

**IMPROVING STUDENTS' READING COMPREHENSION  
BY USING CONCEPT MAPPING AT SIXTH SEMESTER OF PGSD  
PROGRAM OF OPEN UNIVERSITY OF BENGKULU**

*SYAMSUL RIZAL  
YUSRIZAL*

**Abstract:** Tujuan utama dari penelitian ini adalah untuk mengetahui peningkatan pemahaman bacaan siswa dengan menggunakan pemetaan konsep pada semester keenam PGSD FKIP of UPBJJ-UT Bengkulu. Metode penelitian ini adalah Penelitian Tindakan Kelas (PTK). Peserta dalam penelitian tindakan kelas ini adalah 28 mahasiswa semester keenam PGSD FKIP of UPBJJ-UT Bengkulu Pokjar Kota Bengkulu pada Tahun Akademik 2.013,1. Instrumen yang terdiri dari rubrik pemetaan konsep, membaca hasil pemahaman tes, lembar observasi, dan wawancara. Data penelitian ini dianalisis dengan menggunakan dua metode analisis data yaitu; metode kuantitatif dan kualitatif. Metode pertama digunakan untuk memeriksa dan menafsirkan data dari praktek pemetaan konsep dan membaca tes pemahaman dan yang kedua digunakan untuk menganalisis semua data yang diambil dari observasi dan. Hasil penelitian menunjukkan bahwa (1) Konsep Pemetaan meningkatkan 'membaca pemahaman, dan (2) perubahan pemahaman baca siswa disekolah dipengaruhi oleh dua faktor, yaitu, (a) internal yang perubahan pemahaman bacaan siswa disekolah karena siswa siswa motivasi, minat dan pengetahuan umum, dan (b) faktor eksternal yang terdiri dari bahan bacaan dan guru membaca.

**Key words:** *reading comprehension, concept mapping*

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's 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.

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.

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".

Most of UT students have serious problem in comrehending English texts. Based on the researcher experience 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 improve students' reading comprehension. 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". Anderson (1999:1) defines the concept of reading is as follow::

Reading is an active, fluent process which involves the reader and the reading material in building meaning. Meaning does not reside on the printed page ... (a) synergy occurs in reading, which combines the words on the printed page with the reader's background knowledge and experiences.

From Anderson's statement above, it can be seen that there is an important thing in a reading process, that there is a complex interaction between readers and the text they read. Since reading is a unique accomplishment.

Elizabeth (2003:14) states "comprehension is the process of deriving meaning from connected text. It involves word knowledge (vocabulary) as well as thinking and reasoning". *To sum up from the prior expert explanations on what the comprehension is, therefore the researcher concludes comprehension is process of find out the meaning or thinking process about something.*

Students' reading comprehension can be imoroved by some efective startegies used teachers. One of the effective strategy is concept mapping strategy.

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). 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.

## RESEARCH METHOD

The method of this research was Classroom Action Research (CAR). The researcher did the research in a classroom activity. Mettetal (2001:2) defines Classroom Action Research is a method of finding out what works best in your own classroom so that you can improve student learning". Stringer (2008:13) also adds that CAR is to provide educational practitioners with new knowledge and resolve significant problems in classrooms or schools.

This research took a place at MKU English class of sixth semester PGSD of FKIP of UPBJJ-UT Bengkulu at Pokjar Kota Bengkulu. Pokjar means the group of students. The students were grouped into several learning communities in each region or district based on their semester level. They may be at the centre, or at a school or some other location. In 2013.1 year of registration, there were 12 pokjars in UPBJJ-UT Bengkulu of sixth semester of PGSD Program of FKIP, with total number of student is 423 students. From 423 students of sixth semester of PGSD Program of FKIP at UPBJJ-UT Bengkulu, there are 58 students are enrolled to study at Pokjar Kota Bengkulu. For detail information, the researcher displayed the students' feature as follows;

Table 1. Students' Feature of sixth semester of PGSD Program of Pokjar Kota Bengkulu

No	Class's Name	Number of Student
1.	Class A	28
2.	Class B	30
	Total	58

Source: Laporan Koordinator Registrasi UPBJJ-UT Bengkulu, 2013.1

The researcher took the sixth semester of PGSD Program of FKIP as the setting since the MKU English subject is only offered in this semester. The research was conducted at registration year 2013.1, on April – June 2013 as well the program was officially scheduled by the institution. The researcher used the registration year system because in UT, students are recognized by their registration year to name their semester level.

The participants in this classroom action research were the sixth semester of PGSD of FKIP of UPBJJ-UT Bengkulu on Academic Year 2013.1. The research was only implemented in one class A of MKU English that consists of 28 students because the researcher took a part in this class as the tutor of MKU English at Pokjar Kota Bengkulu in this institution.

