The Effect of the Individualized Education Program on Early Reading Ability for Special Needs Students Based on Reading Interest in Inclusive Elementary Schools

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Abstract
This study aims to examine the effect of the Individualized Education Program (IEP) on early reading ability of students with special needs in Inclusive Elementary Schools in Magetan Regency based on reading interest. This study used 2 x 2 factorial design with pre-test and post-test control group design. The samples were selected using a cluster random sampling technique; 35 students were selected as experimental group members, while 37 were selected as control group members. Reading interest scale was used to measure the reading interest of students, and early reading ability was measured using early reading ability test. Two-way ANOVA was used to analyse the hypothesis. The test was performed with a multiple comparison test using Scheffe's method. The results show that (1) there are differences in the early reading ability of students with special needs who are taught by applying the IEP and those who are not; (2) there are differences in the early reading ability of students with special needs between groups of students with high reading interest and low reading interest; (3) there is an interaction between the application of IEP and reading interest in improving the early reading ability of students with special needs.

INTRODUCTION
Magetan is one of the regencies in East Java Province in which 1.7% of 638,924 people are disabilities. Therefore, Magetan's Government provides educational services in the form of inclusive education. Inclusive education is a service system for children with special needs in general schools. Galevska and Pesic (2018) stated that inclusive education organizes a learning model by implementing inclusive learning techniques in public schools. The implementation of inclusive education aims to provide opportunities for special needs students to receive general and special facilities from early childhood to high school. This education has important implications in policies and special education of developed and developing countries (Chairunnisa & Rismita, 2022; Dapudong, 2014; Muthukrishna, 2014). Inclusive education aims to provide equal educational facilities for students with special needs and general students (Kucuker & Tekinarslan, 2015; Hornby, 2015).
Students with special needs entail learning and improving their self-independence. In education, students with special needs have independence problem in early reading. Early reading skill must be mastered by general and special needs students as it affects their advanced reading skill. Grimm et al. (2018) stated that one of the most essential elements to improve reading skill is language skills development. Human language skills comprise of competency in listening, speaking, reading, and writing. These four language skills are used simultaneously, integrally, and inseparably. An example of its realization is that speaking activities imply the requirements of listening activities, and writing activities imply the requirements of reading activities (Brown, 2014). Likewise, reading skill is integrated with other language skills. Cieslik and Simpson (2015) stated that cognitive activities and language skills influence reading skill.

The purpose of teaching early reading is to enable students to read simple words and sentences fluently and accurately. Brown (2014) stated that the aim of teaching reading to young children is to develop oral language skill; teach the functions of characters, story structure, application of reading strategies, and to become an independent reader. Brown conveyed several learning objectives. They are hierarchical and determined by considering child's developmental level. Therefore, the language skill needs to be developed in the first stage is oral skill. It is an essential skill for development of children's literacy. Script is a symbol of spoken language, so the higher the child's spoken language ability, the easier he/she to learn reading. Magnifico (2019) stated that early reading and writing development begins with children's awareness and exploration of the environment to build a foundation of reading and writing skill. In other words, children develop their reading and writing skills since early age as they already had an awareness of literacy, which is shown in the form of enjoying listening, discussing story books, understanding the messages contained in writing, identifying symbols in their environment, participating in rhythmic play until they start to recognize letters and match their sounds, and use letters or symbols to create messages. Shapiro et al. (2013) outlined six factors that need to be known to teach early reading, namely (1) physical, (2) perceptual, (3) conceptual, (4) linguistic, (5) practical, and (6) environmental or experimental readiness.

Referring to the curriculum and stages of cognitive development, teaching reading is begun in first dan second grades along with teaching writing and arithmetic. Specifically, learning early reading for students with special needs can be started in high grades. Picture and letter cards can be utilized in learning activities. Special needs students are likely to study with general students in teaching and learning. Early reading learning in the first and second grades of inclusive elementary schools aims to familiarize and train students to master reading techniques and use correct intonation in speaking written language well. The special assistant teacher must understand that early reading skill aims to enable students to master (1) initial skills that can be used as a basis for listening to the Indonesian language, (2) basic ability to practice Indonesian speaking.
skill, (3) basic abilities to practice reading skill in Indonesian, and (4) basic skills that are used as a basis for improving Indonesian writing skill. Clementson (2010) stated that activities of learning to read and write for elementary school students should be explicitly designed to make students confident and enjoy doing these activities. Topics, types of text, and form of the exercise are chosen to encourage students to be able to read and write based on their age level. Two of aspects referred to conduct teaching early reading are learning to read and adapting texts about real-life conditions (e.g., newspapers, labels, recipes, magazine articles, and stories).

