

Conference Paper

Application of GIST Methods in the Teaching of Reading Comprehension to the Intermediate Level of Indonesian Language for Non-native Speakers

D. Hadianto

The Indonesian Language Education, Department of Language Education, Indonesia University of Education, Jalan Setiabudhi No. 229, Bandung, West Java 40154, Indonesia

Abstract

The purpose of this study is to obtain an overview of the influence of GIST methods on the reading ability of BIPA learner-level understanding. The research method used is a single-subject method (single-subject method) with an A-B-A design. The baseline (A1) was conducted over four sessions, the intervention (B) was conducted over eight sessions, and the second baseline (A2) was conducted over four sessions. The results show that the GIST method can develop the reading ability of middle-level BIPA learners' comprehension. This can be seen from the increase in the average value obtained by each subject under each condition. The data overlap from research subject, that is, 0%, 25%, 25%, 12.5%, and 0%. Overlap data from the results of the study did not exceed 25%, which indicates that the application of the GIST method to reading comprehension ability is very effective. Based on the research, the GIST method proved capable of developing the reading ability of BIPA learners, especially in terms of reading comprehension of texts.

Keywords: ability to read comprehension, BIPA learning, GIST method (Generating Interaction between Schemata and Text)

Corresponding Author:

D. Hadianto
darishadianto@student.upi.edu

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1. Introduction

Reading comprehension skills need to be mastered by BIPA learners, especially those at adult age level and middle level. Through reading comprehension, BIPA learners can understand the content of a text either implicitly or explicitly. Reading is the process by which the reader gets the message that the author wishes to convey through the media of words or written language [1, 2]. In addition, reading can also be regarded as the process of understanding what is implicit in writing, by looking at the thoughts

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contained in the written word. Reading comprehension is the ability to read and understand the essential ideas and important details of the entire reading content [3-5].

Reading comprehension is a reading activity aimed at comprehending thoroughly the content of a text [6]. Someone is said to understand a text well if has the following abilities: first, the ability to capture the meaning of words and expressions used by the author; second, the ability to grasp both explicit and implied meanings; third, the ability to draw conclusions. Based on the aforementioned, it can be concluded that essential reading comprehension skills are mastered by students.

With regard to the importance of reading comprehension skills, BIPA learners are expected to be able to understand texts well. However, based on observations made, BIPA students are still having difficulty in understanding texts in the learning process. This leads to the result of learning to read comprehension skills achieved by low-ability students. The method that researchers think is appropriate for this problem is the GIST method. Therefore, the researcher wanted to discover the effectiveness of the GIST method in developing reading comprehension ability. Abidin [7], Martens [8], and Hidi [9] reveal that the aim of the GIST method is to enable students to have the ability to understand the essence of paragraphs by providing reading recipes by producing the essence by sentences to build the essence of the entire paragraph or to create the essence of discourse based on the essence of paragraph by paragraph [7, 10, 11]. GIST methods are implemented in several stages of learning as follows:

1. Prereading Stage: The teacher chooses a discourse appropriate to the child's developmental level and background. The discourse should consist of approximately five paragraphs. The teacher explains the steps students should take during the lesson.
2. Reading Stage: The student reads the paragraphs and writes a summary of each paragraph.
3. Post-reading Stage: The student summarizes all the paragraphs and presents the results in front of the class. In the final stages of learning, students are individually assigned to write the essence of the text freely, which means using their own ability regardless of the summary of the group that had been compiled.

2. Methods

The research method used in this research is a single subject experiment method. The single subject experiment method is different from other experimental methods. This

method does not divide the group between experimental and control groups because the number of subjects is limited. Experimental results are presented and analyzed on an individual basis [12–14]. This single subject experiment method was chosen because of the limited number of respondents studied, that is, one to five people, and it is not possible to divide the group between an experimental group and a control group. This research method is in line with the nature of the research that will be done, namely to observe changes in behavior and individual differences from the subject under study. In addition, a single subject experimental research method is a simple experimental design that can describe individual differences accompanied by the presentation of simple and detailed quantitative data [15, 16].