In order to find out how effective of concept mapping to improve students' reading comprehension, the data were collected from several sources; concept-mapping rubrics, reading comprehension test (including the aspects of: (1) details, (2) main idea, (3) summarizing, (4) inference, (5) cause-effect, (6) predicting, and (7) excluding facts), observation sheet, and guideline for interviews. These sources provided data about cognitive and attitudinal effects of concept mapping, and allowed for triangulation of data. In this research, the researcher was as a tutor to involve in any steps in the cycle.

Before giving the test, the writer tried-out the test to the same level of student being investigated. Precisely, that 30 items in the form of multiple choice were tested to other class of sixth semester students of PGSD FKIP of UPBJJ-UT Bengkulu. The writer analyzed the result of this trying out to find out its validity by using point Biserial Correlation Formula as suggested by Fulcher and Davidson (2007: 103).

For Reading Comprehension Test Cycle 1, out of 30 items which were tried out, No items (0%) were very easy, 8 items (27%) were easy, 16 items (53%) were desirable, 4 items (13%) were difficult, and 2 items (7%) were very difficult. The very difficult items, were recommended to be revised. In Cycle 2, it was obtained 5 items (17%) were difficult, 19 items (53%) were desirable, and 6 items (20%) were easy. In this cycle, there were no very easy items nor very difficult items. Therefore, the researcher obviously planned to use it for the test. As well as in Cycle 3, 5 items (17%) were obtained difficult, 21 items (70%) were desirable, and 4 items (13%) were

obtained easy. Fortunately, no items were categorized as very difficult or very easy. Therefore, the test was validated to be used.

The researcher used Kuder\_Richardson formula or called K-R-20 to measure the reliability of instrument. By using the formula, the writer found that the instrument reliability of the test for cycle 1 was 0.905. Also the test for cycle 2 was 0.889, and the test for cycle 3 was 0.841 (see Appendix 10). The instrument reliability was consulted to the *r*-Product Moment table, and it was found that the *r*-Product Moment table for 30 students was 0.349 at  $p < 0.05$ . Therefore, it can be concluded that the tests or instruments used by the writer are reliable, because the reliability coefficient from both three tests is higher than the *r*-Product Moment table. Based on the Flesh Formula interpretation above, the researcher designed reading texts for both teaching materials and reading comprehension tests as follows;

1). Reading text materials

No	Title	Sources	Readability	
			Score	Result
1.	Meeting & Greeting	Adapted from Thomson Reuters Limited. lesson © 2011 www.english-to-go.com	53.5	Fairly Difficult
2.	“A Young Tutor’s First Day on the Job”	<i>Reading comprehension skills</i> by Thomas G. Gunning-2010	67.3	Standard
3.	President Barack Obama	<a href="http://www.esolcourses.com/content/topics/obama/reading.html">http://www.esolcourses.com/content/topics/obama/reading.html</a> , 2013	56.4	Fairly Difficult
4.	Sorry, I’m with someone just now...I’ll call you right back.	Glenrothes College: Core Skill Communication—2005	49.7	Difficult
5.	British food best in the world	<a href="http://www.nelliemuller.com/reading_comprehension.htm">http://www.nelliemuller.com/reading_comprehension.htm</a>	34.5	Difficult

6.	The traffic in London	Interchange- Headway 2008	New Intermediate	52.5	Fairly Difficult
7.	When should kids start sports?	Bahasa Guru SD, 2009	Inggris untuk	52.6	Fairly Difficult
8.	Clothing and Fabrics	Bahasa Guru SD, 2009	Inggris untuk	62.6	Standar d
9.	Education Problems	Bahasa Guru SD, 2009	Inggris untuk	36.6	Difficult
		Mean:		51.8	Fairly Difficult

Table 2. Readability Result of Reading Text for Teaching Material

Based on the table above, it can be inferred that the difficulty of reading text material used by the researcher at tutorial was fairly difficult (51.8). The result of readability above also showed that variety of difficulty was almost spread evenly.

The observation was designed by the researcher that includes the description of concept mapping use and classroom tutorial management. This observation form was fulfilled by the collaborator and researcher. The Observation sheet can be seen in the following table.

