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## The Role of Multimodal Text to Develop Literacy and Change Social Behaviour Foreign Learner

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The purpose of this study is to see the role of using multimodal texts based on Indonesian local cultural content to improve the literacy skills of BIPA (Indonesian for Foreign Speakers) learners. The focus of literacy skills in this study is the learner's ability to communicate using the communication culture of Indonesian society as a result of understanding multimodal texts. The method used in this study is a single subject experimental research method (single subject method) with research design A-B-A. The single-subject experimental research method was taken because limited participants could not be divided into control and experimental classes (Cresswell, 2013; Fraenkel, Wallen, Hyun, 2015). The instrument used was multimodal text with the theme of communication culture, observation sheets, and communication skills assessment sheets in applying the understanding of communication culture from multimodal texts. The data collection method is done through authentic assessment and direct observation. Participants in this study were four BIPA learners from various professions, namely students, employees, entrepreneurs, and housewives. Data analysis was carried out by looking at the literacy competence of the subject in each condition. The research data is in the form of literacy skills, namely multimodal text interpretation to communicate. The results showed that they could develop their literacy skills including how to communicate, behaviours and communication gestures shown by foreign students. In single subject research, the data used to determine the conclusion of multimodal texts that have a significant or not role in literacy skills is overlap data.

Keywords: literacy learning, multimodal text, local cultural content, foreign students, language class

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## INTRODUCTION

One of the competencies that can help students to optimally receive and understand all information obtained is literacy competence (Doyle, 2013; Yoon & Sharif, 2015). At present, there is a striking difference between the amount of information produced and the ability of students to receive and process it. This difference will continue to increase with a vast variety of types of information data, namely structured, unstructured, fast, and fictitious (Fletcher & Bullock, 2012; Kracl, 2012; Landerholm, Karr, & Munshi, 2000). Individuals must be good at managing the information appropriately. If not, a lot of information that will make it difficult for individuals to adjust themselves to the development of the world. Information management is a difficult competency, often resulting in misunderstanding, thus requiring us to organize and analyze relevant information, find patterns, hidden correlations, and create understanding that is relevant to information that comes (Ho, Lundblad, Åstreom, & Jern, 2011; Russell, 2014).

Likewise, learning Indonesian for foreign speakers has an equally important role in helping the development of the Indonesian language and country. The regulation that requires foreign workers to speak Indonesian is a policy that aims to introduce Indonesian to the international world and help migrants to easily communicate with Indonesian citizens (Machmud, Saerang, Soegoto, & Wenas, 2019). Foreign language skills play an important role in various fields, especially in education and employment. This is proven by the Indonesian government's policy that requires educators and employees to be able to speak English other than Indonesian. Indonesian language learning for foreign speakers is a facility provided by the Indonesian government for foreign learners who are interested in learning Indonesian (Warsono, Budyanto, & Ridwan, 2019, & Runtuwarouw, 2019).

Until now, there are 45 countries participating in BIPA (Bahasa Indonesia for Penutur Asing) with 174 institutions that hold programs and are spread in several Asian and European countries. In the Darmasiswa program, Indonesian is the most popular major (survey in 2018: 65% Indonesian; 30% arts-culture, culinary and tourism 3%, others 2%). The Darmasiswa program is a scholarship program for foreign students whose country has diplomatic relations with Indonesia, to study in Indonesia. BIPA is studied by students of Darmasiswa programs in 46 to 59 universities in Indonesia. Every year, there are around 700 foreign students from around 77 countries who study art, culture, and Indonesian as well as other fields such as tourism and hospitality (Kemendikbud, 2018). The development of the number of BIPA students in Indonesia is caused by several factors, including Indonesia being a potential country for foreign students to study, establish business relations with Indonesians, travel or work in Indonesia. With these various factors, BIPA learning becomes an alternative for BIPA learners to learn Indonesian.

The BIPA learning program has become one of the country's diplomacy strategies in disseminating the country's language in the international world. Of course this needs good and proper management so that the diplomatic strategy can be accepted by other countries (Jun, Hung, When, Chen, & Aldeehani, 2019). One of the management of education socialization especially BIPA learning needs a special strategy so that the

country to which it is directed or cooperated with receives well and does not create a negative impression. One strategy that can be done is to approach from other fields first, which is considered by other countries to benefit the country and at that time the Indonesian state can enter with its BIPA diplomacy program (Ibrahim, Hung Kee, Hisham, Azahar, Abdullah, & Alfares, 2019)

One competency that plays an important role in conducting diplomacy relations is literacy competence. The ability to understand and absorb information coming from various sources requires accuracy and maturity in identifying, understanding, and taking action from the information obtained. Culture shock that is commonly experienced by BIPA learners while studying in Indonesia is one of which is determined by the ability of literacy to absorb previous information (Daley, 2003; Whitehead, 2001, 2010). Proper understanding of culture and attitudes through literacy skills is needed by BIPA learners to avoid misunderstandings between native Indonesian speakers and BIPA learners. The effort that can be done is the provision of knowledge through the BIPA learning process.

Several studies have proven that increasing the ability of foreign speakers' literacy has an impact on the attitudes and behavior of foreign speakers when communicating with native speakers. "Attending to 'culture' in intercultural language learning: a study of Indonesian language teachers in Australia" (Naidu, 2018). This research focuses on the study of Indonesian language teachers in Australia who present Indonesian culture in their teaching, starting from the methods and their impact on Indonesian language learners in Australia (Naidu, 2018; Donald, 1992; Holm, 2017). Other research "Indonesian Language Education in Australia: Politics, Policies and Responses" This study aims to look at the impact of learning Indonesian in Australia on the politics, policy, and response aspects of Indonesian language learners and the community towards the implementation of Indonesian language learning in Australia (Firdaus, 2013).