The research design used in this research is a single subject experimental A-B-A design. Sukmadinata [12], Kinugasa et al. [17], and Wolery and Harris [18] suggest that the design of a single subject A-B-A experiment is a design model often used in single subject experiments. This design is almost identical to the A-B design, but after the treatment is followed by the non-treated state as in the previous state. The first is the symbol of the baseline data, B, for the treatment data and the second, A, is intended to determine whether without treatment the learner's ability will return to the initial state or continue as in the treatment state. The researcher used an A-B-A design procedure in a single-subject method. The A-B-A design procedure according to Sunanto [15] is as follows:

1. Define target behavior as behavior that can be observed and measured accurately.
2. Perform measurements and recording of data at baseline condition (A₁) continuously at least 3 or 5 times or until the tendency of direction and level of data are known clearly and are stable.
3. Provide intervention (B) after data tendency at stable baseline condition.
4. Next, conduct target behavior (intervention behavior) at the condition of intervention (B) continuously for a certain period of time in order to discover the tendency of direction and the level of data becomes stable.
5. Once the tendency of direction and level at the condition of intervention (B) are stable, repeat again condition baseline (A₂). After that, draw a conclusion as to whether there is a functional relationship between the dependent variable and the independent variable. Care should be taken when drawing conclusions.

Based on the research method used by the researcher, that is, a single subject experiment, this research was appropriately conducted on the BIPA learner because of the small sample size. The subject of this research is BIPA learner of middle level which is 5 people.

3. Results

The ability of BIPA learners in reading comprehension is improved by using the GIST method. This is evident from the average score obtained by BIPA learners (subjects 1 and 2) in each condition (baseline 1 (A1), intervention (B), baseline 2 (A2)). The average score obtained by each research subject is as follows.

3.1. The ability to read of subject 1

The reading comprehension ability of BIPA subject 1 students at A1 condition (baseline or pretest) in session 1 to session 4 shows values of 63, 67, 67, and 67. The average of BIPA learner subject 1 on baseline 1 is 66. The ability to read of subject 1 in the intervention condition (B) in session 5 to session 12 shows values of 71, 71, 72, 72, 72, 73, 74, and 74. The average of subject 1 under intervention conditions is 72.5. The ability to read of subject 1 in the second baseline condition (A2) or posttest in sessions 13 through 16 shows values of 76, 77, 77, and 77. The average of subject 1 on posttest is 76.75. So, of the three conditions, the ability to read of subject 1 has increased.

Based on the results of the calculation, we obtain the result that subject 1 experiences overlap at baseline stage (A1) – intervention (B) 0%. These percentages lead to the conclusion that the change in the ability to read of subject 1 can be believed.

TABLE 1: Overlap data subject 1.

Condition	Baseline (A ₁) – Intervention
Percentage overlap	$\frac{0}{8} \times 100\% = 0\%$

3.2. Reading ability of subject 2

The ability to read of subject 2 under conditions A1 (baseline 1) from session 1 to session 4 shows values of 67, 63, 67, and 71. The average of subject 2 on baseline 1 is 67. The capability of subject 1 under conditions interventions (B) in sessions 5 through 12 shows