No	Indicator	Sub-Indicators
1	<b>Pre-Teaching</b>	1. Survey the concept maps in front of the students
		2. Start with a main idea, topic, or issue to focus on
		3. Then determine the key concepts
		4. Finish by connecting concepts
		5. Tutor draws the map on the board or by using LCD (power point)

2	<b>During-teaching</b>	1. Students may use concept maps during-learning
		2. Copy the map and gives everyone a copy to benefit from
3	<b>Post- teaching</b>	1. Ask individuals or groups of learners to build up concept maps
		2. Check it to know the places of weakness and the places of strength
		3. Introduces the strengths
		4. Help them to overcome the weakness

Table 3. Indicators of Concept Maps in teaching

There was also a **field note** available in order to document main information being situational observed of what the observer has directly seen through the course of study and reflecting the researcher's thoughts during observation sessions. For Gay (2009:367) says, "field notes describe, as accurately and as comprehensively as possible, all relevant aspects of the situation".

The researcher used the guideline for interviews in order to obtain students' opinion about the process of implementing concept mapping or other useful information for this research. The detail aspects and indicators of interview for factors influence students' reading comprehension, were as follows;

<b>Aspects</b>	<b>Indicators</b>
<b>A. Internal Factors</b>	
1. Motivation	
1.1. Personal factors affect student motivation on the activity itself.	<ul style="list-style-type: none"> <li>• Is a confident reader</li> <li>• Often reads independently</li> <li>• Reads favorite topics and authors</li> </ul>
1.2. Outside effect of student motivation to read on classroom practices	<ul style="list-style-type: none"> <li>• Grades from tutors</li> <li>• Enjoys discussing books with peer</li> <li>• tasks or activities is fun</li> </ul>

<p>2. Interest</p> <p>2.1. Evaluative orientation toward a certain domain</p> <p>2.2. Interest has been measured through ratings of a specific text</p>	<ul style="list-style-type: none"> <li>• Highly interested readers have feelings of involvement, stimulation, or enjoyment during reading, and tend to possess knowledge in the domain of their interest</li> <li>• Specific books, authors, or genres (such as novels)</li> <li>• The passages were interesting to readers</li> </ul>
<p>3. General Knowledge</p> <p>3.1. general knowledge possessed by readers</p> <p>3.2. the ability to infer meaning in social studies texts is positively influenced by the level of background knowledge</p>	<ul style="list-style-type: none"> <li>• Students already knows about a topic influences the acquisition of new information about that topic</li> <li>• Students activate their world and literary knowledge to link what they know to what they're reading.</li> </ul>
<p>B. External Factors</p>	
<p>1. Reading Material</p> <p>1.1. quality of writing reading comprehension</p> <p>1.2. level of the difficulty of the text.</p>	<ul style="list-style-type: none"> <li>• Text that is well organized and easy to understand</li> <li>• Good-quality writing</li> <li>• Text given is at the right level of the difficulty of the readers or the students</li> <li>• Students recognize the important ideas more easily.</li> </ul>
<p>2. Teacher of Reading</p> <p>2.1. The teacher of reading should be careful in choosing the text</p> <p>2.2. The teacher of reading should be careful in and giving the tasks</p> <p>2.3. Reading strategy is suitable used</p>	<ul style="list-style-type: none"> <li>• Teacher consider the text structure and feature since students apply students knowledge</li> <li>• Thinks deeply about the content of texts</li> <li>• Tasks or activities is fun and attractive</li> </ul>

Table 13. Guidelines interview (Nuttal, 1996)

The procedure of this research was done by the researcher in three cycles that consisting of four steps. They are planning, action, observation, and reflection. Researcher is going to conduct this research by using a collaborative action research, collaborated with tutor in teaching MKU English. The collaborated tutor is also one of English tutor, namely Yupika Maryansyah, M.Pd. Burns (1999: 13) argued that a collaborative action is potentially more empowering than action research conducted individually as it offers a strong frame for whole-institution change.

This research was conducted in the three cycles with every cycle consist of three meetings. It consists of plan, action, reflection and evaluation. Techniques of data collection in this classroom action research were in form of; (1) concept mapping practice, (2) reading comprehension test, (3) observation, and (4) interview.

Based on research questions on chapter 1, data of this research were analyzed using two methods of data analysis, namely quantitative and qualitative method. Quantitative method of data analysis was used to examining and interpreting data from reading comprehension test. On the other hand, for data taken from observation and interview was used qualitative data analysis. Qualitative data is also called categorical data, as they can be classified into categories such as class, individual, object, or the process they fall in the research.