Some studies illustrate that the teaching of Indonesian certainly cannot be separated from other aspects one of which is cultural, political, social and others. The difference between previous studies and this research, is the media used in literacy learning, especially reading. The use of multimodal text in BIPA learning is the focus of this study and its impact on the literacy ability of BIPA learning. Literacy is the main key for someone to improve their language skills, such as listening, reading, speaking and writing. The quality of one's language skills is determined by how high their literacy abilities (Daley, 2003; Korat, 2009; Lifshitz-Vahav, Shrira, & Bodner, 2017).

The purpose of this study is to look at the literacy ability of BIPA learners and the changes in the social behavior of Indonesian language learners from foreign speakers through the media the media. It is considered by researchers to be more effective in helping to improve literacy skills, namely multimodal texts. Multimodal texts are considered effective in BIPA learning because the presentation of multimodal texts not only presents text in its information, but also includes graphical info, images, and other means so as to facilitate BIPA learners in understanding a text (Adami & Kress, 2014; Guo, 2017; Liebert & Metten, 2012). This research was conducted as an effort of BIPA

instructors in helping BIPA learners to be able to adapt to the culture and social life that exists in Indonesia, so that BIPA learners easily adapt to their daily lives.

Multimodal texts based on local culture can add to the schema and knowledge of BIPA learners about Indonesian culture, so that BIPA learners can demonstrate literacy through changing attitudes, gestures, and communication styles of learners with native instructors or speakers. Besides observing behavioral changes through classroom assessments, observations were also made outside the classroom for several months during the observation session. The literacy ability observed in this study is the ability to read BIPA learners' understanding of multimodal texts that have Indonesian local cultural content. In addition, changes in the social behavior of learners which include gestures, attitudes, and communication styles of BIPA learners during the BIPA learning process. The significance of this research is that the role of multimodal text is more optimal in delivering both language learning material as well as its culture for foreign learners.

### **Literature Review**

Literacy is the basis for someone to learn other things throughout his life. Literacy is very important role in human life for the welfare of himself and social life (Fransman, 2005; Whitehead, 2010). Initially literacy is meant as literacy, but the meaning is wrong meaning. The literal and technical term literacy only talks about reading and writing. So, literacy is more suitable to be interpreted as literacy (Effects, 2012; Fletcher & Bullock, 2012). Literacy implies the ability possessed by someone who is the result of language skills, namely reading and writing so as to produce and manipulate science, linguistic and grammatical analysis produce oral texts and written texts and from the impact of human history towards the philosophical and social development of western education (Kissel, Hathaway, & Wood, 2010). Literacy is deeply influenced by context. Each person and each use of literacy is situated in a world that is interactional, has certain ideologies and that changes occur as the context changes (Arslan, 2013; Daley, 2003)

Even changes and developments in human life from time to time can be said as the implications of literacy (Donald, 1991; Peyman et al., 2019; Shore, Sabatini, Lentini, & Holtzman, 2013). Literacy in this research focuses on reading skills. Reading is an essential activity element in literacy besides writing. The concept of reading undergoes a paradigm shift. Reading is an activity that involves a complex process because the reader goes through several stages during reading until finally the reader gets the information, understands, and interprets the information (Carbone & Reynolds, 2013; Cowie, 2012; Wimmer & Draper, 2019). As stated by Caldwell (2008) that "reading is an extremely complex and multifaceted process". The reader passes a simultaneous process during reading. First, the reader interprets the language codes perceptually and conceptually. After that, the reader collaborates ideas that are interpreted with the schemata that the reader already has with the aim to interpret in detail the information contained in the reading text, so that in the end the reader can build a new concepts from the reading results or can be called "The mental representation that the reader constructs from the text" (Gilliland, 1968). An understanding of sentence structures in the text allows the reader to produce a model situation by connecting the schemata he has

obtained with the meaning and information obtained from the text being read (Gurley, 2011; Sechrist, 2012; Crouse & Kasbohm, 2005; Doyle, 2013).

The term situation model can be interpreted as new concepts developed by the reader as a result of the integration of the old schemata with the new schemata and this is idiosyncratic (Gersch, Lampner, & Turner, 2016; Hughes, Parker-Katz, & Balasubramanian, 2013). These new concepts can be recalled by the reader in memory when needed when dealing with texts in other contexts. Therefore, in order for the literacy ability of learners to develop, it certainly requires a more effective media not only in the form of text but also must be accompanied by other capital that must be included in the text. These media are known as multimodal texts. Multimodal refers to the concept of modes or means by which a person communicates simultaneously with the delivery of messages either in writing or verbally (Kress & van Leeuwen, 1996; Bhojwani, 2010; Liebert & Metten, 2012).

Multimodal is also interpreted as the use of various kinds of semiotic modes in a product together to complement and strengthen the message to be conveyed in the product "(Liebert & Metten, 2012). Multimodality also refers to terms that aim to show that giving meaning is done by someone now, namely by utilizing various signs contained in the object (Guo, 2017; Gourlay, 2016; Iedema, 2003). However, Chen (2010) defines the term multimodality as an understanding of verbal and visual signs that can be used to convey messages in a text. In analyzing a text, according to experts, multimodality is defined as an "analytical procedure" that collaborates with a linguistic analysis step such as systemic functional linguistics (SFL), or Functional Grammar, with analytical tools to understand images, when the text is analyzed using two modes, verbal and picture (Imperative, n.d.; Kissel, Hathaway, & Wood, 2010). To be clear, here are some definitions of multimodal texts according to some experts:

- a. Multimodal text is a type of text that considers linguistic and visual choices to meet the purpose of the text, audience, and context and how those choices work together in the organization and development of information and ideas (Gourlay, 2016).
- b. Multimodal Text is the delivery of concepts of thought contained in a text through a variety of different modes (verbal and image) so that these concepts can be well received by readers. A text can be understood well if the text is understood by linguistics analysis and image analysis tools such as reading images that complement each other so that a complete understanding of concepts occurs (Kress & Leeuwen, 2006; Machin & Mayer, 2012).
- c. Multimodal text is a combination of two different types, namely verbal and non-verbal which are related in harmony and logic in transferring one or several meanings. The relationship can be analysed through the meta function relationship between verbal and non-verbal texts. The text in question can be in the form of texts, paragraphs, simple and complex clauses, phrases and others. Text is a concept that contains social context in it because all units and elements in the text interact with each other. This interaction is called multimodal (Adami & Kress, 2014).