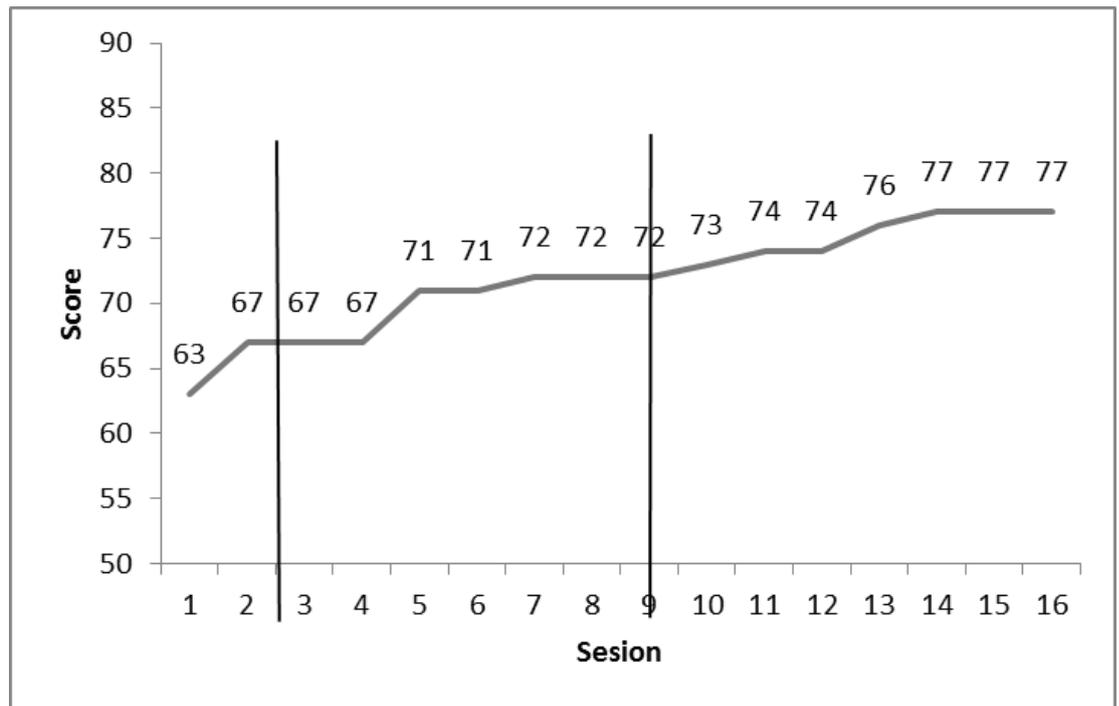


Figure 1: Direction trend subject 1.

values of 72, 72, 73, 73, 74, 74, 76, and 76. The average of subject 2 in the intervention condition is 73.75. Subject 2's reading capability at second A2 baseline condition in session 13 to session 16 shows values of 80, 80, 80, and 82 while the average of subject 2 on baseline 2 is 80.5. So, of the three conditions, the ability to read of subject 2 has increased significantly; the increase can be seen in Figure 2.

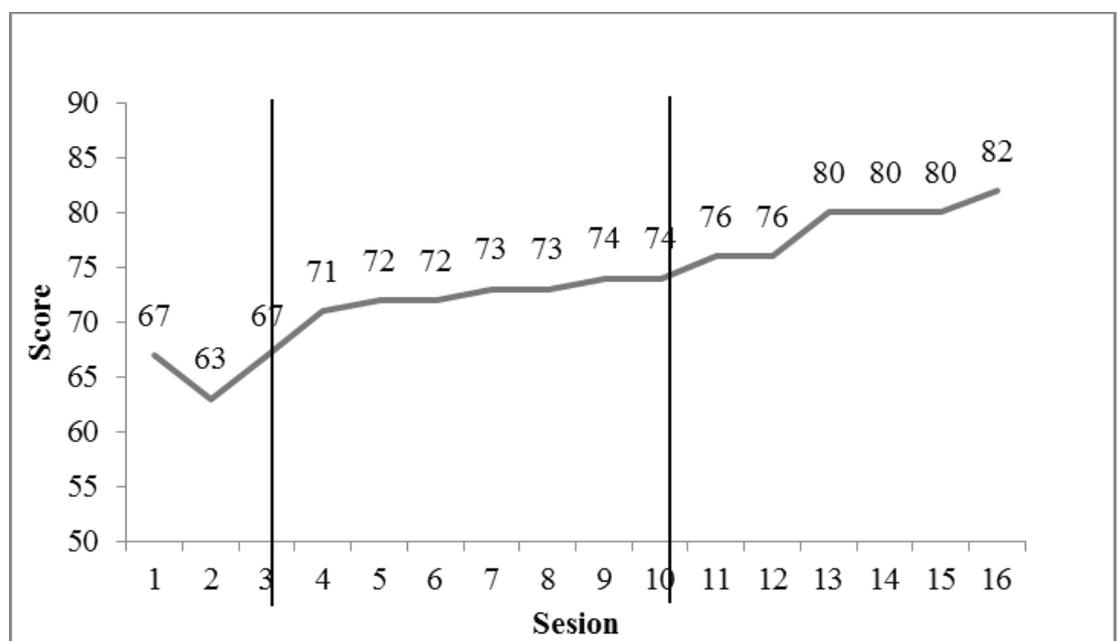


Figure 2: Direction trend subject 2.

