

Contribution of Concept Mapping on the Improvement of Students' Reading Comprehension of Open University of Bengkulu

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Abstract

In a distance learning program, UT is not only required to provide assistances in formulating independent learning materials, examination material, tutorials, practice classes, and examinations with the distance characters, but also to build students' awareness to learn independently. Almost all learning resources at UT are in printed materials-books. Students must be prepared to learn independently to succeed in a distance learning program, supported by having a suitable strategy on reading of givens learning sources. The reading activities for students to exercise are very important in their independent learning. Therefore, comprehending texts is crucial for academic success. The strategy is needed efficiently to increase students reading activity and practically enable students to understand a text comprehensively.

Concept mapping is considered as one of strategies which hopefully used to improve student's reading comprehension, especially for Open University student, whose a particular long distance characters of academic study. This strategy is provided since they can use their time effectively so that they can study regularly according to their own schedule. From the study of improving students' reading comprehension by using concept mapping at sixth semester of PGSD program of Open University of Bengkulu, it was found that Concept Mapping can improve students' reading comprehension. This can be evidenced from the students' means which gradually improved in cycle one, two and three. In particular, the study provided the discussion of 7 indicators of reading comprehension that were improved by using concept maps during the research, as the result of Concept Mapping contribution.

Keywords: Reading Comprehension, Concept Mapping, Open and Distance learning.

Introduction

Open University that in Indonesia is well known as Universitas Terbuka (UT) has been founded to apply a distance and open education system. UT is not only required to provide assistance in formulating independent learning materials, examination material, tutorials, practice classes, and examinations with the distance characters, but also to build students' awareness to learn independently. Independent learning, as one of the learning strategies, however, is determined by the ability to learn efficiently which depends on reading comprehension and the capacity to absorb the materials. Students who want to learn efficiently need to have self-discipline, initiative, and a strong motivation to learn, deliberately required to use their time effectively so that they can study regularly according to their own schedule.

Since UT students are expected to learn independently, It is urgently required that UT should provide teaching materials that are made specifically to be studied independently. Students can also take the initiative to use the library, follow the tutorial either face to face or via the internet, radio, and television, as well as using other learning resources such as computer-assisted instructional materials and program audio/ video. However, some students cannot have the same access to the internet links. Therefore, UT still provides classroom academic services in face-to-face activities.

In Bengkulu, face-to-face tutorial academic service is also held for UT's students. During researcher experiences as a tutor, averagely students' age is mostly over 30 years old and certainly committed serious problems on their reading strategy. In learning module of English

MKU for Students of PGSD Program for example, there are several texts taken from internet and other open sources. The difficulty level of text is not adjusted yet. In fact, students obviously used to struggling through short, boring, and extremely difficult texts, which, for many learners, entails painfully careful reading and constant of using dictionary. In short, students may not understand the language learning value of easy reading or interesting material. However, their college-level reading is much more sophisticated than that of high school, and in doing their academic assignments for any course, students may encounter a lot of literary genres that should be read, understood, and applied in a meaningful way.

Comprehending texts is crucial for academic success. However, almost all learning resources at UT are in books. Modules or books are major sources for students' learning. While, the reading activities for students to exercise are very important in their independent learning. Mcnamara (2007:3) states "reading is an extraordinary achievement when one considers the number of levels and components that must be mastered". Harrison (2004:3) also argues that "in the process of reading, the psychological of process related by thinking, imagination, emotional and moral development and intelligence". In other words, he tries to emphasize why reading is important, much more than considering for information in relation to the question of what we gain from reading as the general purpose of reading, that is always used for human brain activities and attitude.

In addition, Snow (2002:11-12) states "that comprehension entails three elements: (1) The *reader* who is doing the comprehending, (2) The *text* that is to be comprehended and (3) The *activity* in which comprehension is a part". The three elements dimension above usually occurs in the large socio-event such as school, course and learning community. Also, Zainil (2008:10) supports that "reading is written communication when people read, as a reader they are communicating with the writer of reading materials".

Ideally, tutorial face-to-face is aimed to strengthen students' reading in order to mastery learning material substance and reduce silent in learning, that it may increase student motivation in learning as well as encouraging student self confident. Then it is also expected to help student to overcome problems by additional information, discussion, practice and other activities. Specifically, tutorial is conducted to give an opportunity to students to directly interact with tutor in study a subject. In tutorial, tutor is represented teacher in ordinary class activity. Since the presence of the tutorial depends on the number of students who enroll or proposed tutorial classes and some students live relatively far from the tutorial area, students' attendance in class is still less than optimal. There is no requirement for students to follow the tutorial to make the student has not deemed it necessary to be consistently attending in learning activities.