The conditions of early reading learners in inclusive elementary schools in Magetan Regency have not been well. According to explanation of special assistant teacher, there were many obstacles in carrying out early reading learning for students with special needs. The obstacles faced by each student are different. One of the obstacles is associated with reading interest. However, only a few teachers understand these obstacles. Early reading learning must be conducted by considering the students' abilities and psychological development. Therefore, learning must be development-oriented, emphasizing several things including an individual educational program (Wiryani & Barnawi, 2014). In order to improve the early reading skill of inclusive elementary school students, development of Individualized Education Program (IEP) for early reading learning is necessary. IEP is a plan or program prepared for each child with special needs based on the results of assessment and the program adjusted to the conditions, abilities, and needs of the child concern. IEP can be a short-term or long-term program covering various aspects of education (curriculum, placement, and reference institutions related to children with special needs).

IEP preparation aims to ensure the readiness of students to (1) take part in various learning activities of public schools together with other (general) students; (2) attend the assessment system based on school standards; and (3) interact and socialize with other students. Taylor et al. (2009) said that the main components that must be included in compiling IEP are (1) identification and assessment, (2) planning, (3) evaluation, and (4) reports. Some vital information are necessary to complete the IEP (Ministry of Education Ontario, 2004), namely: (1) strengths and needs related to student learning needs; (2) supporting relevant assessment data to identify necessary factors for special education programs or services; (3) special health support services which enable the students to participate in school activities; (4) list of subjects in which the students require modification for their learning process; (5) required accommodation data to help the students in the learning process; (6) level of students’ achievement of each subject; (7) annual program objectives and learning targets of each subject; (8) assessment method to assess students’ achievement; (9) written report of students’ progress for their parents; (10) consultation documentation results of parents and students during the IEP development.

Many teachers of inclusive elementary schools have not developed and implemented the IEP in early reading learning for students with special needs yet. Based
on interview results of twelve teachers in twelve inclusive elementary schools in Magetan Regency, only one teacher in Sukowinangun Elementary School 2 has implemented the IEP, while the rest of them do not have enough understanding about the IEP. IEP is a written note which provides individual learning plans based on the student's strengths and weaknesses. IEP function as a document is to determine cooperation and collaboration among schools, parents, students, and local education office and parties from other institutions or supporting services (if necessary). Special education teachers must compile the IEP for each student. Rotter (2020) explained that the IEP is a plan or program prepared for each student (with special needs) based on the assessment results of the strengths and weaknesses of each student. His research results showed that IEP is very helpful for special education teachers, especially in compiling formative and summative models.

According to Rahim (in Dalman, 2014), interest in reading is an intense desire accompanied by one's efforts to read. People with strong interest in reading will manifest themselves in their willingness to get reading material and then read it on their own accord. Therefore, child's reading interest needs to be developed. Cultivating child's interest in reading is better done early when the child is just getting to know something. Sinambela (in Yetti, 2009) defined interest in reading as positive attitude; sense of children attachment to reading activities; and interest in it. Reading pleasure, reading frequency, awareness of the benefits of reading, frequency of reading, and number of books read child are aspects of reading interest.

Based on the description above, IEP is needed to improve early reading ability of students with special needs. Many teachers still apply the IEP in early reading skill, especially for students with special needs. So far, teachers have only adhered to lesson plans to improve early reading skill of students with special needs. This study aims to test the effectiveness of the IEP on early reading abilities for students with special needs at Inclusive Elementary Schools in Magetan Regency based on reading interest. In detail, the aims of this study are to find (1) differences between students (with special needs) who were taught using IEP and those who were taught without IEP in early reading abilities; (2) differences between group of students (with special needs) who have high reading interest and low reading interest; (3) interaction between the implementation of IEP and reading interest on improving the early reading ability of students with special needs.