Overlap of subject data 2, that is, upper limit = 72.32, lower limit = 61.68 baseline start (A1) and data point at intervention condition (B) which is in condition range (A1) there are 2 data. Based on the results of the calculation, it is found that subject 1 experienced overlap at baseline stage (A1) – intervention (B) of as much as 25%. These percentages lead to the conclusion that the change in the ability to read of subject 2 can be believed.

TABLE 2: Overlap data subject 2.

Condition	Baseline (A ₁) – Intervention
Percentage overlap	$\frac{2}{8} \times 100\% = 25\%$

3.3. Reading ability of subject 3

The reading comprehension ability of subject 2 in condition A1 (baseline 1) from session 1 to session 4 shows values of 61, 65, 65, and 65. The average of subject 3 on baseline 1 is 64. Subject 1’s capability under conditions of intervention (B) in session 5 to session 12 shows values of 66, 66, 72, 72, 74, 74, 78, and 78. The average of subject 2 under intervention is 72.5. Subject 3’s reading capability at second A2 baseline condition from session 13 through 16 shows values of 78, 78, 83, and 83 while the average of subject 2 on baseline 2 is 80.5. So, of the three conditions, the ability to read of subject 2 has increased significantly. The increase can be seen in Figure 2.

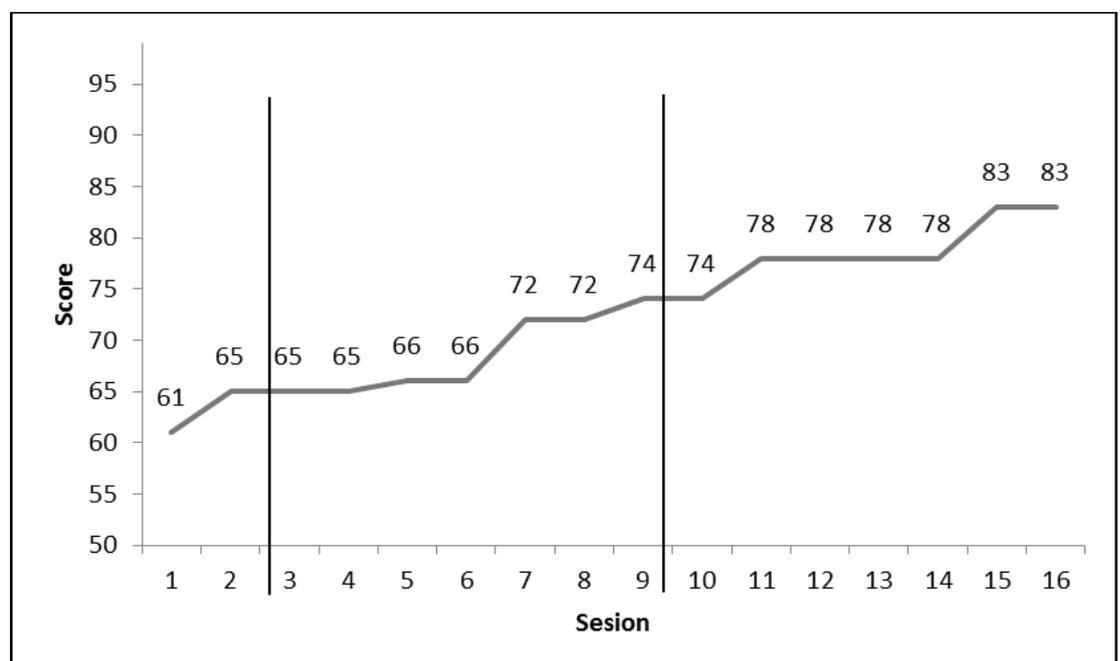


Figure 3: Direction trend subject 3.