## **FINDINGS AND DISCUSSION**

### **FINDING**

After impelementing in the classroom in three cyles, it can be concluded that the students' reading comprehension in every cycles, was better improved. In particular, all reading comprehension indicators showed the increasing happened in the third cycle. In the second cycle, there were also an improvement but from 7 indicators only 5 indicators were increased. They are *detail*, *main idea*, *inference and cause-effect*. The other indicators, *summarizing* and *excluding facts* were decreased in cycle 2. This feature could be gained since the problems also appeared on students' activity in doing concept maps and answering reading comprehension questions after mapping. In concept mapping on cycle 2, students were still lack on determining general

thinking and expressing ideas. In line with finding in the cycle 2, in answering reading comprehension questions after mapping, some students could not optimally answer questions deal with summarizing and identifying facts. However, cycle 1 had the worst result of all. From 7 indicators, only two indicators can be reached score what was expected.

In addition to the findings, the following figure visually shows the improvement of students' reading comprehension from the three cycles. The researcher compared the mean of students' reading comprehension in all cycles.

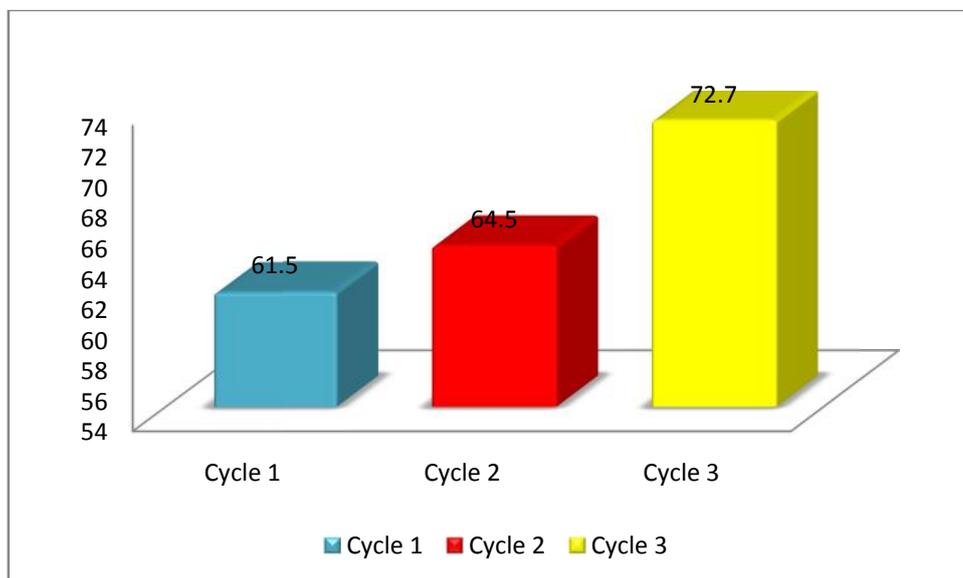


Figure 4. The Mean of Students' Reading comprehension in All Cycles

The improvement of students' reading comprehension in each cycle can be seen from the table and figure above. The researcher conducted the first cycle in which the students' scores in term of each indicator were still low and in the poor level. This was followed by the second cycle in which the researcher found that the scores got significantly higher than the previous cycle. Because there were still several students who were in the poor level, the researcher continued to the third cycle. In this cycle, the students' reading comprehension scores got higher than the two previous cycles, cycle I and II. It means that most of the students were able to identify information detail, main idea, summarizing, inference, cause-effect, predicting and excluding facts.

## Discussion

Referring back to the tests given to the students in order to measure their improvement of reading comprehension at the end of cycle one, two and three, then it showed that using concept maps resulted in a good improvement of students' reading comprehension. It could be seen from the students' average scores that increased in each cycle. The indicators of reading comprehension were better achieved compared to those firstly conducting the research. In other words, the research has met its better result. Below the researcher provides the discussion of 7 indicators of Reading Comprehension that were improved by using concept maps during the research conducted by the researcher.

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. By identifying information detail, students' curiosity and attention has been aroused by a newspaper headline or the title of an article in a magazine, and they want to satisfy their curiosity. 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.

Grasping the main idea of a selection is a foundational skill. In this research, the main idea is what all the other sentences are about. The main idea is more specific than the topic. 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.

In addition to enabling students to organize and recite information, summarizing is also a check on their understanding. The major problem that students have with summarizing is failure to discriminate between essential and unimportant details so that the summary becomes a retelling. Students might also have difficulty organizing information so that their summary is just a random listing of whatever they can remember

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; What might you infer from this sentence? What leads you to make that inference? (Do not ask, "Why did you make that inference?" The use of *why* suggests that students are being judged.) Invite students to make as many inferences as they can.

### Conclusions

On the basis of the results of the data analysis and findings of this research, the researcher concludes the result of the research, as follows. Firstly, it can be concluded 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. Secondly, the researcher finds that the changes of students' reading comprehension are influenced by the some factors. The factors are divided into to two, namely, internal and external. Internal factor as the first factor is that the students' reading comprehension changes because of students' motivation, interest and general knowledge.

