

## The Effectiveness of Akm (Minimum Competency Assessment) Practice on Student's English Learning Outcomes at Sma Negeri 11 Samarinda

### Author

Elva Nadia Zulkarnain  
Widya Gama Mahakam Samarinda University, Indonesia  
elvazulkarnain@gmail.com

Godefridus Bali Geroda  
Widya Gama Mahakam Samarinda University, Indonesia  
Defri@uwgm.ac.id

Widi Syahtia Pane  
Widya Gama Mahakam Samarinda Univerisy, Indonesia  
widi.pane@gmail.com

### Abstract

#### **Background:**

In the learning process at school, of course, teachers and students have learning targets or minimum scores of success indexes that students must achieve. In that case, students' understanding and effective test tools in achieving learning outcomes are very necessary. (AKM) is an assessment of the basic competencies required by all students to be able to develop their own abilities and play an active role in community in activities that have positive values (Mendikbud 2020). AKM is used for measuring students' cognitive abilities where the aspect that is measured is literacy ability reading and numeracy literacy (Nanda Novita 2021). AKM is designed to encourage implementation of innovative learning oriented to the development of abilities reasoning, especially literacy activities that improve language students' reading comprehension skills. the researcher wants to find out whether the AKM could be used as an effective and innovative test for students' learning outcomes especially in reading skill.

#### **Methodology:**

This study used a quasi-experimental method (Quasi Experiment). with quatitative data to obtain an overview of improving student learning outcomes. In addition, the research used was a non-equivalent control group design. The control group and the experimental group were pre-tested. The treatment in the two groups was different, where the experimental group used AKM practice questions as additional knowledge and literacy and the control group was only given general practice questions. and ends with a final test for each group. Meanwhile, the control group in the quasi-experiment only served as a baseline to be compared with the experimental group.

#### **Findings:**

Based on the results of the data obtained and the results of the analysis, it was found that the AKM was effective in improving student learning outcomes

#### **Conclusion:**

from the research results, it is known that there is a significant influence on student learning outcomes. which can be seen from the increase in student scores before and after being given treatment in the experimental and control classes. However, the N-Gain test proves that the experimental class is more effective with the application of AKM questions which with a percentage of 62.9% results are stated to be quite effective and from the results of the Mann Whitney-u hypothesis test using SPSS it states that H1 is accepted, where there is a significant difference between teaching using AKM practice questions with questions in general. Based on the output of "Test Statistics" it is known that Asymp. Sig. (2-tailed) is  $0.034 < 0.05$ . Then it can be concluded that "H1 is accepted"

**Originality:**

The biggest challenge is how to take student scores to see that learning outcomes greatly influence the final results, therefore we as teacher candidates must be able to find and use the best type of test for students as in this study using AKM which turned out to be able to improve student learning outcomes which has a fairly high level of effectiveness.

**Keywords** : *AKM, Reading & Learning Outcomes.*

|                              |   |
|------------------------------|---|
| <b>DOI</b>                   | : 10.53622/ij.v1i02.166   |
| <b>Received</b>              | : February 2023   |
| <b>Accepted</b>              | : March 2023  |
| <b>Published</b>             | : April 2023  |
| <b>Copyright and License</b> | : Authors retain copyright and grant the journal right of first publication with the work simultaneously licensed under a Creative Commons Attribution 4.0 International License that allows others to share the work with an acknowledgment of the work's authorship and initial publication in this journal.<br> |

## 1. INTRODUCTION

As prospective teachers, people must know that the success of the learning process is when students can master various skills in learning, especially in language classes. In language class, some of the skills that they must have are speaking, writing, listening, and most importantly reading. When students are able to read well, they can understand various materials and content contained in the context or reading materials related to their subjects and this can help students to think actively and creatively in understanding, processing, identifying something important information they read. for their learning success. Usually, to help students improve their reading skills, we can give them a assesment to determine their understanding of reading texts.

Learning assessment activities are an inseparable element all through the academic technique takes place. However, now no longer all sorts of checks may be evaluated and used as as a device to measure learning achievement. If you operate a measuring device that appropriate, the achievement of training may be measured clearly. Evaluation sports carried out to college students and establishments each formal and non-formal at each stage and kind of training (A. Sari et al. 2021). Therefore, in wearing out the assessment, it's far higher if precept to acquire some thing higher, in order that each assessment finished through every group is geared toward attaining higher training. Utilization of national exam outcomes because the simplest indicator of student achievement for the duration of the getting to know manner is truely now no longer right. It also can be visible that primarily based totally at the outcomes the world's evaluation of schooling in Indonesia that in step with the 2015 PISA record that could be a world-magnificence evaluation application in which students'

instructional overall performance 15 years vintage to be tested. The outcomes of the record imply that the nice of the gadget schooling in Indonesia is ranked sixty two out of seventy two collaborating international locations entirely (Nanda Nova 2021). This indicates that the improvement of schooling in Indonesia remains a long way away lagging at the back of different international locations withinside the world. Therefore, the Ministry of Education and Culture enforcing the modern-day application known as the National Assessment in lieu of the Exam National with a purpose to be applied in 2021.