Overlap of subject data 2, that is, upper limit = 67.25, lower limit = 60.75 baseline start (A1) and data point at the condition of intervention (B) which is in condition range (A1) there are 2 data. Based on the results of the calculation, it is found that subject 1 experienced an overlap at baseline stage (A1) – intervention (B) of as much as 25%. These percentages lead to the conclusion that changing the ability to read of subject 3 can be believed.

TABLE 3: Overlap data subject 3.

Condition	Baseline (A ₁) – Intervention
Percentage overlap	$\frac{2}{8} \times 100\% = 25\%$

3.4. Reading ability of subject 4

The ability to read of subject 4 under conditions A1 (baseline 1) from session 1 to session 4 shows values of 61, 66, 65, and 65. The average of subject 3 on baseline 1 is 64.25. Subject 1’s capability under intervention condition B from session 5 to session 12 shows values of 66, 72, 72, 74, 74, 74, 78, and 78. The average of subject 4 under intervention conditions is 73. Subject 4’s reading capability at second A2 baseline condition from session 13 through 16 shows values of 78, 83, 83, and 84. The average of subject 4 on baseline 2 is 82. Thus, from these three conditions, the ability to read of subject 4 has increased significantly. The increase can be seen in Figure 4.

Overlap of subject data 4, that is, upper limit = 67.5, lower limit = 61 baseline start (A1) and data point at intervention condition (B) which is in condition range (A1) there is 1 data. Based on the results of the calculation, it is found that subject 4 has an overlap at the baseline stage (A1) – 12.5% intervention. These percentages lead to the conclusion that changing the reading comprehension ability of subject 1 can be believed.

TABLE 4: Overlap data subject 4.

Condition	Baseline (A ₁) – Intervention
Percentage overlap	$\frac{1}{8} \times 100\% = 12.5\%$

3.5. Reading ability of subject 5

The reading comprehension ability of subject 4 under A1 (baseline 1) from session 1 to 4 shows values of 65, 66, 66, and 66. The average of subject 4 on baseline 1 is

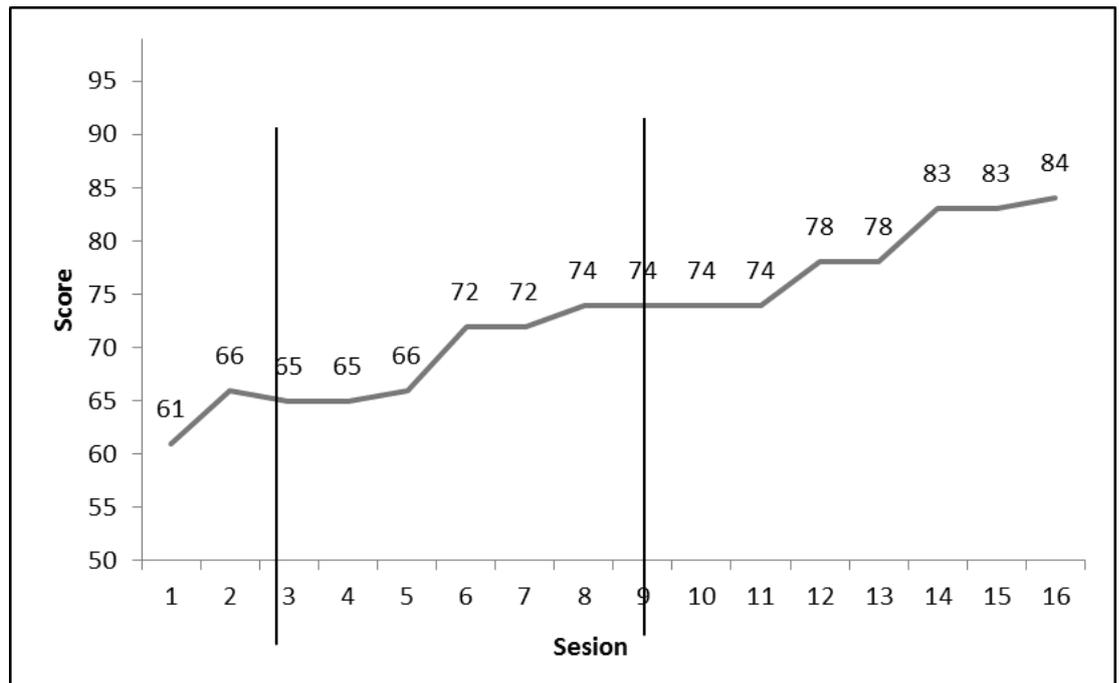


Figure 4: Direction trend subject 4.