**METHOD**

*Research Design*

The experimental research design was used based on the research objectives described above. The type of experimental research used was quasi-experimental design, as it was impossible to control all the variables which were likely influence the treatment. This experimental research used two groups: experimental and control groups. The
The experimental group was treated by applying IEP in the teaching process, while the control group was taught without using IEP. The experimental procedure in this study is explained as follows: (1) measuring the students’ reading interest; (2) conducting a pre-test of experimental group and control group; (3) conducting the treatment using IEP for the experimental group while the control group was taught without using IEP; and (4) conducting post-test of early reading ability on the experimental group and the control group.

To determine the effect of independent variable on dependent variable and its interaction with the moderator variable, a 2 x 2 factorial design was designed with pre-test and post-test control group design. The design used in this study was to analyse (1) the main effect of IEP application treatment on early reading ability, (2) the effect of reading interest level owned by students on their early reading ability, (3) the interaction between the application of IEP and reading interest on early reading skills.

**Participants**

The population in this study were all students with special needs in 43 inclusive elementary schools in Magetan (374 students). Sampling was done through random sampling. A cluster random sampling technique was used to obtain ten inclusive schools as the sample members divided into experimental group and control group in which each of group consist of five inclusive schools. The ten inclusive schools were determined by considering the representativeness of the total population. The experimental groups were SDN Sukowinangun 2, SDN Ploasang 1, SDN Balegondo, SDN Turi 1, and SDN Maospati, while the control groups were SDN Bangsri 2, SDN Bulugunung, SDN Kerik, SDN Sukowinangun 1, SDN Sumberdukun, and SDN Tulung. Sample members of the experimental group were 35 students, and the control group contained 37 students. Students with special needs in this study were the slow learners, students who have learning difficulties, dyslexia, ADHD, and mild physical impairments. Considering research ethics, identity of the students are kept confidential. The method used to determine participants in the experimental and control groups was the regional method. Thus, the schools located in urban and rural areas were represented in each experimental and control group.

**Measures**

The instrument used to collect data in this study was the reading interest scale to determine the reading interest. The reading interest scale comprises of four indicators, namely motivation to read, concentration, feelings while reading, and use of reading time. Example: “I read the book carefully.” A preliminary reading ability test measures early reading ability which consists of five sentences and each sentence consists of five words. Example: “The teacher reads a storybook.” For special needs students, reading one sentence is challenging activity. The scoring is based on the number of words correctly read by students in each sentence. In other words, the maximum score for the overall early reading ability test is fifty. The construct validity of the early reading ability test was
conducted through an expert judgment by language learning expert. Empirical validity was proved by implementing the early reading ability test on students who were not part of research participants. The test results were analysed using the product moment correlation formula by Karl Pearson using IBM SPSS program version 20. The reliability test of the early reading ability questions conducted using Cronbach’s Alpha formula. The result showed that the questions of the early reading ability test are reliable as the value of Cronbach’s Alpha was 0.800.

**Procedures**

The data of this study was collected in two stages: the experimental preparation stage and the experimental implementation stage. The experimental preparation stage done by conducting preliminary observation to obtain overview of students' early reading ability problems and IEP condition in targeted schools. The next activity was preparing learning tools and instruments for collecting research data. The learning tools prepared were Lesson Plans (LP), assessment instruments, and the IEP. At the experimental stage, the performed activities included: (1) measuring the reading interest variable in the experimental and control group; (2) conducting pre-test of early reading ability on the experimental and control group; (3) conducting the IEP on the experimental group while the control group was taught without using the IEP; and (4) conducting early reading ability post-test on the experimental and control group. The experiment was performed in sixteen meetings. The meeting has been conducted twice in a week in which each of meeting was two sessions, 2 x 30 minutes in length.

**Data Analysis**

Data analysis technique used to test the hypothesis in this study was two-way ANOVA. A further test was conducted using multiple comparison test by applying Scheffe's method. This advanced test aimed to find out interaction between the IEP variable and the reading interest variable on early reading ability.

**RESULTS**

The difference in average score can be analysed based on the pre-test and post-test results of early reading ability in the experimental and control groups. Analysis of difference in average score of pre-test and post-test results was intended to identify the percentage difference of the early reading ability score. Description of comparative data and difference average scores of early reading ability pre-test and post-test of the experimental and control groups are presented in Table 1.

