THE EFFECT OF READING TEACHING MATERIAL FOR DIFFERENT LEARNING STYLES IN IMPROVING STUDENTS’ READING COMPREHENSION

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Abstract:
This study aims to explain the relationship between student learning styles and student achievement in English Reading Comprehension and to determine how extents the teaching material meets the needs of students with different learning styles. Researchers conducted the One-Group Pretest-Posttest design where only one experimental group was given a pre-test and post-test. Data collection is done in several ways, namely by giving a questionnaire from Barsch Learning style inventory (1980), interviewing and conducting pre and post tests to determine the development of students’ abilities before and after the presentation of the material. In addition, classroom observation was conducted to find out the classroom activities and students’ participation toward teaching material given. The data revealed that the average of students’ result in pre-test was 38.92% while the result of the average of students’ result in post-test was 68.58%. It may say that the students’ improvement in reading comprehension using the teaching material has a significant improvement. 100% of visual learners have improved the ability in English reading comprehension after being given the material. 100% of auditory learners also have an increase in the ability in English reading comprehension after the provision of teaching materials. Likewise with visual-auditory learners in which 100 percent of respondents experienced an increase. However,
only 80 percent of 100 percent kinesthetic learners experience an increase after the provision of teaching materials. There are many factors that influence the students. It can be in the form of internal factors that trigger students’ motivation in learning English.

**Keywords:** teaching material, learning styles, students’ reading comprehension

Every individual has different abilities and characters. They have different motivations, different attitudes in teaching and learning, as well as different responses in class and specific instructional practices. In this case, a teacher or lecturer must be more careful in understanding these differences, so that the greater the opportunities for students to meet their learning needs.

Students are individuals with individual needs, interests and methods of processing information (Deporter & Hernacki, 2004). There are several student variables in language learning such as motivation, age, learning style, personality, gender, strategy, metacognitive, autonomy, trust, culture and talent (Griffiths, 2008). Based on these variables, the teacher or lecturer must make a reference in presenting teaching material to students so that knowledge, skills and attitudes can be well received.

Recent studies showed that learning style is one of the characteristics of students who have not received enough attention. Most teachers use their own learning methods to teach rather than consider the student’s own learning style. In this case, teaching materials and methods can be included as aspects that affect student performance. In fact, students will learn effectively if the teacher presents appropriate teaching materials to stimulate the learning process which will ultimately improve student learning achievement. A study of learning style and personality in Second Language Acquisition, Husain (1999), suggested that teachers should match the teaching styles or teaching method with the students’ learning and personality styles, in order to achieve better performance.

Learning style as one of the student variables is sometimes not considered by the teacher or lecturer when teaching in the classroom.
With conventional teaching materials and methods, the teacher considers all students to be the same. The use of materials and methods must be in accordance with the skills that will be taught to students but teachers sometimes do not pay attention to differences in student learning styles. Two researchers from Malaysia, Gilakjani&Ahmadi (2011) said that it is very important to understand and explore the learning styles of each individual.

**REVIEW OF LITERATURE**

This research attempted to inspect the effectiveness of reading teaching material for different learning styles (Visual learner, auditory learner and kinesthetic learner styles) in improving students’ reading comprehension.

There are some researchers who conducted research related to Learning styles. Gilakjani (2012), which aimed to increase faculty awareness and understanding of the effect of learning styles on the teaching process, showed that Iranian EFL university students preferred visual learning style. Visual learners had the greatest academic achievement in their educational major. This research enlighten the readers about the impact of Visual, Auditory and Kinesthetic learning style on English Language Teaching hence it can enlarge the knowledge of the readers in this field.

Boström (2011) compared students’ learning style and teachers’ learning style among 53 high school teachers and 102 secondary school students and 66 from vocational programs in Sweden and found that the teachers have a greater need for light and temperature, are more motivated, more adaptable, have less need for structure and authority and are more alert in the morning and less in the afternoon compared with the students. Moreover, the two groups namely academic and vocational program showed no statistically significant differences between them but the group of vocational students differed more from teachers learning style than their academic peers. Hence, he recommends teacher to take into account types of learning style and expand teaching strategies or method in the classroom.