Assessment is an activity to reveal the quality of the process and results learning (Resti and Kresnawati 2020). So it can be said that the assessment is the application of the use of assessment tools to obtain as much information as about the success of students in mastering certain competencies. Assessment This is different from evaluation where evaluation is only oriented to cognitive abilities that related to value (Resti and Kresnawati 2020). The National Assessment Assessment includes three aspects, namely the Minimum Competency Assessment (AKM), character survey, and learning environment survey (Nanda Novita 2021).

Assessment Minimum Competence (AKM) is an assessment of the basic competencies required by all students to be able to develop their own abilities and play an active role in community in activities that have positive values (Mendikbud 2020). AKM is used for measuring students' cognitive abilities where the aspect that is measured is literacy ability reading and numeracy literacy (Nanda Novita 2021). AKM is designed to encourage implementatio of innovative learning oriented to the development of abilities reasoning, especially literacy activities that improve language students' reading comprehension skills In this study, the researcher wants to find out whether the AKM could be used as an effective and innovative test for students' learning outcomes.

## **2. METHOD**

The design of the research is quantitative research to describe the data. According to Creswell (2017) quantative is described as research problem beased on trends the field with relationship between variables. Quantitative research is the most common way of gathering and dissecting mathematical information. It tends to be utilized to track down examples and midpoints, make forecasts, test causal connections, and sum up outcomes to more extensive populaces. Quantitative exploration is something contrary to subjective examination, which includes gathering and breaking down non-mathematical information ( text, video, or sound).Quantitative exploration is generally utilized in the regular and sociologies: science,

---

brain research, financial matters, humanism, advertising, and so forth. There are a number of useful resources for the quantitative measures used to evaluate implementation research studies. First is the Instrument Review Project affiliated with the Society for Implementation Research Collaboration (Lewis et al., 2015). The results of this systematic review of measures indicated significant variability in the coverage of measures across implementation outcomes and salient determinants of implementation.

This research used a quasi-experimental method (Quasi Experiment). Quasi-experimental method to obtain an overview of increasing student learning outcomes. In addition to the research used was the Non-equivalent control group design. The control group and the experimental group were carried out pre-test. The treatment in the two groups was different, where the experimental group used AKM practice questions as additional knowledge and literacy and the control group was only given general practice questions. and ends with a final test for each group. Meanwhile, the control group in the quasi-experimental is only a baseline to compare with the experimental group.

Research is conducted offline for treatment and online for data collection using customized worksheets, such as Google forms, etc. due to time constraints with other agendas at school. The researcher chose the tenth grade of SMA Negeri 11 Samarinda for the English subject because it was considered very appropriate in learning and wanted to be tested. There are still many obstacles in the ability to speak English, especially in reading activities, therefore the researcher chose and researched this place.

Since this study utilizes a quantitative methodology, the researcher will utilize purposive sample it is considered fit to test which. purposive examining is choosing people or gatherings of people who are truly educated or experienced with intriguing peculiarities. According to Etikan (2010). Purposive sampling technique is also known as judgment sampling, namely the selection of participants deliberately because the quality or criteria of participants is in accordance with the research objectives Basically, analysts conclude what they need To be aware and decide to track down the ideal individuals and need to give data in view of their insight and experience. Purposive inspecting helps researchers in choosing participants in this research. According to Sugiyono (2016) Purposive sampling is a sample research technique with certain considerations. The reason for using this technique is because it is suitable for use in quantitative research. it takes samples with certain characteristics in the study. There are several classes at SMA Negeri 11 Samarinda that meet the requirements in this study, the researcher chose class X as the research subject because it was at the right

level, and as the first batch to implement this AKM system in 2021. Subjects in class X amounted to approximately two hundred students, and with a purposive sampling technique participants were selected according to the criteria so that the resulting data could answer research questions.

In quantitative research, data analysis is in the form of numbers from the results of the given instrument. Data pretest and posttest scores obtained from questions given to students and calculate the N-Gain. The comparison of gain scores obtained by students with a gain score student achievement as high as possible (Sugiyono, 2015). N-Gain Calculation obtained from pretest and posttest scores each experimental and control class and then compared which one is more effective Then, from the results of the research, researchers used the T-test to see the effectiveness of an instrument or test given on student learning outcomes, especially reading skills in the AKM questions in English subject.

