between students and text makers because of the different culture is described in Nigel Scott's article "Helping ESL Students Become Better Readers: Schema Theory Applications and Limitations". When students in Japan finding key word 'full moon' in a text, it activates schema for beauty and moon-viewing parties (for ordinary people not werewolves!). Whereas in Europe 'fool moon' includes horror stories and madness. So when students in Japan discussing the text entitled "full moon" their schema before reading is surely about the prettiness. To avoid and to make students have a right schema, teachers at the beginning could give questions like "What do you know about horror legend stories from Europe?" or "Have you ever heard about the (mention one horror story title from Europe)?" With doing that, students in Japan who have schema about prettiness before, they automatically change their schema to catch the real meaning of full moon and it means teachers are success to build students' new schema. In this case, teachers should start pre-reading activity first, in order to students do not get confused in the middle of discussion. If they get confused, it will influence their understanding.

Two modes of processing information in teaching reading called the bottom-up and top-down mode of processing. The bottom-up processing also known as data-driven or **activate students' existing schema** (Carrell & Eisterhold, 1983), and the top-down mode known as called conceptually-driven or **building students' new schema** (Ann M, 2008, Navuro Building Schema for English Language Learners). When teachers give new topic which is little bit difficult to students and they do not have schema, it is called the top-down process. Students' schema is sharpened in learning processes because they will have new information. They form the concept about the thing they got, so why the top-down mode is called conceptually-driven. In the other hand, if the topic which is taught by teachers have been known by students because they have a schema about the topic, the process called bottom-up. With giving that topic, students could add the information and increase their previous knowledge which is called data-driven, and the last discussion is about three types of teaching reading (Liu Yu-hui, Zhu Li-rong, Nian Yue, 2010, Application of Schema Theory in Teaching College English Reading). They are:

2.1 Language Schema

Language schema refers to readers' mastery of a reading material, identifying the letters, words and sentences. Without language schema, a reader can not utilize content schema and form schema in brain by information and clue provided, not to mention comprehension of the reading material. The language schema is a prerequisite for reading comprehension and basis for content schema and form schema.

2.2 Content Schema

Content schema consists of two aspects: one is situation schema connected with reading material; the other is background knowledge schema previously possessed by readers. Situation schema refers to a schema formed by readers through combining letters and words in the same semantic field by language

schema during reading process; background knowledge schema refers to knowledge and experience stored in a reader's brain, which can affect directly the degree of reading comprehension. With good background knowledge schema, readers would also have very good prediction to the matter illustrated in reading, which can greatly raise their reading speed.

2.3 Form Schema

Form schema refers to the extent that readers master the logic structure and rhetoric knowledge in reading. Different text styles have different form schemas. Readers can make a prediction to later development according to form schema in mind.

In some articles that the writer found about teachers' schema, first come from Helen S Timperley and Viviane M.J. Robinson (2001) "Achieving School Improvement through Challenging and Changing Teachers' Schema". It was a research in 1996 to 35 schools in two suburban low-income district in New Zealand. Students' achievement in that school were low and weakness, and that situation were identified that one of the cause is teaching quality. In response to this report, the New Zealand Ministry of Education undertook a major initiative to strengthen the education offered in the schools in the two districts. The researchers cooperated with the New Zealand Ministry of Education to undertake this research for about a two and a half year period. The data from all school were gathered by observation and interview with school management and staff which aims at determining levels of reported students' achievement, explanations for poor performance and links between those explanations and the proposed project. After the research was done, the result showed that the students not as bad as like the teachers taught. When entering school, the teachers have considered that students come with no skills, so that when they are teaching, they do not teach their students well. In teaching reading, they never use pre-reading activities. They underestimate the capability of the students. Whereas when the students given a test by surveyor, they are not bad.

That situation happened in some schools in Indonesia. Sometimes the teachers do not want to give students opportunities to improve their knowledge. They never do powerful activities when teaching reading. Without trying to activate students' building schema first, the teachers jump into second step which is building students new schemata. If the teachers do that, the writer states that the process of learning is not successful. It is because comprehension process is not happened. As Mc Carthey and Charter (1994), Cook (1997) and Nunan (1999) said that comprehension process means, 'we interpret what we read in terms of what we already know, and we integrate what we already know with the content what we are reading' (Nunan, 1999:256) (in Material and Methods in ELT by Mc Donough, Christopher Shaw).

The second article is from NCSS (National Council for the Social Studies) "Using Schema Theory To teach American History. Different with the first article, in this article the writer could say that teachers' schema gives good impact to the students because a teacher gives a powerful activities to the students. When a teacher introduced new text, she activated students' existing schema first with challenging them by giving historical questions. The teacher said that kind of pre-reading help students in developing their schema which were crucial for their retention and understanding of history. It also made clear connections that exist in life between events, past and present, and for avoiding students' boredom. At the end of the lesson the teacher conducted a discussion to review the material. The activities that a teacher did in the article is appropriate with Mc Carthey and Charter (1994), Cook (1997) and Nunan (1999) said in pre-reading activities must attend the comprehension process means, 'we interpret what we read in terms of what we already know, and we integrate what we already know with the content what we are reading' (Nunan, 1999:256) (in Material and Methods in ELT by Mc Donough, Christopher Shaw).

After seeing two articles about teachers' failure and teachers' success in the way of stimulating and adding schema to the students, the writer hopes the readers could obtain the point of view especially the readers who are teachers. Below, the writer will give an example of what activities should teachers do in teaching reading (it was the research who was conducted by Liu Yu-hui, Zhu Li-rong, Nian Yue, 2010, Application of Schema Theory in Teaching College English Reading):

3. Application of Schema Theory in Teaching

College English Reading

The writer chooses giving an example from the article, not based on the writers' ideas because the persons who conducted the research did the activities by their selves so the experience of teaching reading and its problem is happened in real situation, so that we could learn from that.