Some researchers focused their study on learning style and its
correlation to academic achievement in traditional classroom. Husain (1999) conducted a study, which focuses on students’ learning and personality styles in second language acquisition and their relation to students’ academic achievement, found that all groups have no significant differences in their achievement (post-test). The scores of pre-test also show no significant difference among the group. Despite Husain’s claim that there is no significant difference in students’ academic achievement for all groups of learning style, a study on the relation between learning styles and academic achievement of secondary school students conducted by Vaishnav (2013) revealed otherwise. The kinesthetic learning style was found to be more prevalent than visual and auditory learning styles among secondary school students. The findings also show that the main effects of the three variables - visual, auditory and kinesthetic are significant on academic achievement.

The results of these researches indicate that it is very important to understand and explore each individual’s learning style. Analyzing one’s own particular learning style can be very helpful and beneficial to student by aiding them in becoming more focused on their preferred styles in acquiring knowledge, which ultimately will increase educational success.

With reference to the urgency of selecting teaching material, Ellis and Johnson (1994: 157-158) state that there are several reasons why ingredients are highly recommended. First, the original text and dialogue created to learn English. This includes the type of language, which students may need to learn to develop skills to understand, maybe even to be produced. Second, the material can provide information about real life events or situations. In this case, it is material content rather than language, which is useful for lecturer or students. The information conveyed is likely to be more accurate and has high credibility and may be more up-to-date than other material. It may also be relevant to students’ special interests and therefore can be used to fill gaps of material published for English students. For this research, the researchers composed teaching material which was given to students in the classroom.

In this research, the researcher will see the effectiveness of teaching
material in reading comprehension. Reading comprehension is the way to build up meaning of the text. The process of comprehension involves decoding the word of the text and then using basic knowledge to construct of understanding of the message. Comprehension the text means understanding what has been read. Comprehension involves understanding the vocabulary seeing the relationship among words and concepts, organizing idea, recognizing authors’ purpose, making judgment and evaluating. According to Heilman (1981: 265) as cited in Erika et al. (2015:15) “reading is a process of making sense of written ideas through meaningful interpretation interaction with language. A good reader is one who understands what he reads, and the faster he able to get meaning from his reading the more efficient he is”.

In Souhila R, (2013:4-5) cited that According to Seyed et al (2010: P.376-380), the word comprehension refers to “the ability to go beyond the words, to understand the ideas conveyed in the entire text” .Furthermore, Snow (2002: 11) that comprehension refers to “the simultaneous ability used by a reader to construct and extract meaning through interaction and involvement with written materials”.

Besides that, Woolley. G (2011: 15) “Reading comprehension is the process of extracting meaning from text. The goal, therefore, is to gain an overall understanding of what is described in the text rather than to obtain meaning from isolated words or sentences”. It means that reading comprehension is the way to getting the information of the text A similar view was given by Maria (1990: 14-15) who defined “reading comprehension as holistic process of constructing meaning from written text through the interaction of (1) the knowledge reader brings to the text i.e. word recognition ability, word knowledge, and knowledge of linguistic conventions; (2) readers interpretation of the language that the writer used in constructing the text; and (3) the situation in which the text is read’.

**Reading strategies**

Cited in Souhila R, (2013:11-13), there are some reading strategy that should be mastered by the students. The First strategy is predicting,
Magiliano (1993: 35) stated that “prediction strategy involves thinking about what might be coming next in the text. It is applied by effective reader that mean, they used pictures, headings and text as well as personal experience to make predictions before they begin to read”. So, predicting involves thinking about something that happens on the text.

The next strategy is skimming. According to Grellet (1999: 2-25) It is used by readers to get “a general idea about the content of printed materials through reading the text quickly i.e. in this strategy, readers will look for something quite specific or get general ideas before putting effort into close reading”.

The third strategy is called Scanning. According to Grellet (1981: 58-59), “scanning is a reading technique that requires reader to search for specific information without reading the whole text, through looking at its title, table of content and so on”. It is a strategy you often use when looking for specific information by reading something quickly such as search for key words or ideas. In most cases, you know what you’re looking for, so you’re concentrating based on finding a particular answer. In this way, we can say that scanning is to take the core of the sentence or the important information to gain the particular information from the text.

Inferring is the next reading strategy that should be understood. Inferring is defined as the process of figuring something out through reasoning. It means figuring out something that the author doesn’t actually say. The reader can use clues that are in the text and things from your own mind. So, the inferences are the strategy in understanding the text as a whole with combining the basic understanding of the reader.

The fifth strategy is guessing the meaning of new words. One of the obstacles for students in the comprehension of reading is getting some new words. According to Clarke (1980: 211-220) the best way to solve this problem is “to guess the meaning of unfamiliar words from the context in order to save time and to continue reading without interruption or referring to a dictionary”. The ability to guess meaning from context is a useful skill
to practice and try to improve.