**Table 1**

**Reading Ability Score of Experimental and Control Groups**

<table>
<thead>
<tr>
<th>Independent variable: Early Reading Ability</th>
<th>N</th>
<th>M (Pre-test)</th>
<th>M (Post-test)</th>
<th>Difference</th>
<th>Increase (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental Group</td>
<td>35</td>
<td>33.40</td>
<td>44.11</td>
<td>10.71</td>
<td>32.06%</td>
</tr>
<tr>
<td>Control Group</td>
<td>37</td>
<td>33.35</td>
<td>35.35</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

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The level of reading interest in this research is categorized into two groups: high reading interest and low reading interest. Result analysis data of the pre-test and post-test of early reading ability showed that the average score between both of the tests either in high or low reading interest is difference. The result analysis of average and comparation scores of pre-test and post-test on early reading ability are served on Table 2 below.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Reading Ability Score Based on Reading Interest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Independent Variable: Early Reading Ability</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>High reading interest</td>
<td>35</td>
</tr>
<tr>
<td>Low reading interest</td>
<td>37</td>
</tr>
</tbody>
</table>

The results of the prerequisite tests are described as follows: the result of normality test showed that data obtained from pre-test and post-test on early reading abilities of the control group and the experimental group were normally distributed ($p > 0.05$). Likewise, the pre-test and post-test mean distribution of the early reading ability in the reading interest group were below average ($p > 0.05$).

Levene's test was used to test the homogeneity data among two or more compared groups. The results of the homogeneity test of the early reading ability pre-test score in the experimental and control groups showed that $F$-count value 0.743 with a significance 0.391. The post-test result showed that $F$-count value 1.524 with a significance 0.221 ($p > 0.05$). It means that the variance of the experimental group data and the control group is homogeneous. The homogeneity test of the pre-test early reading ability of high and low reading interest groups result showed that $F$-count value 0.291 with a significance 0.591. In contrast, result of post-test showed $F$-count value 3.949 with a significance 0.51 ($p > 0.05$) which means the variance data of the high and low reading interest are homogeneous.

To test the balance of the average score of early reading ability between the experimental and control group was conducted by using balance test before the treatment using independent test. The result showed $t$-count 0.047 with a significance 0.963 ($p > 0.05$) which means that there was no significant difference in early reading ability between the experimental and the control group before the treatment.

Two-way ANOVA was used to test the hypothesis of this research. The result of two lanes variants is presented in Table 3 below.

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Result of ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Type III Sum of Squares</td>
</tr>
<tr>
<td>Corrected Model</td>
<td>1737.822$^a$</td>
</tr>
<tr>
<td>Intercept</td>
<td>113687.332</td>
</tr>
<tr>
<td>Kelp</td>
<td>1392.751</td>
</tr>
<tr>
<td>Reading Interest</td>
<td>323.195</td>
</tr>
<tr>
<td>Kelp * Reading Interest</td>
<td>27.304</td>
</tr>
</tbody>
</table>
Data reserved on Table 3 is result of further analysis of the research hypothesis. Criterion of hypothesis test is that Ho is rejected if the significance value is \( p < 0.05 \). Several results obtained from the analysis using ANOVA are: (1) \( F \)-count of post-test scores between the experimental and control groups is 238.383. Ho is rejected since the significance value of \( F \)-count for the application of IEP is less than 0.05. By way of explanation, there is a significant difference in the early reading ability of students who were taught using IEP and students who were taught without IEP; (2) \( F \)-count of post-test scores between high and the low reading interest group is 55.318. Ho is rejected as the significance value of the \( F \)-count is less than 0.05. Thus, it can be concluded that there is a significant difference in the early reading ability between students with high reading interest and those with low reading interest; (3) the results of the post-test score interaction test between the research group and the reading interest group showed that \( F \)-count is 4.673, with a significance 0.034 < 0.05. Thus, Ho is rejected as the significance value of \( F \)-count is less than 0.05. This means there was an interaction between the experimental and control group, that is improving students’ early reading ability either on high reading interest group or the low reading interest group.

Further analysis was performed using Scheffe’s method to examine the differences of each research cell group based on the IEP application and reading interest groups. The results of multiple comparison test on EIP application and reading interest using Scheffe’s method are presented in Figure 1 below.