65.75. Subject 4’s capability under intervention condition B from session 5 to session 12 shows values of 74, 74, 78, 78, 78, 84, 84, and 84. The average of subject 4 under intervention conditions is 73. The reading ability of subject 4 at second A2 baseline condition from session 13 to session 16 indicates values of 88, 83, 90, and 90. The average of subject 4 on baseline 2 is 89. Thus, of the three conditions, the ability to read of subject 4 has increased significantly, and the increase can be seen in Figure 4. Overlap of subject data 4, that is, upper limit = 69.05, lower limit = 62.45 baseline start (A1) and upper limit = 69.05, lower limit = 62.45 baseline start (A1) and no data point at intervention condition (B) condition range (A1).

Based on the results of the calculation, it is found that subject 2 has an overlap at the baseline stage (A1) – 0% intervention. The percentage leads to the conclusion that changing the reading comprehension ability of subject 4 can be believed.

The reading comprehension ability of BIPA learners has increased. This is evident from the average score obtained by BIPA learners (subjects 1, 2, 3, 4, and 5) in each condition (baseline 1 (A1), intervention (B), baseline 2 (A2)). obtained every research subject, that is as follows.

This is seen from the average score obtained by BIPA learners (subjects 1, 2, 3, 4, and 5) in each condition (baseline 1 (A1), intervention (B), baseline 2 (A2)).The average score obtained by each research subject is as follows.

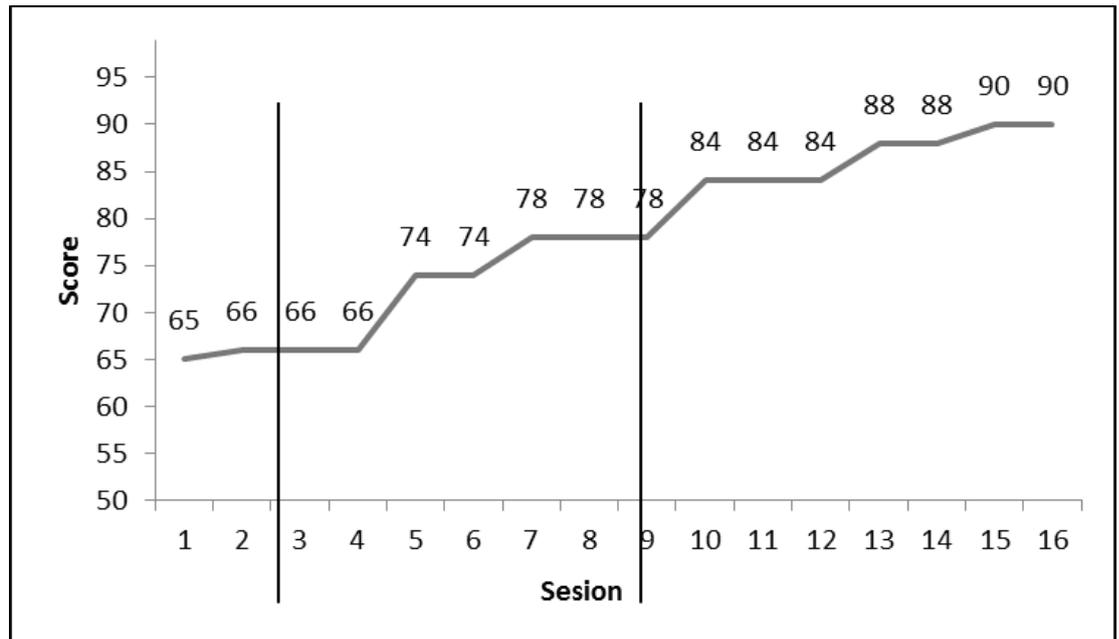


Figure 5: Direction trend subject 5.