Furthermore, self monitoring is the next strategy that should be understood by the students. Hanson (1996: 173-191) views that “the ability of a student to self-monitor his or her performance is a natural step toward becoming independent, which can only happen when students take responsibility for their own behavior and essentially become agents of change”. Furthermore, Carr et al, (1993: 50) said that “self-monitoring can be used both to assess where students are functioning academically and behaviorally and to improve academic or behavioral performance”.

The last strategy is summarizing. It is the last strategy that can be used in reading activity, it requires the readers to organize or restate the information or the main ideas of a given text by his/her own style after their comprehension or in other words, taking a lot of information and creating a condensed version that covers only the main points. Oxford (2006: 717) defines “summarizing as a short description of the main ideas or points of something without any details”.

There are many reading strategies that can be taught to students and for this research, the researcher will apply those strategies above in teaching material in the reading comprehension classroom.

Based on the rational above about the importance of identifying students’ learning styles in teaching and also the urgency of selecting teaching material, the researchers aims to elaborate the effectiveness of reading teaching material for different learning styles (Visual learner, auditory learner and kinesthetic learner styles) in improving students’ reading comprehension.

**METHOD**

**Research Design**

This research applied pre-experimental design which used to see the result of applying reading teaching material for different learning styles in improving students’ reading comprehension. The researcher intended to investigate in which kind of learning style this teaching material can work

**DOI:** dx.doi.org/10.21274/ls.2018.10.2.215-230
effectively. There was only one group experiment involved in this research so there was no control group.

**Respondents**

The respondents of this research was 2nd semester students of English Education Department Universitas Muslim Maros (UMMA) Yapim. The reason of choosing these samples was the appropriateness of these samples with the research. They were chosen based on purposive sampling because they were taught reading comprehension in that semester.

**Instruments**

There were some instruments used in this study; questionnaire, interview and classroom observation and reading comprehension test.

**Procedures**

The first instrument namely questionnaire was used to find out the students’ learning styles by administering 24 items of questions from Barsch’s LSI, which is categorized into 3 scales; often, sometimes, and seldom. The second instrument was interview. Data from the questionnaire were confirmed and crosschecked by interviewing the students. The third instrument was classroom observation to find out the classroom activities and students’ participation toward teaching material given and the last was vocabulary test which consisted of pre-test which was intended to see the students’ prior knowledge in reading comprehension and post-test which was aimed to see students’ reading comprehension after the teaching material given.

**Data analysis**

The data were analyzed chronologically, as follows: first, the data collected from questionnaire was analyzed by tabulating the students learning style results and differentiating them based on their preferred learning style. The Learning Style inventory was calculated into number to find out students learning style. Second, the researcher calculated the result of vocabulary test (pre-test and post-test).

Calculating of students’ percentage by using sudjana’s formula as
follows:

\[ P = \frac{fq}{N} \times 100\% \]

Where:
- \( P \) = Percentage of data
- \( Fq \) = Number of Frequency
- \( N \) = Total Sample

(Sudjana, 1992:3) as cited in Sirajuddin (2010)

Calculating the mean score of the students’ test

The formula of the mean score was:

\[ X = \frac{\sum x}{N} \]

\[ X = \text{meanscore} \]
\[ \sum x = \text{thesumofallscore} \]
\[ N = \text{Thetotalnumberofsubject} \]

(Gay and Airasian, 2006) in Sirajuddin (2010)

Then, Students were grouped based on their preferred learning style and their result of their pre-test and post-test in reading comprehension. The researcher described the match between students’ learning styles and students’ reading comprehension after giving teaching material. Moreover, in identifying students’ learning style, researcher used the two data namely LSI and interview. The data from LSI were confirmed and crosschecked by interviewing the students to finally determine the student’s learning style. The researcher triangulated all the data obtained namely students’ learning style, classroom observation data and reading comprehension test to see how effective reading teaching material for different learning style in improving students’ reading comprehension. At the end, by seeing all data obtained, researcher discussed the findings of the research.

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**FINDINGS AND DISCUSSION**

The first research question of this current study was what the profile of each individual student is in term of learning style. In this research, researcher used LSI inventory by barsch (1980) to identify students’ learning style. In order to answer the first research question, respondents were required to complete the inventory by giving checklist next to the statement that suits their daily habit. Moreover, to reinforce the LSI data, researcher did interview respondents to crosscheck their statement in LSI.