Consequently, from the problems of their reading activities, it effects to their tutorial task score in tutorial activity of English MKU, where the researcher experienced as a tutor, it was found that most students obtain lower score of test result. From 22 students of MKU English Class, 5 students (22.73%) got below scores 60.14 students (63.64%) got 60-70 scores, 3 students (13.64%) got above 70, that is far from minimum standard score.

By looking at all the problems of students above, it seems very important to get a suitable strategy in tutorial activity of English MKU. The strategy is needed efficiently to increase students reading activity and practically enable students to understand a text shortly. It is also conducted to establish students' awareness learning. Furthermore, it is expected that students' reading comprehension can also be improved.

One way of solving the problem is that the teacher can use concept mapping to help students getting the right meaning. Since by using concept mapping, it may enable students to actively construct a conceptual framework to which new concepts are added, related, and refined meaning comprehensively. Teresa and Jorge (2006:13) see that "concept mapping is a graphic organizer which uses schematic representation to hierarchically organize a set of concepts connected by words in order to build meaningful statements".

In addition Novak and Gowin (1984:15) describe "a map can also provide a kind of visual road map showing some of the pathways we may take to connect meanings of concepts in propositions. Birbili (2006:2) also states that this kind of graphic organizers help students not

only to read or comprehend more easily or complex relationships but also to generate ideas, structure their thoughts, and inferring how to make visible, in a n easy-to-read way, what they know. Using concept maps is an alternative ways to develop students reading comprehension since there is conceptual hierarchy of precedence or cause and effect in the concept maps (Novak, 2008). This graphical organizers help students to connect new content and ideas to their prior knowledge by encouraging them to think about what they already know about the topic or the type of text (Monet, 2003:86). The students become familiar with facts and concepts (Pelley, 2005:2), as concept map enabled students to gain enhanced knowledge of any topic and evaluate the information whether it is a fact or an opinion. According to Adler (2004:1-3) mentions one of comprehension strategies, which is expected to encourage students improving their awareness of their reading and become a good active reader, is by using Graphic and semantic organizers, which are aimed to illustrate concepts and relationships between concepts in a text or using diagrams.

Related to the explanation above, the purpose of this study is to find out “What are the contributions of concept mapping on the improvement of students’ reading comprehension?”

Discussion

From the study of improving students’ reading comprehension by using concept mapping at sixth semester of PGSD program of Open University of Bengkulu, it was found that Concept Mapping can improve students’ reading comprehension. The indicators of reading comprehension were selected in accordance with the contribution of concept mapping on students’ reading comprehension improvement. In other words, the study provides the discussion of 7 indicators of reading comprehension that were improved by using concept maps during the research as the result of Concept Mapping contribution.

a. Identifying Information Detail

Generally, teacher needs to provide a reason for reading. Sometimes in reading, readers are looking for very specific information. It may have certain beliefs, which they want to confirm or perhaps to reconsider. Teacher should try to put students in the same situation when they approach a reading by identifying important details that may not be clearly stated. Teacher also can use the reading material to figure out the meaning of words that are not defined. As it is stated by Harris and Graham (2007:17) “The specific information needed about the student’s reading comprehension (types of questions missed, level)”. Also Brown adds that to see whether students comprehend or not can be seen whether the students are able to identify the correct information that stated in the text or not (2004:188). By using concept maps in reading, they can help students to identify the key concepts and principles that they must focus on for any specific information on learning task (Novak & Gowin, 1984:15).

b. Main Idea

Grasping the main idea is a foundational skill in reading. In this research, the main idea is what all the other sentences are about. The main idea is more specific than the topic. Whereas the topic is the subject, the main idea is the general idea that is expressed about the topic. Unless students grasp the main idea, they have no basis for organizing information and run the risk of getting lost in details. Grasping the main idea is also a prerequisite for summarizing, outlining, and taking notes. Grasping the main ideas requires the ability to see similarities among details, note differences, and classify or categorize details. Without the pre-requisite skills of noting likenesses and differences and being able to classify details, students will have difficulty deriving or recognizing main ideas. The major problem that students have with selecting or constructing main ideas is not including all the details. Students tend to select or construct a main idea that is too narrow. After using concept maps, it was proved that once students learn how to externalize their understanding and create concept maps, their maps can be used as a way to monitor their

conceptual development and assess their understanding and knowledge (Novak, 1998). Pannen (2001) also adds that organizing idea or concept flow of a lecturing and books become a concept map inventing the ideas connected in task analysis, therefore students could construct their main ideas of the text.