Through multimodal texts, BIPA learners are presented various concepts and knowledge through texts that are accompanied by other media (oral, images, and digital) that make

language competencies such as reading, listening, writing, and speaking develop optimally. Multimodal texts serve as a medium in packaging local Indonesian cultural content, namely by displaying a number of media other than text in learning to read. This certainly aims to make it easier for BIPA learners to understand Indonesian local culture-based texts. Of course, this is expected to be applied to the daily lives of BIPA learners while living in Indonesia.

### METHOD

This study uses a single subject experiment method (single subject experiment). The implementation of a single subject research method is different from other experimental research methods. The difference lies in the method of data collection and data analysis. The basis for choosing this method is the purpose of research to see changes and developments in the conditions of BIPA learners per individual. The results of the assessment data are interpreted per individual so that changes in each individual can be seen clearly (Cresswell, 2013; Fraenkel, Wallen, & Hyun, 2015).

The research design used in this study was a single subject experimental design A-B-A. The single subject design of the A-B-A experiment is a design model that is often used in single subject experiments (Cresswell, 2013; Fraenkel, Wallen, & Hyun, 2015). The selection of research design A-B-A was based on the researcher's goal of seeing changes in the literacy conditions (multimodal text interpretation to communicate) of BIPA students after going through the intervention by leaving the research session untreated. With the selection of research design A-B-A, the researcher can see the stability of the change data from the intervention results at the stage without giving further intervention treatment so that the change data does prove the results of treatment. The instrument used at the time of the intervention was the Learning Process Plan, a multimodal text containing various themes about the communication culture of Indonesian society. The instruments used in data collection on the literacy skills of BIPA learners are literacy (communication) assessment sheets, multimodal text comprehension assessment sheets, communication skills observation sheets resulting from an understanding of the communication culture of Indonesian culture.

The data collection method in this study was carried out through an authentic assessment of the literacy skills of BIPA students and through the literacy ability observation assessment sheet, which focuses on the use of the communication culture of Indonesian society as a result of understanding the multimodal text per subject at each research session. The data analysis method was carried out by the subject by observing the changes and behavioural development of BIPA students' communication skills at each session starting from the initial baseline, intervention, and final baseline. These changes and developments are interpreted to see the effectiveness of the treatment on the literacy skills of BIPA students. In single subject research, the data used to determine the conclusion of multimodal texts that have a significant or not role in literacy skills are overlap data.

This research was conducted by a language course institute in a state university in Indonesia. The author plays a direct role as a researcher in this study assisted by BIPA teachers at the BIPA course institute. This research lasted for four months. With the

division of time, one month is to see initial literacy competencies, namely literacy skills in understanding a text about communication culture and communicating with Indonesian culture, the next two months are used to intervene by providing knowledge to increase literacy through multimodal texts containing the communication culture of Indonesian society and another month is used to see his final literacy skills.

Based on the research method used by the researcher, which is a single subject experiment, this research is appropriate for BIPA learners because of the small numbers. The subjects in this study were four middle level BIPA learners. All BIPA learners follow the BIPA learning process at Universitas Pendidikan Indonesia.

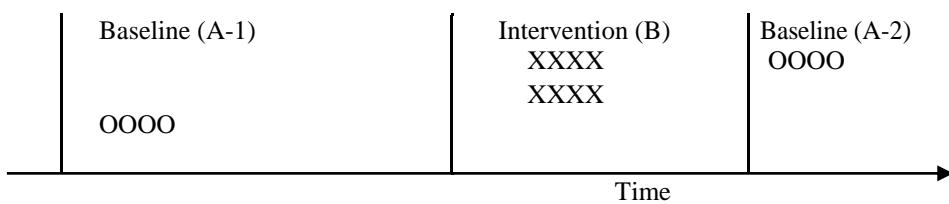


Figure 1  
Design of single subject experimental method

The A-B-A design procedure in the single subject experimental method is as follows. First, in the first baseline session (A1), the researcher saw the initial literacy abilities of BIPA learners, namely understanding and using communication culture in Indonesia. Determination of initial literacy skills is carried out after going through four observations at the baseline session with the aim of seeing the stability of the data on the early literacy abilities of BIPA students. Second, at the intervention stage (B), the researcher provides treatment by providing language material through the presentation of multimodal texts with various contexts of communication culture in Indonesia in literacy learning and at the end of the intervention process the researcher evaluates the ability to communicate using communication culture in Indonesia. This intervention stage was carried out for eight sessions which were held over a period of two months. At the intervention stage, students are really involved in the process of understanding and using multimodal texts with evaluation control at the end of the session. At the final baseline stage (A2), the researcher saw the results of the intervention with multimodal text, whether the conditions changed from the initial conditions by taking data on literacy abilities four times with the aim of being able to see the data on literacy abilities of each student was stable (Cresswell, 2013; Fraenkel, Wallen, & Hyun, 2015).

Processing and data analysis in the single-subject research method is different from the quasi-experimental method, that is, it does not use the division of the experimental class and the control class, and does not use the t-test, but analyses the development of literacy skills per subject and by looking at data overlap (overlapping data between conditions). Here's how to find out the overlap data:

- 1) First, look for the stability range by means of (the highest score at the first baseline condition x the stability criteria (0.1)).

- 2) Find the average value in the initial baseline conditions (A1) by (Number of scores) / (number of sessions)
- 3) Look for the upper and lower limit values in the initial baseline conditions with the following formula. The formula for the upper limit, that is (mean + half of the stability range), while the lower limit is (mean level - half of the stability range).
- 4) Search how many values during the intervention session (B) are in the predetermined upper and lower limit ranges then divided by the number of sessions x 100% by the formula (number of values in the range) / (number of intervention sessions (B)) x 100%. The limit of overlap data values is 25%. As long as the overlap data value does not exceed 25%, the intervention carried out means that it has a significant impact on the targeted competencies.
- 5) Determine conclusions from overlap data (Cresswell, 2013; Fraenkel, Wallen, & Hyun, 2015).