Those elements are influenced by students' understanding internally. In other words, the reader finds reading is useful, or it brings pleasure in one way or another. Student is thus reinforced to repeat the activity, in this case reading for meaning or comprehension. The second factor that changes the students' reading comprehension is the external factor. This factor is consisted of reading materials and teacher of reading. Both of then enable the students to recognize the important ideas more easily when they understand the patterns that authors use to organize text, as well students enjoy participating in well-designed group activities for reading.

**Penulis:** Syamsul Rizal State Institute for Islamic Studies (IAIN) of Bengkulu  
Syamsul.rizal42@gmail. com Yusririzal *Universitas Terbuka UPBJJ Bengkulu*  
*yusrizal@ut.ac.id.*

### BIBLIOGRAPHY

- Adler, C.R. (Ed). (2004). *Seven Strategies to Teach Students Text Comprehension*, 49-54. National Institute for Literacy from <https://edc448uri.wikispaces.com/file/view/Adler+2004.pdf> (accessed on March 3<sup>rd</sup>, 2013).
- Anderson, J. N. (1999) *Exploring Second Language Reading*. Toronto: Heinle & Heinle Publishers.
- Alderson, J.C. & Urquhart, A.H. (eds.) (1984). *Reading in a Foreign Language*. London: Longman.
- Alexander, P. A., Jetton, T. L., & Kulikowich, J. M. (1995). "Interrelationship of knowledge, interest and recall: assessing a model of domain learning." *Journal of Educational Psychology*, 87, 559–575.
- Alexander, P. A., & Murphy, P. K. (1998). "Profiling the differences in students' knowledge, interest, and strategic processing." *Journal of Educational Psychology*, 90, 435–447.
- Amir, Achsin (1985). *Strategi Belajar Mengajar Keterampilan Bahasa Inggris*. Jakarta : Departemen Pendidikan dan Kebudayaan.
- Arono (2009), *Mengorganisasi Informasi Dengan Peta Konsep Dalam Meningkatkan Kualitas Pembelajaran Tutorial*, Universitas Bengkulu. (accessed on March 5<sup>th</sup>, 2013) from: <http://arono.wordpress.com/2009/08/05/mengorganisasi-informasi-dengan-peta-konsep-dalam-meningkatkan-kualitas-pembelajaran-tutorial/>
- Asan, A (2007). "Concept Mapping In Science Class: A Case Study Of Fifth Grade Students." *Educational Technology And Society*, Vol (10) , No (1). p.11.
- Bacha, Nahla Nola. (2002). "Testing Writing in the EFL Classroom: Student Expectations" *English Teaching Forum*. 40 (2): 14-16.
- Bachman, L. F. (2000). Series editor's preface. In J. C. Alderson (Ed.), *Assessing Reading* (pp., x-xi). Cambridge: Cambridge University Press.
- Birbili, Maria (2006) Mapping Knowledge: *Concept Maps in Early Childhood Education*. Early Education and Parenting ECRP Ltd. University of Illinois. From <http://ecrp.uiuc.edu/v8n2/birbili.html> (accessed on March 5<sup>th</sup>, 2013).
- Brown, A. L. (1997). "Transforming schools into communities of thinking and learning about serious matters. *American Psychologist*." Vol. 52, 399–414.
- Brown, Douglas. (2004). *Language Assessment Principles and Classroom Practice*. New York: Pearson Education Inc.