TABLE 5: Overlap data subject 5.

Condition	Baseline (A ₁) - Intervention
Percentage overlap	$\frac{0}{8} \times 100\% = 0\%$

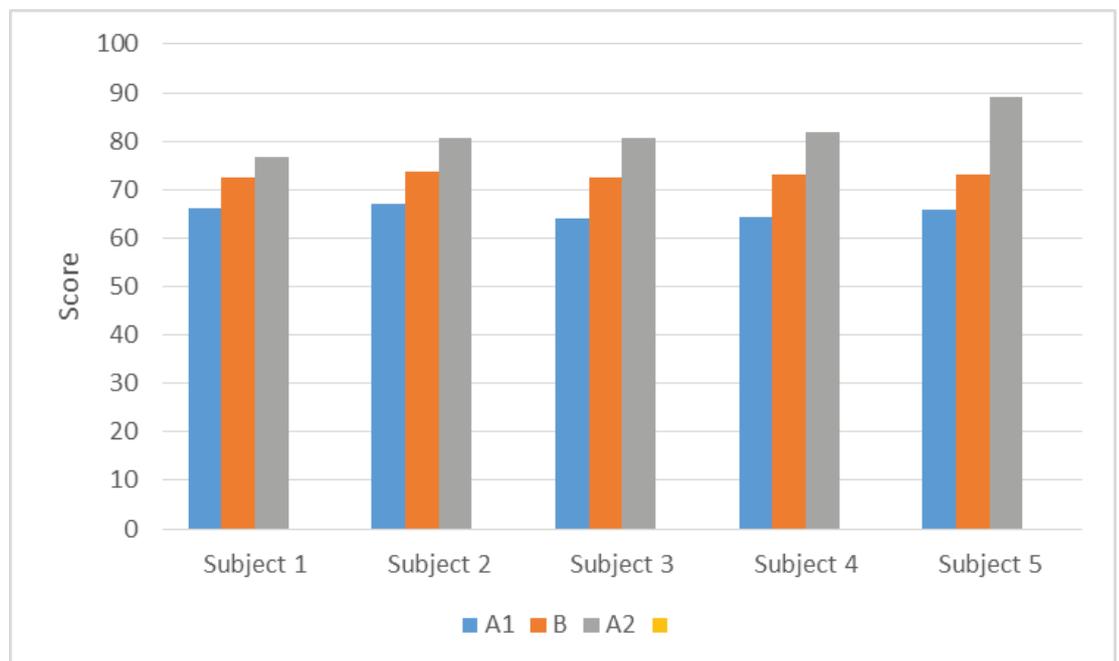


Figure 6: Average differences of each subject score under baseline 1, intervention, and baseline conditions 2.

1. Subject 1 at baseline 1 (A1) received an average score of 66 from four data retrieval sessions conducted prior to the use of the GIST method in reading comprehension. At intervention or treatment (B) subject 1 received an average score of 72.5 from eight sessions and at baseline 2 or posttest subject 1 obtained an average score of 76.75 from four data retrieval sessions after the application of the GIST method.
2. Subject 2 at baseline 1 (A1) achieved an average score of 67 from four data retrieval sessions conducted prior to the use of the GIST method in reading comprehension. At intervention or treatment (B) subject 2 received an average score of 73.75 from eight sessions and at baseline 2 or posttest subject 2 received an average score of 80.5 from four data retrieval sessions after the application of the GIST method.
3. Subject 3 at baseline 1 (A1) obtained an average score of 64 from four data retrieval sessions conducted prior to the use of the GIST method in reading comprehension. At intervention or treatment (B) subject 3 received an average score of 72.5 from eight sessions and at baseline 2 or posttest subject 3 received an average score of 80.5 from the four data retrieval sessions after the application of the GIST method.
4. Subject 4 at baseline 1 (A1) achieved an average score of 64.25 from four data retrieval sessions conducted prior to the use of the GIST method in reading comprehension. At intervention or treatment (B) subject 4 achieved an average score of 73 from eight sessions and at baseline 2 or posttest condition subject 4 obtained an average score of 82 from four data retrieval sessions after the application of the GIST method.
5. Subject 4 at baseline 1 (A1) received an average score of 65.75 from four data retrieval sessions conducted prior to the use of the GIST method in reading comprehension. At intervention or treatment (B) subject 5 achieved an average score of 73 from eight sessions and at baseline 2 or posttest condition subject 5 received an average score of 89 from four data retrieval sessions after the application of the GIST method.