### **3. FINDINGS AND DISCUSSION**

Mention your review method here for example: the writer used Systematic review literature from experts. If you have subfield, you can write them as; The research findings are based on the data analysis results. Score data It was held to answer the research . Researchers collected data by giving tests and treatments to two groups, namely the experimental group and the control group (without treatment) to first graders of high school. The tests that the researchers gave were pre-test and post-test. This instrument was carried out to determine the impact of applying AKM questions to train students' critical thinking in improving English learning outcomes in class. Researchers used AKM questions which included literacy and numeracy and provided training to students on how to process and answer questions on related material. The research explained the difference in the average scores obtained by students between the results of the pre-test and post-test between the two classes using the N-gain and testing the t-test as well as to find out whether was accepted. Researchers spent 1 week to collect and obtain data :

#### ***3.1 Control Class***

The results from the control class, the scores in the pre-test from 30 respondents has an average of 66.93 or is rounded up to 67. where, the average value is very low. and after the post test was carried out by carrying out treatment in the form of teaching related subject matter and practicing general questions the average student score increased to 83.73 which can be rounded up to 84. Also Based on the results of the N-gain score calculation data, obtained from 30 respondents, it was found that the control class has an average value of 35.69% which means the results is ineffective.

---

### **3.2 Experimental Class**

The average pretest value was 68.40 or rounded up to 68. where the average value is also very low. and after the post test was carried out by carrying out treatment in the form of introduction, teaching, and practice AKM questions related to learning materials related to subject matter, the student's average score increased to 88.86 which can be rounded up to 89 close to 90. Based on the results of the N-gain score calculation data, obtained from 30 respondents from the experimental classes. it was found that the experimental class had an average of 62.9%, which means that the application of AKM assignment in the experimental class was quite effective according to the category.

### **3.3 Hypothesis Testing**

After carrying out the N-Gain test to see effectiveness, then the researcher conducted a normality test whether the data was normally test or not so that the independent T-test could be continued to test the hypothesis and find out whether there was a significant difference between the application of AKM questions and only applying ordinary questions in class as a result student learning.

Based on the data on SPSS, the sig values of the two groups were not the same, that is, the control class was not normally distributed (sig 0.193 > 0.05). As an alternative to the independent sample t-test, researchers use the Mann Whitney test as a solution for data that is not normally distributed to look for significant differences between variables. Based on the data above, the sig values of the two groups were not the same, that is the control class was not normally distributed (sig 0.193 > 0.05). As an alternative to the independent sample t-test, researchers use the Mann Whitney test as a solution for data that is not normally distributed to look for significant differences between variables. The "Test Statistics" output Mann Whitney Test from SPSS, it is known that Asymp. Sig. (2-tailed) is 0.03 < 0.05. Then it can be concluded that "H1 is accepted". Thus, it can be said that there is a significant difference in student learning outcomes between the experimental class using AKM practice and the control class using general assignments.

Researchers collected data in 2 times for one week. The research subjects were class X students of SMA 11 Samarinda. There are two classes tested, namely the control and experimental classes. where the experimental class was given treatment in the form of exercises and understanding of AKM type questions whose application was recommended by the Indonesian minister of education and culture (Mendikbud) since 2021. Meanwhile in the control class, only carrying out ordinary learning activities using ordinary test instruments. From collecting data from the two groups, it was found that the average pre-test score obtained from the control class was 66.93 and the experimental class was 68.40, there was only a slight difference in the results obtained. Meanwhile, the post-test results obtained by the average control class were 83.73 while the experimental class was 88.86 close to 90 meaning that there was an increase in student learning outcomes in the experimental class after the post-test was carried out. after that, the researcher conducted a statistical test using

SPSS to determine the effectiveness of these variables. The researcher used the N-Gain test. on the results of the N-gain test, it was found that the experimental class had a percentage of 62.9% which according to the category of effectiveness interpretation that AKM was quite effective for student learning outcomes. whereas in the control class only obtained a percentage of 35.6%, meaning that it was not effective in obtaining student learning outcomes. Then, the researcher conducted a hypothesis test in which there were two hypotheses in the study, namely H0 and H1.

Before carrying out the hypothesis test, the researcher conducted a normality test and planned to use an independent sample t-test. However, one of the data, namely the control class, is not normally distributed. So, as an alternative the researcher uses the Mann Whitney-U test which has the same function as the independent sample t-test looking for a significant difference but the data does not have to be normally distributed.

Based on the data obtained by the Whitney test, it was found that H1 was accepted which is true that there is a significant difference in the use and application of AKM questions to obtain student learning outcomes, especially English reply lessons. The results of this study are also supported by several previous researchers, one of them is Nanda and Novita (2021) stated AKM is used for measuring students' cognitive abilities where the aspect that is measured is literacy ability reading and numeracy . AKM is designed to encourage implementation of innovative learning oriented to the development of abilities reasoning, especially literacy activities that improve language students' reading comprehension skills. Also according to Novrian (2021) AKM is to measure capabilities inside and outside, not just fulfilling authority. The current AKM is not yet in a different decision question framework but takes a structure based on higher reasoning abilities. (Novrian, 2021).