**Figure 1**

*Result of Multiple Comparison Test between Cells Using Scheffe’s Method*

<table>
<thead>
<tr>
<th>Multiple Comparisons</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>A1B1</td>
<td>3.013*</td>
<td>.820</td>
<td>.006</td>
<td>.66</td>
</tr>
<tr>
<td>A1B2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2B1</td>
<td>7.583*</td>
<td>.831</td>
<td>.000</td>
<td>5.20</td>
</tr>
<tr>
<td>A2B2</td>
<td>13.066*</td>
<td>.820</td>
<td>.000</td>
<td>10.71</td>
</tr>
<tr>
<td>A1B2</td>
<td>-3.013*</td>
<td>.820</td>
<td>.006</td>
<td>-5.36</td>
</tr>
<tr>
<td>A2B1</td>
<td>4.570*</td>
<td>.795</td>
<td>.000</td>
<td>2.29</td>
</tr>
<tr>
<td>A2B2</td>
<td>10.053*</td>
<td>.784</td>
<td>.000</td>
<td>7.80</td>
</tr>
<tr>
<td>A2B1</td>
<td>-7.583*</td>
<td>.831</td>
<td>.000</td>
<td>-9.96</td>
</tr>
<tr>
<td>A2B2</td>
<td>-4.570*</td>
<td>.795</td>
<td>.000</td>
<td>-6.85</td>
</tr>
<tr>
<td>A2B1</td>
<td>-13.066*</td>
<td>.820</td>
<td>.000</td>
<td>-15.42</td>
</tr>
<tr>
<td>A2B2</td>
<td>-10.053*</td>
<td>.784</td>
<td>.000</td>
<td>-12.30</td>
</tr>
<tr>
<td>A2B1</td>
<td>-5.482*</td>
<td>.795</td>
<td>.000</td>
<td>-7.76</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the .05 level.
Figure 1 demonstrates the results of multiple comparisons test. The different test between cells was performed in the IEP application group using the reading interest scale. The results of data analysis revealed that: (1) between cells in the IEP application group which had high reading interest and the IEP implementation group which had low reading interest had mean difference (3.013) with a significance value 0.006 < 0.05. This means that there is a significant difference among the compared cells, (2) between cells in the IEP application group with high reading interest and the group without IEP application with high reading interest had mean difference (7.583) with a significance value 0.000 < 0.05. This means that there is a significant difference between the compared cells, (3) between the cells of the IEP application group with high reading interest and the group without IEP application and low reading interest group had mean difference (13.066) with significance value 0.000 < 0.05. This means that there is significant difference between the compared cells, (4) between the cells of the IEP application group with low reading interest and the group without IEP application with high reading interest had mean difference (4.570) with significance value 0.000 < 0.05. This means that there is no significant difference between the compared cells, (5) between the cells of the IEP application group with low reading interest and the group without IEP implementation with low reading interest had mean difference (10.053) with significance value of 0.000 < 0.05. This means that there is a significant difference between the compared cells, and (6) between cells of the group without IEP application with high reading interest and the group without IEP application with low reading interest had mean difference (5.483) with significance value of 0.000 < 0.05. This means there is no significant difference between the compared cells.

DISCUSSION

The experimental study has three significant findings based on the data analysis results. First, there were differences in the early reading ability of students with special needs who were taught by applying the Individualized Education Program (IEP) compared to the students were taught without the application of IEP. This phenomena is supported by idea which mentioning that the IEP is an essential document (for education of children with special needs) in the form of written statements which are addressed to each child, and the statements entail development, improvisation, observation, and revision every meeting (Blackwell & Rossetti, 2014). Vusparatih (2011) added that the IEP is a plan or program for each child with special needs arranged based on the assessment results of disabilities had by each child. This IEP program can be short-term or long-term and including education, psycho-social-emotional, and references related institutions for children with special needs.