### **Participants**

BIPA learners who are the subject of participants in this study is four students. The selection and determination of the amount is done based on the rational research methods used and the objectives to be obtained. Participants were four BIPA learners from South Korea as subject 1, Australia as subject 2, the Philippines as subject 3 and Turkey as subject 4. Background of BIPA learners subject 1 was a student at a tertiary institution in Indonesia, subject 2 was an entrepreneur, subject 3 is a tour guide, subject 4 is a housewife. The four BIPA learners take non-formal education as BIPA learners at the Indonesian University of Education. The ages of the four participants varied from subject 1 (28 years), subject 2 (30 years), subject 3 (34 years), subject 4 (29 years).

### **FINDINGS**

The ability of BIPA learners to read comprehension is improved by using the GIST method. This can be seen from the average score obtained by BIPA learners (subjects 1 and 2) in each condition (baseline 1 (A1) – intervention - baseline 2 (A2)). As for the average score obtained by each study subject, namely as follows.

#### 1. Ability to communicate with Indonesian culture of BIPA learners subject 1

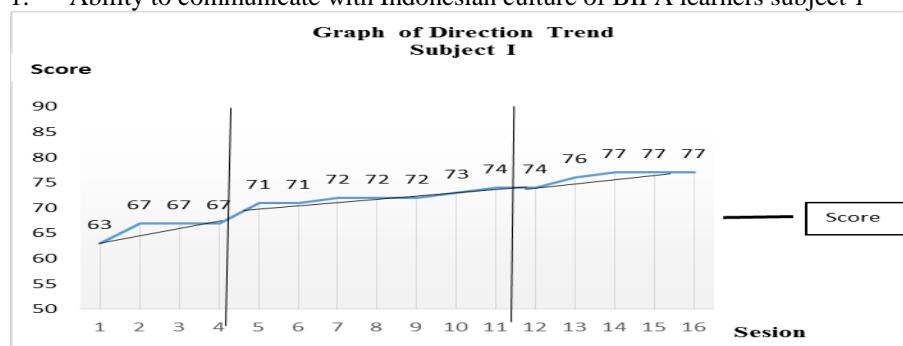


Figure 2  
Graph of direction trend subject 1

In the initial baseline conditions or pre-test (A1) session 1-session 4, the ability to communicate with the Indonesian culture of the learners showed scores of 63, 67, 67, and 67. The average BIPA subject 1 learner obtained at the initial baseline (A1) were 66. The ability to communicate with subject 1 in the intervention condition (B) in session 5 to session 12 shows the values 71, 71, 72, 72, 72, 73, 74, and 74. The mean obtained by subject 1 in the intervention condition is 72, 5. Subject 1's communication ability at the second baseline (A2) or post-test at session 13 to session 16 showed scores of 76, 77, 77, and 77. The average obtained by subject 1 in the post-test was 76.75. So that from these three conditions, subject 1's communication ability has increased. To see the impact of the intervention from the presentation of multimodal text on the communication skills of BIPA subject 1 learner, the overlap data was calculated as follows.

- Find stability ranges: Highest baseline baseline score x Stability criteria (0.1) = 67 x 0.1 = 6.7
- Find the average value in the initial baseline conditions (A1) =  $(63 + 67 + 67 + 67 + 67) / 4 = 66$
- Find the upper and lower limits of the initial baseline conditions (A1) = Average + 1/2 of the value of the stability range =  $66 + 3.35 = 69.35$ , Lower limit = Average - 1/2 of the value of the stability range =  $66 - 3.35 = 62.65$
- Find the number of data points on the intervention conditions that are in the upper and lower limit ranges.
- So the overlapping data from the data of subject 1 with an upper limit = 69.35 and a lower limit = 62.65 at the initial baseline (A1) is absent or 0 data. The overlap data can find with the formula  $\frac{\text{The number of data points in the range}}{\text{The number of intervention sessions}} \times 100\%$ . So that overlap data processing can be seen in the table below.

Tabel 1  
Overlap data sujek 1

Condition	Baseline (A1) – Intervention
Overlap Presentation	$\frac{0}{8} \times 100\%$

Based on the results of these calculations, the results show that subject 1 experienced overlap at the baseline (A1) - intervention (B) stage by 0%. This percentage provides the conclusion that changes in subject 1 communication skills can be believed.

## 2. Ability to communicate with Indonesian culture of BIPA learners subject 2

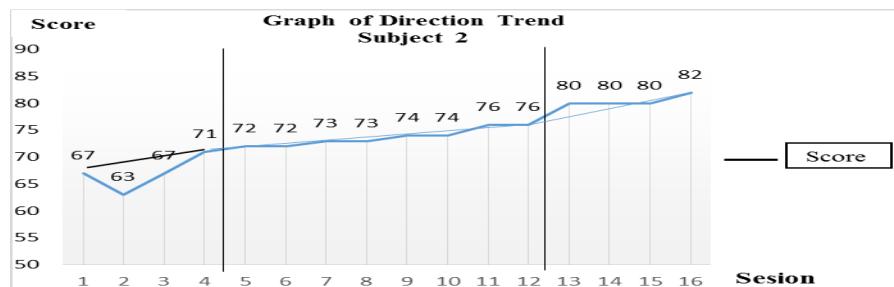


Figure 3  
Graph of direction trend subject 2

In the conditions of the initial baseline or pre-test (A1) session 1-session 4, the ability to communicate with the Indonesian culture of the learners showed scores of 67, 63, 67, and 71. The average obtained by subject 2 at the initial baseline (A1) was 67. The ability of subject 1 in the intervention condition (B), namely session 5 to session 12 shows the values of 72, 72, 73, 73, 74, 74, 76 and 76. The average obtained by subject 2 in the intervention condition was 73.75. Subject 2 in the second baseline A2 condition who was in session 13 to session 16 showed values of 80, 80, 80, and 82, while the average obtained by subject 2 at baseline 2 was 80.5. So, from the three conditions, the subject of communication ability 2 increased significantly, the increase is seen in the graph above. To see the impact of the intervention from the presentation of multimodal text on the communication skills of BIPA subject 2 learners, the overlap data was calculated as follows:

- Find stability ranges: Highest baseline baseline score x Stability criteria (0.1) =  $71 \times 0.1 = 67.1$
- Count the average value at the initial baseline conditions (A1) =  $(67 + 63 + 67 + 71) / 4 = 67$
- Search the upper and lower limits of the initial baseline conditions (A1) = Average + 1/2 of the value of the stability range =  $67 + 3.55 = 70.55$ , Lower limit = Average - 1/2 of the value of the stability range =  $67 - 3.55 = 63.45$
- Find the number of data points on the intervention conditions that are in the upper and lower limit ranges.
- So the overlapping data from the data of subject 2 with an upper limit = 70.55 and a lower limit = 63.45 at the initial baseline (A1) is absent or 0 data. The overlap

data can find with the formula  $\frac{\text{The number of data points in the range}}{\text{The number of intervention sessions}} \times 100\%$ . So that overlap data processing can be seen in the table below.

Tabel 2  
Overlap data sujek 2

Condition	Baseline (A1) – Intervention
Overlap Presentation	$\frac{0}{8} \times 100\%$

Based on the results of these calculations, the results show that subject 2 experienced overlap at the baseline (A1) - intervention (B) stage by 0%. These percentages provide a conclusion that changes in subject 2's communication skills can be believed.

### 3. Ability to communicate with Indonesian culture of BIPA learners subject 3

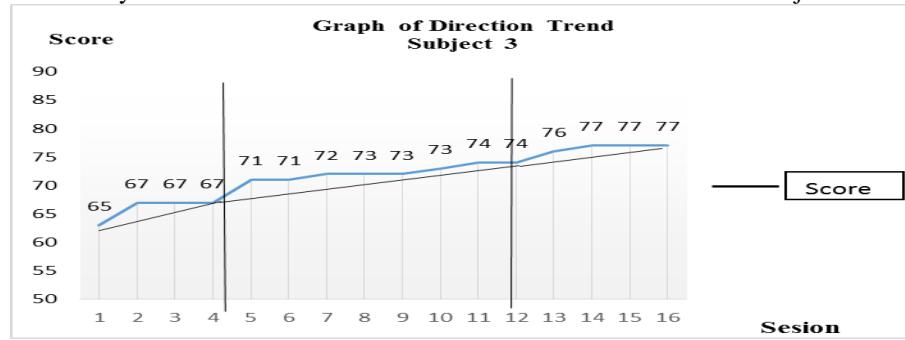


Figure 3  
Graph of direction trend subject 3

In the initial baseline conditions or pre-test (A1) session 1-session 4, the ability to communicate with Indonesian culture of BIPA learners showed a score of 65, 67, 67, and 67. The average obtained by BIPA students subject 3 on baseline 1 was 66. The ability to communicate with subject 3 in the intervention condition (B) in session 5 to session 12 shows the values 71, 71, 72, 73, 73, 73, 74, and 74. The mean obtained by subject 3 in the intervention condition is 72.5. Subject 3's ability to communicate at the second baseline (A2) or post-test in sessions 13 to 16 shows the scores of 76, 77, 77, and 77. The average obtained by subject 3 on the post-test was 76.75. So that from these three conditions the ability to communicate in subject 3 has increased. To see the impact of the intervention from the presentation of multimodal text on the communication skills of BIPA subject 3 learners, the overlap data was calculated as follows:

- Find stability ranges: Highest baseline score x Stability criteria ( $0.1 = 67 \times 0.1 = 6.7$ )
- Look for the average value in the initial baseline conditions (A1) =  $(65 + 67 + 67 + 67) / 4 = 66.5$
- Find the upper and lower limits of the initial baseline conditions (A1) = Average +  $1/2$  of the value of the stability range =  $66.5 + 3.5 = 69.85$ , Lower limit = Average -  $1/2$  of the value of the stability range =  $66.5 - 3.5 = 63.15$
- Find the number of data points on the intervention conditions that are in the upper and lower limit ranges.
- So the overlapping data from the data of subject 2 with an upper limit = 69.85 and a lower limit = 63.15 at the initial baseline (A1) is absent or 0 data. The overlap

data can find with the formula  $\frac{\text{The number of data points in the range}}{\text{The number of intervention sessions}} \times 100\%$ . So that overlap data processing can be seen in the table below, so that overlap data processing can be seen in the table below.

Tabel 3  
Overlap data sujet 3

Condition	<i>Baseline (A1) – Intervention</i>
Overlap Presentation	$\frac{0}{8} \times 100\%$

Based on the results of these calculations, the results show that subject 3 overlaps at the baseline (A1) - intervention (B) stage by 0%. These percentages conclude that changes in subject 3's communication skills can be believed.

#### 4. Ability to communicate with Indonesian culture of BIPA learners subject 4

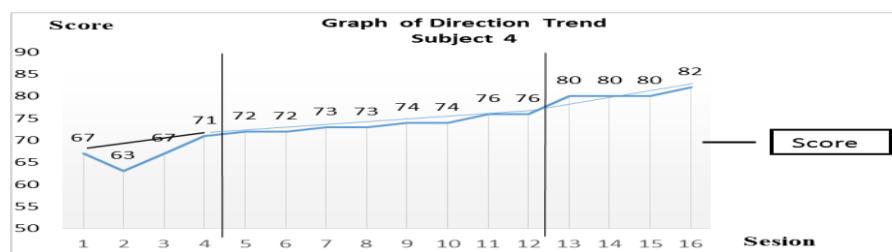


Figure 3  
Graph of direction trend subject 4

In the initial baseline conditions or pre-test (A1) session 1-session 4, the ability to communicate with Indonesian culture of BIPA learners showed scores of 67, 63, 67, and 71. The average obtained by subject 4 at the initial baseline (A1) was 67. The ability of subject 4 in the intervention condition (B), namely in session 5 to session 12 shows the values of 72, 72, 73, 73, 74, 74, 76 and 76. The mean obtained by subject 4 in the intervention condition is 73.75. Subject 4's communication skills in the second baseline condition (A2), namely in sessions 13 to 16 shows the values of 80, 80, 80, and 82, while the average obtained by subject 4 at baseline 2 is 80.5. So that from these three conditions, subject 4's ability to communicate has increased quite significantly, this increase can be seen in the graph above. To see the impact of the intervention from the presentation of multimodal text on the communication skills of BIPA subject 4 learners, the overlap data was calculated as follows:

- Find stability ranges: Highest baseline baseline score x Stability criteria (0.1) =  $71 \times 0.1 = 7.1$
- Count the average value at the initial baseline conditions (A1) =  $(67 + 63 + 67 + 71) / 4 = 67$
- Search the upper and lower limits of the initial baseline conditions (A1) = Average + 1/2 of the value of the stability range =  $67 + 3.55 = 70.55$ , Lower limit = Average - 1/2 of the value of the stability range =  $67 - 3.55 = 63.45$
- Find the number of data points on the intervention conditions that are in the upper and lower limit ranges.
- So the overlapping data from the data of subject 2 with an upper limit = 70.55 and a lower limit = 63.45 at the initial baseline (A1) is absent or 0 data. The overlap

data can find with the formula  $\frac{\text{The number of data points in the range}}{\text{The number of intervention sessions}} \times 100\%$ . So that overlap data processing can be seen in the table below, so that overlap data processing can be seen in the table below

Tabel 4  
Overlap data sujekt 4

Condition	Baseline (A1) – Intervention
Overlap Presentation	$\frac{0}{8} \times 100\%$

Based on the results of these calculations, it was found that subject 4 overlapped at the baseline (A1) - intervention (B) stage by 0%. These percentages conclude that changes in subject's communication skills 4 can be believed. The intervention phase in this study, namely the learner is given treatment through the provision of multimodal texts that have a variety of cultural content including customs, there are customs from several regions in Indonesia. In addition to being given understanding through multimodal texts, learners are instructed to try to explain again and practice it in front of the class. Multimodal texts presented make BIPA learners easier to understand various cultures in Indonesia. The interventions in this study were carried out for eight sessions. Each treatment session on the four subjects was equated namely, firstly BIPA learners were given the opportunity to read multimodal text accompanied by other images and graphics to facilitate BIPA learners. After going through the process of reading, learners are given the opportunity to re-examine their reading results and try to practice other Indonesian customs or culture. This intervention can make students more aware of Indonesian culture so that they can assess Indonesian culture and practice it in their learning and life processes when meeting Indonesian people. The treatment was carried out during the intervention process eight times with the aim that the literacy skills of BIPA students increased and the literacy abilities of students looked stable.

## DISSCUSSION

From the the results of this research, the overlapping data on the literacy abilities of all participants showed 0%. In a single subject study, overlapping data that does not exceed 25% can be ascertained that the independent variable or the use of multimodal text has a significant effect on the measured dependent variable, namely, the literacy ability of using multimodal text understanding in communicating. Based on the data above, the literacy ability of BIPA learning shows a change in ability towards a better understanding of texts that have local cultural content. This study proves the hypothesis that the presentation of language material using multimodal text has a significant impact on literacy skills, namely schemata knowledge about the communication culture of society in Indonesia and its use. This study strengthens previous studies from Landerholm, Karr, & Munshi, 2000; Mackey & Jacobson, 2005 which reinforce that literacy abilities to interpret meaning in a text and use this information will be more optimal if facilitated with various modalities in a text.

Multimodal texts that present knowledge of local culture in Indonesia increase the knowledge of BIPA students, so that the scheme of Indonesian culture in the form of customs, routines, and communication culture makes BIPA students understand Indonesian more. Increased understanding of students is shown by the ability of BIPA students to interpret and analyze texts from various contexts (Arslan, 2013; Avgerinou & Ericson, 1997). The reading ability of BIPA learners in interpreting the meaning of the text and using this meaning further shows that this multimodal text has a good impact as a means or media for BIPA students in understanding the content of the text. With an increase in a person's scheme of an object, the individual will easily adapt to the object being studied. This reinforces previous research "Introduction: Multimodality, meaning making, and the issue of" text. "Text and Talk" from research by Adami & Kress, 2014.

Knowledge of Indonesian local culture presented through multimodal texts was carried out in several sessions with different local cultures. The treatment has an impact on social behavior, attitudes, and behavior, including the style of communication that begins to appear to adjust to the communication style of Indonesia. Attitudes, social behavior, and communication styles that appear to change, namely the attitude in opening a conversation by greeting, greeting, reprimanding greeting, and giving hand signals greeting or shaking hands like native speakers of Indonesian (Geertz, 1966; Reegård & Blackett, 2019). In addition, the attitude in closing Indonesian cultural conversation is used by BIPA learners, for example BIPA female learners by hugging each other or kissing their cheeks before closing the conversation. Communication style that starts with the term "pleasantries" began to be seen in the speech of BIPA learners. However, the change in behavior is not only the result of the role of BIPA's learning process which adds to the schemata about Indonesian culture but also the interaction with native speakers that is very intense making BIPA learners accustomed to attitudes, behaviors, and social behavior in Indonesian (McKim & Wright, 2012; Nursalam, 2016, 2013; Russell, 2014; Stone & Christie, 1996).

So, based on assessments and observations during the research period, it can be concluded that this multimodal text based on Indonesian local cultural content has a good impact on BIPA learners, namely introducing culture while changing the culture of BIPA learners during their stay in Indonesia. The knowledge gained began to appear to be applied in everyday life. Of course this is the impact of the growing ability of BIPA learners in interpreting, understanding, and applying the results obtained in the form of multimodal text information. This ability to understand, interpret, and apply can be called literacy (Daley, 2003; Whitehead, 2001, 2010). The results of individual interactions with the text are applied in the academic world and everyday social life. The application of the literacy results can be seen from the results of reading tests of understanding and observations of individual observations of attitudes, social behavior, and communication styles while attending BIPA education.