- Brown, Douglas. (2000). *Principles of Language Learning and Teaching* (4<sup>th</sup> ed.) San Francisco: Addison Wesley Longman, Inc.
- Burns, Anne (1999) *Collaborative Action Research for English Language Teachers*. (pp. 13) Cambridge: Cambridge University Press.
- Burns, Anne (2010) *Doing Action Research in English Language Teaching*. (p. 9). New York: Routledge Taylor and Francis Group.
- Buzan, T. & Buzan, B. (1996). *The Mind Map Book: How to Use Radiant Thinking to Maximize Your Brain's Untapped Potential*: Plume.
- Cañas, A. J., (2003). *A Summary of Literature Pertaining to the Use of Concept Mapping Techniques and Technologies for Education and Performance Support*, Pensacola: Institute for Human and Machine Cognition Press.
- Chan, C. (2009) *Assessment: Concept Map*, Assessment Resources. Hong Kong: University of Hong Kong Press.
- Chiou, Chei-Chang. (2008). "The Effect Of Concept Mapping On Students Learning Achievements And Interests". *Innovations In Education And Teaching International*, 45(4): 375-387.
- Chularu, DeBacker, K. T. (2004) "The influence of concept mapping on achievement, self-regulation, and self-efficacy in students of English as a second language", *Contemporary Educational Psychology Journal*, Volume 29, Issue 3.
- Clark, I .F and James: R. (2004). "Using Concept Maps To Plan An Introductory Structural Geology Course", *Journal Of Geoscience Education*, V (52), No (3).
- Daley, B., Torre, D., Stark-Schweitzer, T., Siddartha, S., Ziebert, M., & Petkova, J. (2006). Advancing teaching and learning in medical education through the use of concept maps. *Second International Conference on Concept Mapping*. September 4-7, 2006, Universidad de Costa Rica, San Jose, Costa Rica. p.48.
- Eden, C. & Ackerman, F. (2001). "Group decision and negotiation in strategy making." *Group Decision and Negotiation*, Vol. 10, 119-140.
- Elizabeth, Pang. S, (2003). *Teaching Reading*. Switzerland : International Academy of Education Press.
- Eppler, Martin. J (2006) "A comparison between concept maps, mind maps, conceptual diagrams, and visual metaphors as complementary tools for knowledge construction and sharing." *Information Visualization* Vol. 5, 202 - 210.

- Fisher, K. M. (1990). "Semantic Networking: The new kid on the block." *Journal of Research in Science Teaching*, 27(10), 1001-1018.
- Frederick, Cline, et.al (2006). *Focus Group Reactions to Three Definitions of Reading*. Minneapolis: National Accessible Reading Assessment Projects.
- Fulcher, Glenn and Davidson, Fred (2007) *Language Testing And Assessment*. New York: Routledge Taylor and Francis Group.
- Gay, L. R. and Araisan, P. (2009). *Educational Research: Competencies for Analysis and Application*. New Jersey: Prentice Hall Inc.
- Gunning, T.G. (2010b). *Reading comprehension boosters: 100 lessons for building higher level literacy for students in grades 3–5*. San Francisco: Jossey Bass.
- Ha, Hung M, (2006) The Development of a Spatial Technical Writing Technique: *The Application of Concept Mapping And Sentence Diagramming*, M.Info.Sys thesis, School of Economics & Information Systems, University of Wollongong. <http://ro.uow.edu.au/theses/577> (accessed on March 5<sup>th</sup>, 2013).
- Harrison, Collin. (2004) *Understanding Reading Development*. London SAGE Publications Ltd.
- Hartley, Peter., Woods, Amanda., & Pill, Martin. (2005). *Enhancing Teaching In Higher Education : New Approaches For Improving Student Learning*. New York: Routledge Taylor and Francis Group.
- Iwai, Yuko (2010) Re-envisioning Reading Comprehension for English Language Learners. *The Internet TESL Journal*, Vol. XVI, No. 4, April 2010 from : <http://iteslj.org/> accessed on March 5<sup>th</sup>, 2013.
- Jacobs-Lawson, J.M., & Hershey, D.A. (2002). Concept maps as an assessment tool in psychology courses. *Methods & Techniques*, 29(1), 25–29.
- Jonassen, D. (2000). *Computers as Mind tools for schools* (2nd ed.). Columbus: Merrill Press.
- Juall, L. and Moyet, C. (2005) Understanding The Nursing Process. *Concept Mapping And Care Planning*, Williams And Eilkins, USA. From: <http://books.google.com> (accessed on March 5<sup>th</sup>, 2013).
- Kahayanto. E. 2005. A Comparative Study on Students' Achievement in Reading I of the Education Study Program of Palangkaraya University who Entered Through PSB and SPMB in Academic Year 2003/2004. *Unpublished Thesis*. Palangka Raya: The Faculty of Teacher Training and Education University of Palangka Raya.