As already mentioned above, in identifying students’ learning styles, researchers used two types of instruments namely questionnaire and interview. First, researcher disseminate the questionnaire to the students, after that the researchers interviewed the students with the same question in the questionnaire. Researcher feels need to conduct interview because she doubt the students filled out the questionnaire given correctly.

When equating the results of the questionnaire and interviews, there were some respondents who have different learning styles results between these two types of instrument. To overcome this problem, researcher took the results of the interview to determine the student’s learning style since in interview process; researcher emphasized very clearly the examples of each statement.

The respondent of this study were 24 students of English Education Department of UMMA YAPIM. Twenty-four questions with three alternatives were distributed to students. Through the processes of test administration, it was indicated that about 50% of the students preferred visual learning style, 20.83% students preferred auditory learning style, 20.83% of the students preferred kinesthetic style for their learning. Moreover, there was one types of combination learning style indicated in this study namely 8.33 % visual-auditory learning style

The findings of the study in the domain of style inventory revealed that respondents taking part in the study were mostly inclined towards being visual. It reached half of the number of respondents. While, auditory,
Kinesthetic and visual-auditory learning styles were in the little amount of respondent.

Fundamentally, the findings of the current study confirm some previous studies concerning visual, auditory, and kinesthetic learning styles. Barbe and Milone (1981) in Gilakjani (2012), stated that for grade school children the most frequent modality strengths are visual (30%) or mixed (30%), followed by auditory (25%), and then by kinesthetic (15%). Barbe and Milone (1981) showed that visual learning style became the very dominant in the classroom and confirm the result of the current study regarding to learning style of grade school children. Meanwhile, the previous research also found mixed learning style as the dominant learning style (30 %) but for this current study, mixed or combination learning style occupied a low level because there was only 8.3 % of the total sample who have the combination of learning style.

The students with the combination learning style are the students who have combination characteristic style in learning. They have a tendency to be double or even triple learning styles, so that their characteristics are the combination of the single learning style. Every student has an access to those three learning styles (Visual, Auditory, or Kine\textethetic) and prefers to one modality of learning style which contributes to students’ learning process and communication. Otherwise, person not only disposes to be a single learner, but also the combination of them which gives particular talent and lack.

There are several things that can be obtained from the process of identifying learning styles. Lecturers become aware of the importance of identifying students in the classroom so that the lecturer provides materials that can cover all learning styles in the classroom. For this current study, the lecturer composes teaching material in reading comprehension class to see how effective that materials for different learning styles in the classroom.

Knowledge of an individual’s learning style is also very important for students. The individuals should know what their own learning styles are and what characteristics this style has and they should thereby behave according to this style. In this way, the individual can acquire the constantly changing

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and increasing amount of information without need for the assistance of others. However, in this study, researchers did not explain to the students about their learning style and how they should act with knowledge of the learning styles. The researcher in this case simply identify students’ learning styles and let the class run naturally because researcher only want to know about the effectiveness of teaching material for heterogeneous classroom. This maybe important for future researchers who want to conduct the same study, in which they should provide knowledge about the importance of knowing the individual learning style because when the individual knows his/her learning style, s/he will integrate it in the process of learning so s/he will learn more easily and fast and will be successful (Gilakjani, 2012).

The second question of the current study is sought to elaborate how effective teaching material in improving students’ reading comprehension with different learning styles. The result of this research shows that the teaching material improves students’ reading comprehension.

The teaching material is effective in improving students’ reading comprehension in heterogeneous classroom. The findings revealed that after conducting the experimental research to investigate whether the teaching material was effective in improving students’ reading comprehension, the teaching material had high effect in improving reading comprehension of the students. This is proven that the mean score of the students in pre test was 38.92 % while the mean score of the students’ result in post-test was 68.58 %. This indicated that the students’ achievement in reading comprehension by applying the teaching material had a significant improvement for all of learning styles namely for visual, auditory and kinesthetic learning style.

CONCLUSION

The data revealed that the average of students’ result in pre-test was 38.92 % while the result of the average of students’ result in post-test was 68.58 %. It may say that the students’ improvement in reading comprehension using the reading teaching material has a significant improvement. 100% of
visual learners have improved the ability in English reading comprehension after being given the material. 100% of auditory learners also have an increase in the ability in English reading comprehension after the provision of teaching materials. Likewise with visual-auditory learners in which 100 percent of respondents experienced an increase. However, only 80 percent of 100 percent kinesthetic learners experience an increase after the provision of teaching materials. There are many factors that influence the students. It can be in the form of internal factors that trigger students’ motivation in learning English.