Referring to the stages of IEP development compiled by the Ministry of Education of British Columbia (Rovik, 2017), the preparation of IEP in early reading learning is structured through stages: (1) Assessment. This step can be organized in several ways,
such as observing the student's abilities and behaviour, reading documents of students’ development available at school, conducting structured interviews with special assistant teachers and carrying out formal and informal tests (e.g., inclusive assignments, psychological diagnoses examination, benchmark reference tests, normative reference tests, and other tests in the form of oral tests, presentations, and handwriting); (2) Collaboration. It is a process in which people work together to solve common problems that are being the concern at that time; (3) Writing. IEP must contain the identity of students, development and implementation team, conducted assessment, obstacles and strength, needs and treatment, supporting and inhibiting factors, treatment plans, and so forth. IEP that has been developed is used as a reference in developing learning tools, such as syllabi, annual programs, semester programs, and lesson plans; (4) Introducing the developed IEP will be helpful if it has been introduced and practiced correctly; (5) Monitoring. It is a process in which educators gather and use student's responses data regarding the way and level of student psychological development to determine the goals expected to be achieved by the IEP; (6) Review. Purpose of the IEP review is to determine the level of feasibility and effectiveness of IEP, provide data of student progress, and identify the strategies used to the transition process; and (7) Report. Development report contains a description of the student's development towards the targeted goals. The description comprises of subjects, courses, or class levels. Reports must be objective, brief and do not use a particular accent. Reports need to be made by class teachers, subject teachers, special assistant teachers, and related agencies.

The aim of IEP arrangement is to enable students with special needs to participate in all school activities together with other general students. Therefore, the IEP drafting team must understand the process of compiling the IEP as it is the primary curriculum for students with special needs. The difference of time setting to achieve target and standard values means that the students will experience different teaching and learning activities compare to general students. The percentage of learning activities differences between students with special needs and general students highly depends on the severity of each student with special needs (Vusparatih, 2011).

The second finding shows a difference in the early reading ability of students with special needs in terms of reading interests level (high and low). This means that students with special needs have different reading interests. Based on the result of teacher interviews, students with special needs reading interest are still low because of limitations, so they are less motivated to read. Therefore, by providing exciting books, teachers encourage their students to be highly interested in reading. Sumardi et al. (2018) supported this. They stated that students with special needs have difficulty in reading. It is necessary to create reading habits, learn while playing, and use appropriate learning methods by considering the learning styles of students with special needs to improve their reading skills. Survey conducted by Program for International Student Assessment
(PISA) 2018 noted that Indonesian students' reading ability was ranked on 74th out of 79 surveyed countries.

The research concluded that the reading ability of Indonesian children between 9-14 years old was deficient. Several measured aspects by PISA were the student's ability to retrieve text, the ability to interpret text, and the ability to process and give meaning to the text. Some research results show that reading interest directly affects academic achievement. For students with special needs, reading interest is strongly influenced by parental support in providing books. Parents reading assistance make students feel happy and focus on what they read (Aprilia et al., 2020; Lianti et al., 2022; Toste & Lindstrom, 2022). Triatma (2016) stated that interacting with texts, including biographies, historical fiction, legends, poetry, and brochures, can improve students reading performance. Besides that, Pitoyo et al. (2020) explained that aspects of reading interest include reading pleasure, reading frequency, awareness of the benefits of reading, frequency of reading, and the number of reading books read by child.

The third finding shows an interaction between the application of the IEP and the reading interest in improving the early reading skills of students with special needs. Leftsein (2007) stated that the application of IEP considers the limitations and inability to deal with the disruptions faced by students with special needs. Elder et al. (2018) explained that these limitations relate to the disabilities of each child with special needs. The disabilities will become a consideration to select the appropriate part from general curriculum, goals, and objectives and select environment with minimal limitations.

In the implementation, IEP focuses more on what is being learned by students in specific periods. IEP explains how students with special needs study, presents examples of what has been studied, and what teachers and education providers will do to help the students with special needs by enabling them to learn actively (Rovik, 2017).

CONCLUSION

Based on the results and discussion, it was concluded that there are differences in the early reading abilities of students with special needs who were taught by applying the IEP and those were taught without the IEP. There is a difference in the early reading ability of students with special needs regarding the level of students’ reading interest (high and low). Moreover, there is an interaction between the application of the IEP and the reading interest in improving the early reading ability of students with special needs.

The recommendation from these results is for other researchers to develop IEPs according to the types of students’ (with special needs) disabilities, and it is hoped that teachers can create IEPs that are integrated with lesson plans.

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REFERENCES