- Kemmis, Stephen, and Robin McTaggart. (1988). *The Action Research Planner (3<sup>rd</sup> ed)*. Victoria: Daikin University.
- Kendeou, Panayiota. (2010). "Reader and text factors in reading comprehension processes. *Journal of Research in Reading*", Vol. 3, Issue 2, pp 1–19.
- Khutobah & Misno A. Latif. (2006), *Pembelajaran Menggunakan Peta Konsep untuk Meningkatkan Pemahaman Mahasiswa PGSD FKIP Universitas Jember pada Mata Kuliah PPKn*. Universitas Jember. [http://www.ditnaga-dikti.org/ditnaga/files/-sari\\_penelitian\\_ppkp-pips.pdf](http://www.ditnaga-dikti.org/ditnaga/files/-sari_penelitian_ppkp-pips.pdf) (accessed on March 5<sup>th</sup>, 2013).
- Kolers: A. (1973). Three stages of reading. In F. Smith (Ed.), *Psycholinguistics and reading* (pp. 28-49). New York: Holt, Rinehart and Winston.
- Kommers: A. M. (2004) *Cognitive Support For Learning: Imagining The Unknown*, London: Ios Press, p.53.
- Maria, K. (1990). *Reading Comprehension Instruction, Issues & Strategies*. Parkton, MD: York Press.
- Mcnamara, Danielle S. (2007). *Reading comprehension strategies*. New Jersey: Lawrence Erlbaum Associates.
- McCagg, E.C., & Dansereau, D.F. (1991). "A Convergent Paradigm for Examining Knowledge Mapping as a Learning Strategy." *Journal of Educational Research*, 84 (6), pp. 317-324.
- McNiff, J. & Whitehead, J. (2002). *Action Research: Principles and Practice*, London: RoutledgeFalmer.
- Mettetal, Gwynn (2001). "The What, Why and How of Classroom Action Research." *The Journal of Scholarship of Teaching and Learning* Vol. 2 (1) p. 1-4.
- Miles & Huberman (1994). *Qualitative Data Analysis: An Expanded Sourcebook* (2nd ed.) London: SAGE Publications Ltd.
- Monet, Beyond (2003). *Think Literacy: Cross-Curricular Approaches, Grades 7-12*. Ontario Secondary School Literacy Course Ltd.
- Nicoll, G., Francisco, J. S. & Nakhleh, M. (2001). "An Investigation of the Value of Using Concept Maps in General Chemistry." *Journal of Chemical Education*, 78(8), 1111-1117.
- Novak, Joseph D. (2008) *The Theory Underlying Concept Maps and How to Construct and Use Them*. Technical Report. Florida Institute for Human and Machine Cognition.

- Novak, J.D., & Gowin, D.B. (1984). *Learning How to Learn*. New York, NY: Cambridge University Press.
- Nuttall, C. (1982). *Teaching reading skills in a foreign language*. London: Heinemann Educational.
- Nuttall, C. (1996). *Teaching Reading Skills in a foreign language*. London: Heinemann Educational. p.176.
- Ontario Early Reading Strategy (2003). *A Guide to Effective Instruction in Reading*. Ontario: Queen's Printer Press
- Pakhare, Jayashree. (2011). *Effective Teaching: Reading Comprehension Strategies*. (<http://www.buzzle.com/articles/effective-teaching-reading-comprehension-strategies.html>, (accessed on March 5<sup>th</sup>, 2013).
- Pannen, Paulina (2001). *Konstruktivisme dalam Pembelajaran*. Jakarta: PAU-PAAI-Universitas Terbuka Press.
- Pelley, John, W., Ph.D (2005) *Concept Mapping-A Tool for Time Management and Long Term Memory*. Texas: Tech University Press.
- RAND Reading Study Group. (2002). *Reading for understanding: Towards an R&D program in reading comprehension*. Retrieved February 8, 2002, from <http://www.rand.org/multi/achievementforall/reading/readreport.html> accessed on March 5th, 2013.
- Reid, Gavin. (2007). *Motivating Learners in the Classroom: Ideas and Strategies*. London: Paul Chapman Publishing EC1Y 1SP
- Renninger, A. K. (1992). Individual interest and development: Implications for theory and practice. In A. Renninger & S. Hidi (Eds.), *Role of interest in learning and development* (pp. 361–395). Hillsdale, NJ: Erlbaum.
- Renninger, A. K. (2000). Individual interest and its implications for understanding intrinsic motivation. In C. Sansone & J. M. Harackiewicz (Eds.), *Intrinsic and extrinsic motivation: The search for optimal motivation and performance* (pp. 373–404). San Diego, CA: Academic Press.
- Renkema, Jan (2004). *Introduction to Discourse Studies*. Philadelphia: John Benjamins Publishing Company. p. 10-11, 176.
- Riduwan. (2006). *Belajar Mudah Penelitian Untuk Guru-Karyawan Dan Peneliti Pemula*. Bandung: Alfabeta.
- Saleemi, Anjum P. (1988). "Language testing: some fundamental aspects". *English Teaching Forum*, 26 (1): 5-6.