In this part, application of language schema, content schema and form schema in teaching of college English reading will be explored with examples from book II, *New Horizon College English* published by Foreign Language Teaching and Research Press.

3.1 Application of Language Schema in Teaching College English Reading

Language schema is a basis for reading comprehension, content schema and form schema. Therefore, it is necessary to explore students' vocabulary, and to teach basic words, sentences and grammar. In teaching college English reading, the researchers find out that one main problem for poor learners is their lack of language knowledge, with a certain number of students not mastering some basic words. Some students have difficulty in understanding one sentence, because there is a word "result in". They got confused between 'result in' and 'result from', without knowing which one refers to cause and which one to effect; the other is the unfamiliarity with '(be) committed to', which affects the comprehension of the following text. Small vocabulary forms could be an obstacle to understanding whole of the text. To help that problem, the researcher said that teachers could help students to enlarge vocabulary by specific context and give some learning strategy to make them be focus, so that if they found difficult words they could guess the meaning of them from context and their language level will improve by applying language schema.

3.2 Application of Content Schema in Teaching College English Reading

Content schema functions in the following three phases in a reading class: pre-reading, while-reading and post-reading.

3.2.1 Pre-reading

In pre-reading, teachers could help doing some reading-related preparation which was connected to the material, such as listing and explaining words, questions about the topic, pair grouping to activate students' existing schema about the topic. As mentioned above, language schema is a basis for reading comprehension, but students may not understand what they are reading only with certain language schema. The researchers said that students always complain that they can not figure out what the author is narrating even though they know each word in the reading material. From this, the teachers could help students to establish specific content schema through providing background knowledge for students to predict correctly. Prediction ability is an important skill for reading. No matter right or wrong the prediction is, it could help students get closer to the article which is good for their understanding. The researchers told there was an interesting activity for predicting text by mention only the title of the text, and let the students in pair grouping guess the content. It could improve students' enthusiasm and interest while learning. But the researcher said when pair of students were discussing, they met some difficulties, but through the title that researchers have said at the beginning, students are guided to predict the possible, and then check their prediction at while-reading phase. When students find it difficult to do so, teachers also could provide some words and ask them to choose the possible ones to activate students' content schema and language schema.

3.2.2 While-reading

The while-reading phase, or the reading comprehension phase, is a phase for schema embodiment. After students know about the general meaning of an article or text, teachers are suggested not only to give language knowledge, but also explain detailed content, especially the different culture related to the article.

3.2.3 After-reading

In this phase, students would do some exercises such as multiple choice or clozein after-reading, or some translation and story retelling. That is the way to measure whether students understand the lesson or no. In order to stimulate their interest and consolidate schema, teachers could use their imagination and creativity by providing colorful classroom activities to improve students' reading ability.

(1) Discussion

In this activity, students are divided into double, four or five-person groups. Pair groups are good to form a mutual reliable and mutual helpful relationship. Students could share their experience, knowledge, interest and opinions related to learning material, or consolidate content schema by question and response form. The researcher said that students in such groups would like to express themselves in class to relax.

(2) Role playing

Role playing can improve students' learning enthusiasm. Students were enthusiastic, active and creative in such activity. This way could be used in learning reading material reflecting foreign culture.

(3) Writing

After reading, teachers could have students rewrite, comment on or summarize the reading material, which could not only consolidate language schema, but also turn new knowledge into content schema.

3.3 Application of Form Schema in Teaching College English Reading

Different styles have different form structures. Therefore, understanding of style forms is usually good for students to understand an article. English text form has not yet been established in most students' mind due to the adoption of traditional teaching method which emphasizes word-by-word reading, sentence-to-sentence translating to know about the article thesis. Teachers are advised to guide students to read by applying text form in teaching reading and introduce several English text forms, explaining text form tendencies of different styles. In teaching, teachers could help students establish various style form schemas by consciously analyzing a text structure, instructing some continuous knowledge and skills of the article. When students see relative reading materials, certain form schema would be activated, which is good to improve their reading ability.

4. Conclusion and Suggestions

Based on the discussion above, could be concluded that teachers' schema in teaching reading is different from one to another. Their schema depends on their teaching experience. In teaching reading, there are teachers who apply all the activities, pre-reading activities, while-reading and post-reading activities. Activities in pre-reading like asking questions, giving pictures, or group discussion about the topic. Those activities aims at activating students' existing schema or the bottom-up processing, and in while-listening activities teachers explain the content of the text and describe the culture knowledge of the text or called the top-down processing. The last is post-reading activities which make sure that students have understood what the material taught, like role-playing, group discussion and writing. Not only those activities above, but teachers should apply three types in reading text. First is language schema including vocabularies and grammar point, second is content schema which consists of two aspects: one is situation schema connected with reading material; the other is background knowledge schema previously possessed by readers, and the third is form schema including how readers could master any different of text.

The suggestions from writer to the teachers in teaching reading is they should apply the complete strategies, begin from pre-reading strategies to activate students' existing schema until post-reading strategies. Because the evidence in the article shows if teachers do that, it will bring good impact to students' understanding. When teachers do complete strategies, it will be happened what called comprehension process which make students' cognitive increased. One thing that have to be

remembered by teachers is do not underestimate students' schema. Teachers must give opportunities to all students to express their opinion about one topic, do not pay attention just to active students but they should give opportunity to all students in the class. Teachers have to create a comfortable atmosphere in the classroom in order to students could accept the lesson well. Teachers' schema is not only about teaching the strategy but also how teachers' way to deliver message well in order to students understand the lesson.

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