## **CONCLUSION**

This research can help students from abroad who study in Indonesia to adapt to Indonesian culture. Knowledge or schemata about Indonesian local culture conveyed

through multimodal texts is certainly very helpful for foreign learners specifically foreign learners who learn Indonesian are able to adjust their language skills accompanied by language culture, attitudes, cultural communication behaviour of native speakers of Indonesian. With the improvement in literacy skills of BIPA learners, other language skills will also improve, for example, listening, reading, writing and speaking skills. This knowledge of local Indonesian culture helps BIPA learners to adapt to Indonesian culture. Such cultural knowledge makes BIPA learners more effective in following the BIPA learning process. In addition, this scheme of Indonesian local culture encourages BIPA learners to better understand and ultimately will create mutual understanding and respect between BIPA learners and native Indonesian speakers. This research can be used as a reference for BIPA teachers when teaching reading learning, one of which is by using multimodal text so that BIPA learners can easily understand the context and content of reading texts. Because this research only focuses on media or effective tools in learning literacy, researchers provide further research recommendations so that researchers can focus on developing media and means to improve literacy skills. This study proves the hypothesis that the presentation of language material using multimodal text has a significant impact on literacy skills, namely schemata knowledge about the communication culture of society in Indonesia and its use.

## REFERENCES

- Adami, E., & Kress, G. (2014). Introduction: Multimodality, meaning making, and the issue of “text.” *Text and Talk*. doi: 10.1515/text-2014-0007
- Arslan, S. (2013). A new concept in literacy: leisure literacy. *Journal of Education and Sociology*, 4(2), 145–149. doi: 10.7813/jes.2013/4-2/23
- Avgerinou, M., & Ericson, J. (1997). A review of the concept of Visual Literacy. *British Journal of Educational Technology*. doi: 10.1111/1467-8535.00035
- Bhojwani, P. Multimodality and assessment., NATE Classroom 8–10 (2010). Carbone, P. M., & Reynolds, R. E. (2013). Considering community literacies in the secondary classroom: A collaborative teacher and researcher study group. *Teacher Development*, 17(1), 127–145. <https://doi.org/10.1080/13664530.2012.753938>
- Cowie, H. (2012). *Emotional literacy in the early years. Pastoral Care in Education* (Vol. 30). <https://doi.org/10.1080/02643944.2012.651283>
- Creswell, John W. (2009). Research Design: Qualitative, Quantitative and Mixed Methods Approaches. London: Sage Publication
- Crouse, W. F., & Kasbohm, K. E. (2005). Information literacy in teacher education: collaborative model. *Educational Forum*, 69(1), 44–52. <https://doi.org/10.1080/00131720408984664>
- Daley, E. (2003). Expanding the Concept of Literacy. *Educause Review*, (March/April), 32–40.

- Donald, D. R. (1992). Reading as an active and constructive linguistic process: Implications for language and literacy policy. *Southern African Journal of Applied Language Studies*, 1(1), 1–15. <https://doi.org/10.1080/10189203.1992.9724588>
- Doyle, M. A. (2013). Marie M. Clay's Theoretical Perspective: A Literacy Processing Theory. *Theoretical Models and Processes of Reading*, (2001), 636–656. doi: 10.1598/0710.26
- Effects, T. (2012). The Effects of Fountas & Pinnell's LLI 1, 1–29.
- Firdaus. (2013). Indonesian Language Education in Australia: Politics, Policies and Responses. *Asian Studies Review*, 37(1), 24–41. doi:10.1080/10357823.2012.760527
- Fletcher, T., & Bullock, S. M. (2012). Enacting Literacy Pedagogies: A collaborative self-study by teacher educators in physical education and science. *Studying Teacher Education*, 8(1), 19–33. doi: 10.1080/17425964.2012.657011
- Fransman, J. (2005). Understanding literacy: A concept paper. *WebRef*, 26(3), 149– 57. doi: 10.3109/07434618.2010.505610
- Freankel, Jack R., Norman E. Wallen., & Helen H. Hyun. (2012). How toDesign and Evaluate Research in Education (Eight Edition). New York: McGrawHill.
- Geertz, C. (1966). The Impact of the Concept of Culture on the Concept of Man. *Bulletin of the Atomic Scientists*, 22(4), 2–8. doi:10.1080/00963402.1966.11454918
- Gersch, B., Lampner, W., & Turner, D. (2016). Collaborative Metaliteracy: Putting the New Information Literacy Framework into (Digital) Practice. *Journal of Library and Information Services in Distance Learning*, 10(3–4), 199–214. <https://doi.org/10.1080/1533290X.2016.1206788>
- Gilliland, J. (1968). The concept of readability. *Literacy*, 2(2), 24–29. doi: 10.1111/j.1467-9345.1968.tb00749.x
- Gourlay, L. (2016). Multimodality, argument and the persistence of written text. In *Studies in Writing* (Vol. 33, pp. 79–90). doi: 10.1163/9789004312067\_006
- Guo, S. (2017). Interactions, Images and Text: A Reader in Multimodality. *Discourse Studies*, 19(1), 111–113.
- Gurley, J. (2011). Reading. In *Ralph Waldo Emerson in Context* (pp. 59–66). doi: 10.1017/CBO9781139235594.011
- Holm, L. (2017). Constructions of the literacy competence levels of multilingual students. *Language and Education*, 31(5), 449–462. <https://doi.org/10.1080/09500782.2017.1305397>
- Hughes, M. T., Parker-Katz, M., & Balasubramanian, A. (2013). Learning to teach literacy through collaborative discussions of student work. *Teachers and Teaching: Theory and Practice*, 19(5), 543–558. <https://doi.org/10.1080/13540602.2013.827365>
- Ibrahim, Muhamad Fithri, Daisy Mui Hung Kee, dkk. (2019). Efficiency Issue and Its Relation to Labour/Worker. *Acia Pacific Journal of management and education*.