DOI: dx.doi.org/10.21274/ls.2018.10.2.215-230
REFERENCES

Barsch Jeffrey. 1980. Barsch Learning Style Inventory. Retrieved from http://www.windward.hawaii.edu/trio/forms/participant_inventories.pdf accessed on 29th January 2014.

Boström. Lena .(2011). Students’ Learning Styles Compared with their Teachers’ Learning Styles in Secondary Schools. Mid Sweden University, Sweden. Institute for Learning Styles Journal Volume 1, Spring 2011.

Carr, &Punzo, Rutherford, Quinn &Mathur. (1993). The Effects of self-monitoring of academic accuracy and productivity: on the performance of students with behavioral disorders (pp50-241).

Clarke, D.F. & Nation, I.S.P. (1980).Guessing the meanings of words from context: strategy and techniques system (pp211-220).

Deporter, Bobbi and Hernacki Mike. 2004. Quantum Learning. Bandung: Mizan Pušlaka.

Ellis and Johnson.1994. Teaching Business English. Oxford : Oxford University Press

Gay & Airaiasian. 2006. Educational Research : Competencies for analysis and applications. 8th Edition. New Jersey: Prentice Hall Publisher.

Gilakjani, Abbas. 2012. Visual, Auditory, Kinesihetic Learning Styles and Their Impacts on English Language Teaching. Journal of studies in Education. ISSN 2162-6952 2012, Vol.2, No.1.

Gilakjani & Ahmadi. 2011. The Effect of Visual, Auditory, and Kinesihetic Learning Styles on Language Teaching. International Conference On Social Science and Humanity. IPEDR Vol.5.

Griffiths Carol. 2008. Lesson from Good Language Learner. Cambridge: Cambridge University Press.

Grellet.F. (1981).Developing Reading Skills: A Practical Guide to Reading Comprehension Exercises (pp 58-59).Cambridge University Press.

Grellet.F. (1999).Developing reading skills(pp 2-25). NY: Cambridge University Press.

Hanson, M. Porter, Rutherford, Quinn, &Marthur.(1996). Self-management through self-monitoring. In K. Jones & T. Charlton.(Eds.),
Overcoming learning and behaviour difficulties: Partnership with pupils. London: Rutledge.

Heilman, W. Athur.et.al.(1981). Principles and Practice of Teaching Reading.5th. Ed. Bell & Howell Company.

Husain, Djamiah. 1999. Learning and Personality Styles in Second Language Acquisition. Unpublished Thesis. Hasanuddin University.

Magliano, J. P., Baggett, W. B., Johnson, B. K., &Graesser, A. C. (1993). The time course of generating causal antecedent and causal consequence inferences. Discourse Processes, Vol 16. (pp35-53).

Maria, K. (1990). Reading Comprehension Instruction, Issues and Strategies. Parkton, MD: York Press. 14-15.

Oxford. (2006). Word Power Dictionary (pp 717). New York: Oxford University Press

Seyed Hossein Fazeli, M. e. (2010). Language in India: some Gaps in the current Studies of reading in Second/Foreign language learning. (Vol.10).issue4. (pp376-380).

Sinambela Erike, et al. 2015. Improving Students’ Reading Comprehension Achievement by Using K-W-L Strategy. North Sumatra: HKBP Nommensen University.

Sirajuddin, Andi. (2010). Improving speaking ability by using Total Physical Response Strategy at SMA Negeri 1 Samarinda. Unpublished Thesis. Hasanuddin University.

Snow, C. (2002). Reading for Understanding. Toward an R&D Program in Reading Comprehension. Santa Monica, CA : RAND. 7. Reading. study Group.11.

Souhila, Rouai. 2013. The Use of Reading Strategy in Improving Reading Comprehension. University Kasdi Merbah Ouargla

Vaishnav, Rajshree. (2013). Learning Style and Academic Achievement of Secondary School Students. Voice of research Vol. 1 Issue 4, March 2013.

Woolley, G. (2011). Reading Comprehension: Assisting Children with Learning Difficulties. Retrieved from http://www.springer.com/cda/content/document/cda_downloaddocument/9789400711730-c1.pdf?SGWID=0-0-45-1158048-p174102871.

DOI: dx.doi.org/10.21274/ls.2018.10.2.215-230
Zul Astri, Isnaeni Wahab, The Effect of Reading Teaching Material for ...230.