4. Conclusion

Based on the results of the research and discussions that have been described previously, several conclusions can be drawn, namely:

1. The reading comprehension ability of BIPA learners improved after using the GIST method in reading learning. Therefore, the GIST method is effectively used in reading learning, especially in reading comprehension.
2. Students appear more responsive at the time of application of GIST methods in reading learning compared to BIPA learner responses when using other learning methods in learning.

References

- [1] Tarigan, H. G. (2008). *Membaca Sebagai Suatu Keterampilan Berbahasa [Reading as a Language Skill]*. Bandung: Angkasa Bandung.
- [2] Anmarkrud, Ø. and Bråten, I. (2009). The motivation for reading comprehension. *Learning and Individual Differences*, vol. 19, pp. 252–256.
- [3] Soedarso. (2005). *Sistem Membaca Cepat Dan Efektif [The Reading System is Fast And Effective]*. Jakarta: Gramedia.
- [4] Ball, P. (2010). Speed reading. *Physics World*, vol. 23, pp. 24–28.
- [5] Price, C. J. and Mechelli, A. (2005). Reading and reading disturbance. *Current Opinion in Neurobiology*, vol. 15, pp. 231–238.
- [6] Somadayo, S. (2011). *Strategi Dan Teknik Pembelajaran Membaca [Reading Strategies And Learning Techniques]*. Yogyakarta: Graha Ilmu.
- [7] Abidin, Y. (2012). *Pembelajaran Membaca Berbasis Pendidikan Karakter [Learning to Read Based on Character Education]*. Bandung: Refika Aditama.
- [8] Martens, J. (2011). Generating text with recurrent neural networks. *Neural Networks*, vol. 131, pp. 1017–1024.
- [9] Hidi, S. and Anderson, V. (1986). Producing written summaries: Task demands, cognitive operations, and implications for instruction. *Review of Educational Research*, vol. 56, pp. 473–493.
- [10] Pienereira, F., Detre, G., and Botvinick, M. (2011). Generating text from functional brain images. *Frontiers in Human Neuroscience*, vol. 5, p. 72.
- [11] Toledo, P. F. (2005). Genre analysis and reading of English as a foreign language: Genre schemata beyond text typologies. *Journal of Pragmatics*, vol. 37, pp. 1059–1079.
- [12] Sukmadinata, N. S. (2005). *Metode Penelitian Pendidikan [Educational Research Methods]*. Bandung: Remaja Rosdakarya.

- [13] Kothari, C., Kumar, R., and Uusitalo, O. (2014). *Research Methodology*. New Delhi: New Age International.
- [14] Williams, C. (2007). Research methods. *Journal of Business Economics and Management*, vol. 5, pp. 65-72.
- [15] Sunanto, J., Takeuchi, K., and Nakata, H. (2006). *Penelitian Dengan Subjek Tunggal [Research With A Single Subject]*. Bandung: UPI Press.
- [16] Forbes, S. A., Ross, M. E., and Chesser, S. S. (2011). Single-subject designs and action research in the K-12 setting. *Educational Research and Evaluation*, vol. 17, pp. 161-173.
- [17] Kinugasa, T., Cerin, E., and Hooper, S. (2004). Single-subject research designs and data analyses for assessing elite athletes' conditioning. *Sports Medicine*, vol. 34, pp. 1035-1050.
- [18] Wolery, M. and Harris, S. R. (1982). Interpreting results of single-subject research designs. *Physical Therapy*, vol. 62, pp. 445-452.