- Jun, Ooi Ee, Daisy Kee Mui Hung, Tan Xiang Wen, Koay Xiem Chen, Ma Jia Qi, Faisal AlDeehani. (2019). Issues of Entering New Market and Ways to Overcome the Issues Company: F&N Holdings Berhad. *Acia Pacific Journal of management and education*.
- Kissel, B., Hathaway, J. I., & Wood, K. D. (2010). Digital Collaborative Literacy: Using Wikis to Promote Social Learning and Literacy Development. *Middle School Journal*, 41(5), 58–64. doi: 10.1080/00940771.2010.11461742
- Korat, O. (2009). How accurate can mothers and teachers be regarding children's emergent literacy development? A comparison between mothers with high and low education. *Early Child Development and Care*, 179(1), 27–41. <https://doi.org/10.1080/03004430600879232>
- Kracl, C. (2012). Using Literacy Stations to Manage Small Group Instruction, 2(18), 200–209.
- Landerholm, E., Karr, J. A., & Munshi, S. (2000). A collaborative approach to family literacy evaluation strategies. *Early Child Development and Care*, 162(1), 65–79. doi: 10.1080/0300443001620106
- Liebert, W.-A., & Metten, T. (2012). Multimodal Text. In *The Encyclopedia of Applied Linguistics*. doi: 10.1002/9781405198431.wbeal0816
- Lifshitz-Vahav, H., Shrira, A., & Bodner, E. (2017). The reciprocal relationship between participation in leisure activities and cognitive functioning: the moderating effect of self-rated literacy level. *Aging and Mental Health*, 21(5), 524–531. <https://doi.org/10.1080/13607863.2015.1124838>
- Literacy, A. (2009). Concept-Oriented Reading Instruction (CORI). *What Works Clearinghouse*, (June), 1–24. doi: 10.1037/e578392011-004
- Machmud, Rizan, David P.E. Saerang, Agus S. Soegoto, Rudy S.Wenas. (2019). E-Marketing and Information System Through University Image On Student Decision Selecting Teacher Training Institute (LPTK) In Eastern Indonesia. *Acia Pacific Journal of management and education*.
- Mackey, T. P., & Jacobson, T. E. (2005). Information Literacy: A Collaborative Endeavor. *College Teaching*, 53(4), 140–144. <https://doi.org/10.3200/CTCH.53.4.140-144>
- McKim, A., & Wright, N. (2012). Reflections on a collaborative adult literacy and numeracy action enquiry. *Educational Action Research*, 20(3), 353–366. <https://doi.org/10.1080/09650792.2012.697393>
- Naidu, K. (2018). Attending to “culture” in intercultural language learning: a study of Indonesian language teachers in Australia. *Discourse*, 0(0), 1–13. doi: 10.1080/01596306.2018.1548430
- Nursalam, 2016, metode penelitian. (2013). 済無 No Title No Title. *Journal of Chemical Information and Modeling* (Vol. 53). <https://doi.org/10.1017/CBO9781107415324.004>

- Peyman, N., Tavakoly Sany, S. B., Nasehnezhad, M., Doosti, H., Chesneau, C., & Ferns, G. (2019). Associating of mother's health literacy with sunlight protective behaviors of teenage children: application of social cognitive theory. *International Journal of Health Promotion and Education*, 57(5), 274–285. <https://doi.org/10.1080/14635240.2019.1623706>
- Reegård, K., & Blackett, C. (2019). The Concept of Cybersecurity Culture The Concept of Cybersecurity Culture. *Proceedings Of the 29th European Safety and Reliability Conference*, (October), 9. doi: 10.3850/978-981-11-2724-3
- Runtuwarouw, Roddy Albert. (2019). The Motivation to Work and Environmental Influences Working Performance of The Employment at Department of Education, Youth and Sports District Minahasa. *Acia Pacific Journal of management and education.*
- Russell, F. A. (2014). Collaborative literacy work in a high school: Enhancing teacher capacity for English learner instruction in the mainstream. *International Journal of Inclusive Education*, 18(11), 1189–1207. doi: 10.1080/13603116.2014.884642
- Secrist, S. S. M. (2012). *Reading Briefing 2. Context. Early Child Development and Care*, 162(1), 65–79. doi: 10.1080/0300443001620106
- Shore, J. R., Sabatini, J. P., Lentini, J., & Holtzman, S. (2013). Changes in Reading Practices and Perceptions in Low-Literacy-Level Adult Learners. *Reading Psychology*, 34(6), 550–568. <https://doi.org/10.1080/02702711.2012.660371>
- Stone, S. J., & Christie, J. F. (1996). Collaborative literacy learning during sociodramatic play in a multiage (k-2) primary classroom. *Journal of Research in Childhood Education*, 10(2), 123–133. <https://doi.org/10.1080/02568549609594895>
- Warsono, Heribertus Yudho, Budiyanto, Akhmad Riduwan. (2019). Analysis of Educators' Work Motivation in Supporting Main Tasks of Development and Education Command of Indonesian Navy (Causal Study in Educators Group Kobangdikal, Surabaya). *Acia Pacific Journal of management and education.*
- Whitehead, M. (2001). The Concept of Physical Literacy. *European Journal of Physical Education*, 6(2), 127–138. doi: 10.1080/1740898010060205
- Whitehead, M. (2010). The concept of physical literacy. In *Physical Literacy: Throughout the Lifecourse* (pp. 10–20). doi: 10.4324/9780203881903
- Wimmer, J. J., & Draper, R. J. (2019). Insiders' Views of New Literacies, Schooling, and the Purpose of Education: "We Should be Teaching Them more Important Things." *Reading Psychology*, 40(2), 149–168. <https://doi.org/10.1080/02702711.2019.1607000>
- Yoon, B., & Sharif, R. (2015). *Critical Literacy Practice. Critical Literacy Practice*. doi: 10.1007/978-981-287-567-9