Table 1 (Mann Whitney-u test )

| <b>Test Statistics<sup>a</sup></b> |                           |
|------------------------------------|---------------------------|
|                                    | Student Learning Outcomes |
| Mann-Whitney U                     | 308.000                   |
| Wilcoxon W                         | 773.000                   |
| Z                                  | -2.118                    |
| Asymp. Sig. (2-tailed)             | .034                      |

Based on the "Test Statistics" output, it is known that Asymp. Sig. (2-tailed) is  $0.03 < 0.05$ . Then it can be concluded that "H1 is accepted". Thus, it can be said that there is a significant difference in student learning outcomes between the experimental class using AKM practice and the control class using general assignments.

---

#### 4. CONCLUSION

Based on the results of research that has been done by processing data in the form of pretest and posttest scores from two groups, namely control using general assignment and experiments using AKM, it can be seen that there is a significant influence on student learning outcomes. which can be seen from the increase in student scores before and after being given treatment in the experimental and control classes. However, the N-Gain Test proves that what is more effective is the experimental class with the application of AKM questions which with a percentage result of 62.9% is stated to be quite effective and from the results of the Mann Whitney-u hypothesis test using SPSS it states that H1 is accepted, where there is a significant difference between teaching using AKM practice questions and questions in general. Based on the "Test Statistics" output, it is known that Asymp. Sig. (2-tailed) is  $0.034 < 0.05$ . Then it can be concluded that "H1 is accepted"

#### 5. REFERENCES

- Amanda, S. (2022). Hypotesis Testing. In Hypotesis Testing ( one sample T-test, p. Chapter 3).
- Chu, PH. and Chang, Y. (2017). John W, Creswell, Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. *Journal of Social and Administrative Sciences*, 4(June), 3–5.
- Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Fogart, R. J., Kerns, Y. G. M., Pete, B. M., Jan, W., & Ballou, C. (n.d.). LITERACY. Solution Tree Press
- Ford-Baxter, Tiffanie, Kendall Faulkner, and Jennifer Masunaga. 2022. "Situating Information Literacy: A Case Study Exploring Faculty Knowledge of National Disciplinary Standards and Local Program Learning Outcomes." *Journal of Academic Librarianship* 48(3):102523. doi: 10.1016/j.acalib.2022.102523
- Frankel, K. K., Becker, B. L. C., Rowe, M. W., & Pearson, P. D. (2016). From "What is Reading?" to What is Literacy? *Journal of Education*, 196(3), 7–17. <https://doi.org/10.1177/002205741619600303>
- Grabe, W., & Stoller, F. L. (2013). *Teaching and Researching Reading, Second Edition*. In *Teaching and Researching Reading, Second Edition*. <https://doi.org/10.4324/9781315833743>
- Herrera, H. (2019). Qualitative methods in Pharmacy Practice Research. *Encyclopedia of Pharmacy Practice and Clinical Pharmacy*, 29–38. <https://doi.org/10.1016/B978-0-128-12735-3.00138-2>

- Moje, E. B., Afflerbach, P. P., Enciso, P., & Lesaux, N. K. (2020). Handbook of Reading Research, Volume V. In Handbook of Reading Research, Volume V. <https://doi.org/10.4324/9781315676302>
- O'Dowd, Robert. 2021. "What Do Students Learn in Virtual Exchange? A Qualitative Content Analysis of Learning Outcomes Across Multiple Exchanges." *International Journal of Educational Research* 109(June):101804. doi: 10.1016/j.ijer.2021.101804.
- Pourhosein Gilakjani, A., & Sabouri, N. B. (2016). How Can Students Improve Their Reading Comprehension Skill? *Journal of Studies in Education*, 6(2), 229. <https://doi.org/10.5296/jse.v6i2.9201>
- Rohim, D. C., Rahmawati, S., & Ganestri, I. D. (2021). Konsep Asesmen Kompetensi Minimum Meningkatkan Kemampuan Literasi Numerasi Sekolah Dasar untuk Siswa. *Jurnal Varidika*, 33(1), 54–62. <https://doi.org/10.23917/varidika.v33i1.14993>
- Sage Publications. (2019). *t Test: One-Sample, Two-Independent-Sample, and Related-Sample Designs. Comparing Means: Significance Testing, Effect Size and Confidence Intervals*, 136
- Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: PT Alfabet.
- B. A. B., Dan, M., & Penelitian, D. (2015). Bab iii metode dan desain penelitian 3.1. 32–56.
- Ramdhani, E. P., Khoirunnisa, F., Studi, P., Kimia, P., Maritim, U., & Ali, R. (2020). Efektifitas Modul Elektronik Terintegrasi Multiple Representation Pada Materi Ikatan.