c. Summarizing

In addition to enabling students to organize and recite information, summarizing is also a check on their understanding. An inability to summarize is a sign that comprehension is lacking and calls for a rereading. Building on the previous unit, summarizing requires the ability to identify the main idea and supporting details. It also requires the abilities to select the most important information, combine details, and condense and paraphrase. Students might also have difficulty organizing information so that their summary is just a random listing of whatever they can remember. After introducing concept maps to students, they were gradually able to summarize a report or a text well, as concept maps can provide graphical summary of students have read or learn (Novak, 1985).

d. Inference

One effective technique for having students develop a sense of making inferences is with visual aid. By using visual aid, students are not obstructed by a lack of adequate decoding skills or unknown vocabulary. The maps might be drawn from a text that students are about to read. By inviting students to read the maps and, for each sentence, ask the students to make as many inferences as they can. This could be happened that concept maps provided a kind of visual road map showing some of the pathways we may take to connect meanings of concepts in propositions (Novak, 1985). Furthermore, Birbili (2006:2) also states that this kind of graphic organizers help students not only to read or comprehend more easily or complex relationships but also to generate ideas, structure their thoughts, and inferring how to make visible, in a n easy-to-read way, what they know.

e. Cause-Effect

Often when people read, they recognize a cause-and-effect relationship because the writer directly states that relationship. At other times, the relationships are less obvious, and reader has to make an inference about the causes or the effects. The writer directly states some; others are not as obvious. Gunning (2010: 194) states, “writers organize their explanations of cause-and-effect relationships by focusing on causes, on effects, or on causal chains. Since concept maps can "help students to create a way to show networking (Pannen 2001), Using concept maps is an alternative ways to develop students reading comprehension since there is conceptual hierarchy of precedence or cause and effect in the concept maps (Novak, 2008).

It was also proved that concept maps can be used to develop students to focus on cause-effect relationship in reading comprehension, since this visual learning tool of graphic organizers, included diagrams depicting hierarchical information, time-sequence patterns, or cause-effect relationships (Birbili, 2006:3).

f. Predicting

Predicting is a highly effective strategy that combines the activation and application of prior knowledge, reasoning skills, and text knowledge. Predicting is not just guesses, students should base their predictions on clues provided by titles, headings, illustrations, and whatever text they have read. Students should also use their background knowledge to make predictions. They can use their background knowledge to hypothesize what is likely to happen, especially if the situation in the text is one with which they are familiar. Predicting is an ongoing strategy. Students continue to predict as they read a selection (Gunning, 2010:194). When discussing students’ predictions, teacher may ask them to tell

what led them to make their predictions. This graphical organizers help students to connect new content and ideas to their prior knowledge by encouraging them to think about what they already know about the topic or the type of text (Monet, 2003:86).

g. Excluding Facts

Excluding Facts develop the ability to discriminate between facts and opinions and reviews previously taught skills and strategies. It also explores the theme of inventions. The ability to identify statements as fact or opinion is a simplification of the sophisticated skill of classifying statements as being empirical, analytical, attitudinal, or value. Facts can be verified by empirical or analytical means as accurate or inaccurate by counting, measuring, weighing, touching, hearing, observing, or analyzing. An analytical statement is one that can be verified by analyzing the statement and, if necessary, checking with some sort of reference.

Opinions are statements that express an attitude or a value and cannot be proved. The terms *facts* are imperfect descriptions. The word *fact* suggests something that can be proved with objective evidence and suggests something that is true. It is related to previous discussion on review related theories that the students also can distinguish facts from opinion and recognize attitude to reader and topic (Weir, 1993:77). Brown (2004:188) also argued that to know students are comprehend or not, can be seen from their ability to identify correct opinion about the text. After using concept maps, the student becomes familiar with facts and concepts (Pelley, 2005:2), as concept map enabled students to gain enhanced knowledge of any topic and evaluate the information whether it is a fact or an opinion.

Conclusion

Related to the discussion above about the contribution of concept mapping on the improvement of students' reading comprehension at sixth semester of PGSD Program of Open University of Bengkulu, it can be concluded that this strategy contributes efficiently to increase students reading activity and practically enable students to understand a text comprehensively. It also establishes students' awareness of learning. In short, as the result of concept mapping contribution, from 7 indicators of reading comprehension it gives the benefit so that students' reading comprehension is gradually improved during the study.

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