- Sanz, Cristina. (2005). *Mind And Context In Adult Second Language Acquisition Methods, Theory, And Practice*. Washington, DC: Georgetown University Press.
- Scanlon, Donna M., & Kimberly L., Anderson., and Joan M. Sweeney (2010). Early intervention for reading difficulties: the interactive strategies approach. New York: The Guilford Press.
- Schiefele, U. (1999). "Interest and learning from text." *Scientific Studies of Reading*, Vol. 3(3), 257–279.
- Septiana (2011). *Keefektifan Penggunaan Media Peta Konsep Pohon Jaringan Pada Pembelajaran Menulis Cerpen di Kelas X SMA Negeri 1 Mojotengah Kabupaten Wonosobo*, Yogyakarta: Universitas Negeri Yogyakarta Press.
- Sheng, H. J. (2000). "A Cognitive Model for Teaching Reading Comprehension." *Forum*, 38(4), 12–15.
- Singh. (2007). *Quantitative Social Research Methods*. New Delhi: Sage Publications India Pvt Ltd. p.123.
- Snow, Catherine. (2002). *Reading For Understanding: Toward A Research And Development Program In Reading Comprehension*: Pittsburgh: RAND Education.
- Stanovich, K.E. (1980). "Towards an interactive-compensatory model of individual differences in the development of reading fluency." *In Reading Research Quarterly* 16, (p.32-71).
- Stringer, Erni. (2008). *Action Research in Education*. New York. Pearson.
- Student Record System Program Program Pendas (SRS Pendas). Bengkulu: UPBJJ-UT Bengkulu masa registrasi 2013.1
- Sudijono, Anas, (2010). *Pengantar Statistik Pendidikan*. Jakarta: PT Raja Grafindo Persada.
- Sukidin (2010). *Manajemen Penelitian Tindakan Kelas*. Jakarta: Percetakan Insan Cendikia.
- Talebinezhad, M. R. (2007). "The Effect of Explicit Teaching of Concept Mapping in Expository Writing on EFL Students' Self –Regulation". *The Linguistic Journal*, Volume (2) , Issue ( 1).
- Tarchi, C. (2009). "Reading comprehension of informative texts in secondary school: A focus on direct and indirect effects of reader's prior knowledge." *Learning and Individual Differences*, 20, 415-420.
- Taylor, Claire (2006). *Doing Action Research: A Guide for School Support Staff*, London, A SAGE Publications Company

- Teresa, S. M. & Jorge, V (2006). *Using Concept Maps As A Strategy To Teach Physics, In Particular The Topic Of Acoustics.* p.13 From: <http://cmc.ihmc.us/cmc2006papers/cmc2006-p7a-pdf> accessed on March 3rd, 2013.
- Tim Penyusun (2011). *Buku Panduan Penulisan Tesis dan Disertasi.* Padang: UNP Press.
- Tompkins, G. E. (2006). *Literacy for the 21st century: A balanced approach.* 4th ed. Upper Saddle River, NJ: Pearson, Merrill, Prentice Hall.
- Trochim, W. (1989). "An Introduction To Concept Mapping For Planning And Evaluation". In W. Trochim (Ed.) *A Special Issue of Evaluation and Program Planning*, 12, 1-16.
- Ulijin, J.M. and Strother, J.B. (1990). "The Effects of Syntactic Simplification on Reading EST texts as L1 and L2." *Journal of Research in Reading*, 13, 38-54.
- Vakilifard , A. & Armand , F. (2006). "The Effects Of Concept Mapping On Second Language Learner Comprehension Of Informative Text." from: <http://cmc.ihmc.us/cmc2006papers/cmc2006-p7a-pdf> accessed on March 3rd, 2013.
- Vernon, M.D (1984) *The Experimental Psychology of Reading.* In G Brooks & A. K. Pugh (Eds), *Studies in History of Reading* (pp. 48-55). Reading: Centre for the teaching reading. London: University of Reading School and Education Press.
- Vecchai, L. L. & Pedroni, M. (2007). "Concept Maps As A Learning Assessment Tool." *Issues In Informing Science And Information Technology*, Vol (4) . p.308
- Wagner, K (2009). *Beyond decoding: the behavioral and biological foundations of reading comprehension* (Eds). New York: The Guilford Press.
- Walker, J.M.T., & King: H. (2003). "Concept Mapping As A Form Of Student Assessment And Instruction In The Domain Of Bioengineering." *Journal of Engineering Education*, 92, 167-179.
- Weir, J.C. (1993). *Understanding and Developing Language Test.* New York: Prentice Hall.
- Zainil (2012). Officially course entitled *Language Teaching Seminar.* Padang: Padang State University Press.
- Zainil. (2008). *Actional Functional Model (AFM).* Padang: Padang State University Press.
- Zeilik (2009) *Classroom Assessment Techniques: Concept Mapping. Field-tested Learning Assessment Guide FLAG,* from <http://www.flaguide.org/cat/conmap/conmap7.php> accessed on March 3rd, 2013.