Reading Assistance for EFL Readers with Kit-build Concept Map with Source-connection

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Abstract: Recently, access to information is easier than before, but most of them are written in English. It leads to another new problem for a non-English speaking country. This research proposes an approach to improve English reading comprehension with the help of Kit-build concept map (KB-map) with an additional function named source connection. A university teacher in Indonesia practically used this approach and the other two approaches in several English classes of the second year of undergraduate student to compare the effectiveness of those approaches. The result shows that KB-map with the source-connection function was more effective in English reading comprehension compare to the traditional summarization and the normal Kit-build method.

Keywords: Concept map; Reading assistance; EFL; Kit-build concept map

1. Introduction

Concept mapping is one of the popular strategies used to improve Reading comprehension for English as a Foreign Language (Chang, Sung, & Chen, 2002). As a kind of concept map method, Kit-build concept map (KB-map) proven to have the same efficiency as the original concept map but unlike the original concept map (Funaoi, Ishida, & Hirashima, 2011, Alkhateeb, Hayashi, & Hirashima, 2013) even though KB-map is a kind of "closed-end" approach because it delivering the component of the teacher or expert concept map and student can only reconstruct the provided components without the ability to create or delete the component. This paper proposes an approach to improve English reading comprehension with the help of Kit-build concept map (KB-map) with an additional function named source connection. This approach helps the student to externalize their understanding in the form of the concept map and to confirm the relation between the concept map and the reading material. This study evaluates the effectiveness of the approach with the practical use of this by a university teacher in Indonesia, compared with the traditional summarization and the normal Kit-build concept map.

2. Kit-build Concept map and the additional function called source connection

Kit-build concept map (KB-map) has several phases (See Figures 1), the first phase called goal map building; this phase required a teacher/ expert to create an initial map from the reading material. The initial map will be called a goal map. After the teacher/ expert finished creating the goal map, the system will automatically disassemble it into components called kits consisting of nodes and links. The second phase, called learner's map building. This phase required students/ learners to reconstruct the kits into a map. They cannot create or modify a component. The third phase is the KB Analyzer. This is the last step where the teacher/ expert can check the comparison result between their map and the students or learners. Since between the teacher or expert and the students using the same component, it will be easier to make the comparison by conducting an exact match comparison method.
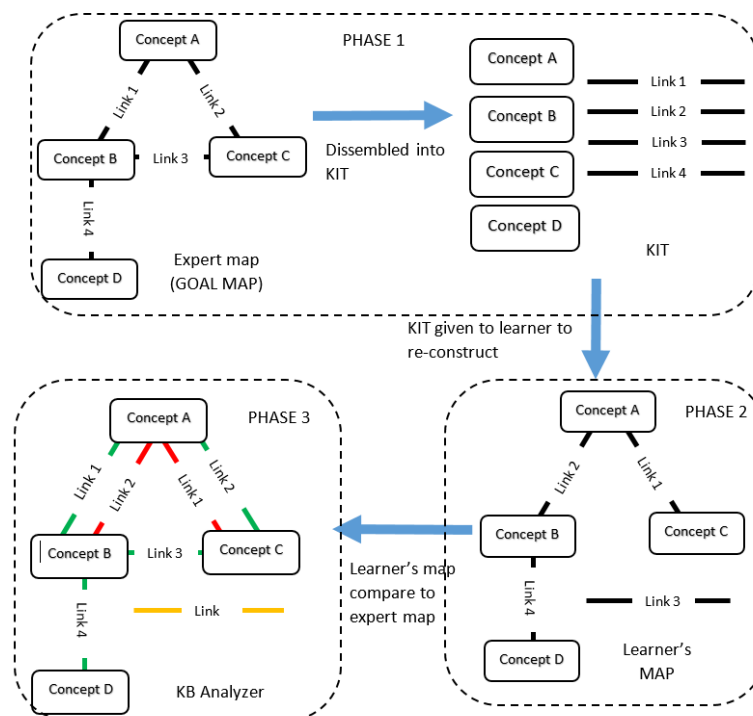
Figure 1. KB Map Phases

Source connection function aims to improve the use of KB map. This function facilitates learners to make confirmation between their reconstructed map to the reading material directly. By making a confirmation, hopefully, will decrease the number of misunderstanding. Source connection function facilitates students/ learners to confirm each proposition (consist of two nodes and one link) of the map to the reading material (see Figure 2) and then modify the proposition if necessary.
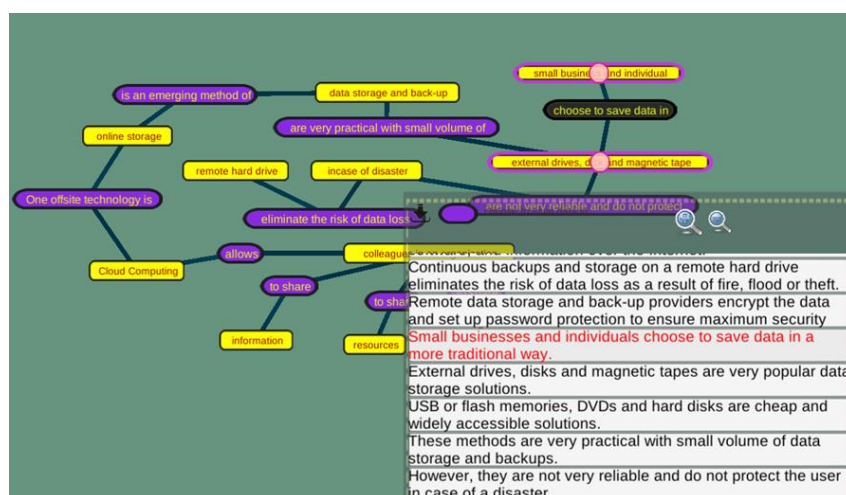

Figure 2. KB map with source connection function

3. Experimental setting and result

We experimented Indonesia. The experiment was involving two hundred and thirty-two undergraduate students. They are all learning English as a Foreign Language as a mandatory subject in the university. We are dividing the students into three groups. We divided them equally by using the English comprehension test result conducted before the experiment. The experiment was conducted for three times by using three different material for almost four weeks. Each experiment has the same activity as described in Figures 3.
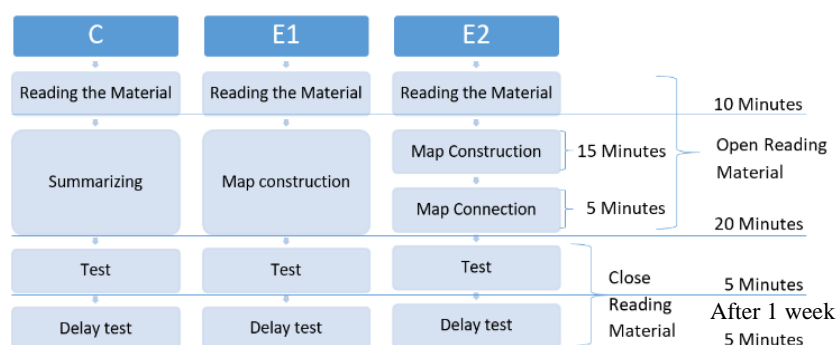
Figure 3. Experimental setting activity

The test result for each material is shown in Figure 4; we also conduct the Holm's Sequentially Rejective Bonferroni Procedure to rank up the groups to see the differentiation among the groups. The result shows the significant difference between the KB-map with source connection group and the control group in all material. While the KB map group only superior in two material to the control groups.
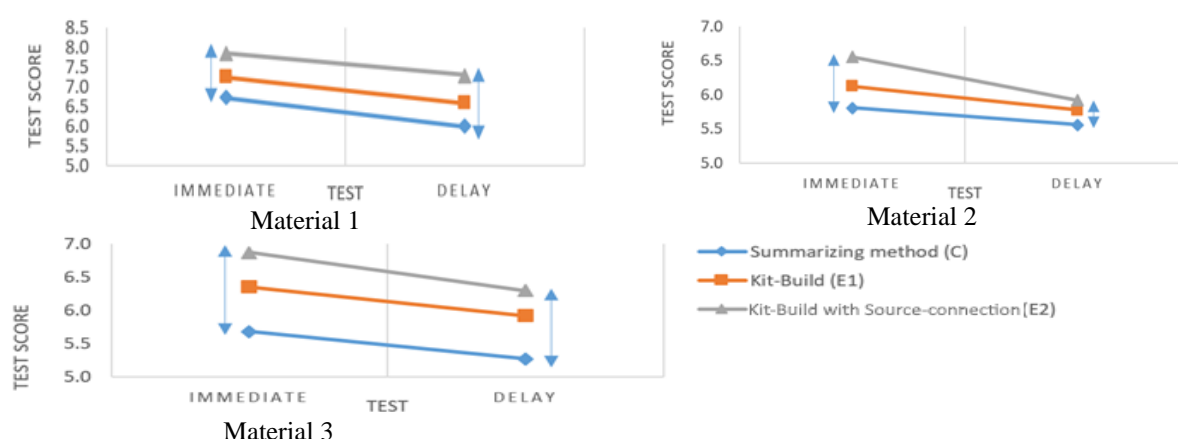

Figure 4. Test result for all material

4. Conclusion

In this paper, we propose the new function of KB map, source connection. The source connection function in KB-map helps students to confirm the relation between the concept map they have made and the reading material as the source. From the result of the practical use of it in Indonesian university, the effectiveness of this function is better than the reading comprehension with the traditional summarization and the normal Kit-build concept map. The future work is the analysis of the reading process with KB-map and source connection to confirm whether the function provides learners with the opportunity for self-reflection.

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