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Empowering Model Learning English Test for Economic Students

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Abstract---This study aimed to find out which one was the best learning model for implementing the mid-semester exam and final semester exam model in class for economics students during online class and offline classes at Universitas Pendidikan Nasional. This research was a descriptive study. The subject selection technique used purposive sampling to obtain creativity data from seventy-two students with empowering abilities in the active Model learning process. The findings of this study indicated that the students surveyed did not take their class tests seriously. Few of them take it seriously since they don't know how to study in college yet. During the test, most students had no idea what to do because the lecturer's content from class directed them. Therefore, it's important to note that the different levels of thinking defined within each domain of the Taxonomy are hierarchical. These two levels were significant in mastering the subject matter in the classroom. Students needed to be well informed on the proper model to use while taking class assessments. Furthermore, lecturers must instruct students and assume full responsibility for the profession as role models for students on what to do before, during, and after completing class assessments so that both sides pay attention to one other and give constructive encouragement so that students are successful in the model learning process in the classroom.

Keywords---Average model, high model, low model, model learning, moderate model, offline and online learning.

Introduction

A test measures a person's ability, knowledge, or performance in each domain (Brown, 2000). Hughes (2003), achievement test directly relates to language course; their purpose is to establish how successful individual students, group of students, or the courses themselves have been in achieving objectives. There are two kinds of tests: final achievement tests and progress achievement tests; 1) Final achievement tests are those administered at the end of a course of study; 2) Progress achievement tests, as their name suggests, are intended to measure the progress that students are making.

The level of Bloom's taxonomy solves a problem belongs to. Bloom's Taxonomy Chart was knowledge (Recalling data or information) and comprehension (Demonstrating understanding of the meaning and ideas by organizing, comparing, translating, summarizing, and giving descriptions, and can state a problem in one's own words. This was done so that the target achievement was designed to measure the achievement of student instructional goals. Remembering is the lowest level of learning in the cognitive domain in Bloom's Taxonomy and typically does not bring about a behaviour change. It involves memorization and recall of information with no evidence of understanding. And the analysis level is where students use their judgment to begin analyzing the knowledge they have learned. At this point, they begin understanding the underlying structure of knowledge and can distinguish between fact and opinion (Farchi et al., 2021; Van Popta et al., 2017).

This study aims to determine whether they will do as well on a preparation, middle test, and final exam in English test as the standard at which they believe they should be performing. This appears to be an important area of study since students' anticipations may affect how much time and effort, they spend preparing for all the exams in online or offline tests (MacWhinney & Leinbach, 1991; Lee, 2010). In this study, the student's anticipations at the time of the middle test and final exam are related to 1) their subsequent performance on the middle test and final test, 2) their reasonable mark expectations for the achievement, 3) their past exam performances in the class, and 4) issues which are often regarded as affecting exam performance like anxiety at the time of the exam, seat position during the test, and calculation time amount during the middle or final exam).

According to [Finochiaro & Sako \(1983\)](#), achievement tests were used to determine learning that produces facts and (b) which aspects need to be revised; 2) to measure student achievement against predetermined goals so that they can (a) move to a higher level of text, eligible to another group that was more suitable at the same level. (b) be certified as ready to graduate from university or equivalence for another term. (c) held at the same rate for another period. Or (d) expelled from the program.

The extent to which achievement tests contribute to improving learning was primarily determined by the principles underlying their development and use ([Wasserman, 2000](#)). Achievement tests should measure learning outcomes consistent with the instructional objectives and include an adequate sample of the learning tasks in the instruction. The test items used in the university test must be the most appropriate for measuring the desired outcome. Achievement tests must be reliable, and the results should be interpreted cautiously ([Grondfund, 1984](#)).

[Patrick et al. \(2007\)](#), said that fundamental changes at the school level might need to occur for teachers to be able to allocate the time and resources necessary for preparing classroom assessments as learning (19). Most importantly, the classroom curriculum and accompanying assessment systems must be organized to support and value independent inquiry and strategic problem-solving.

[Primadani \(2013\)](#) and [Ratnafuri \(2011\)](#), analyzed English mid-term and final tests. Both studies revealed that the quality of the tests was not so good due to the reason that teachers did not follow the rules on how to develop test items which resulted in low quality of the test. Another study conducted by [Sugianto \(2017\)](#), focused on analyzing an English Summative test for senior high school in Palangka Raya. The result showed that the English Summative test was valid and reliable, which was proven statistically.

To summarize, the valuable studies presented above reported different results on teacher-made tests because constructing a test also related to the competence of the test developers. This indicates that teachers lack conceptual assessment tools or the practical skills to investigate or use tests ([Fulcher, 2012](#)). Each lecturer's choice can do the achievement test. The mid-semester or end-of-semester exam models can take home tests or written exams in the classroom. If the mid-semester and end-semester exams are given a choice of test strategy models, students are happy and thank the lecturers if they choose a take-home test. Because many factors cause and benefit students, including helping students to concentrate more, and do tests more relaxed in the open or a cafe, they are not anxious because officers supervise them, did not wake up early and were time efficient, can ask questions or discuss with other friends or they can take tests in groups, and while opening a notebook or reference and being self-conscious, etc.

However, lecturers tend to prefer and believe that in-class tests are preferable and valid. The results were reliable and accountable because when students take their exams, they are supervised by supervisors or appointed officers. Their time was limited, the atmosphere was tense, and they came early to find close friends. Meanwhile, if they test at home, there is an indication of suspicion about the work of the final semester exam test because the test can be done by other people or people who have the ability or know the field of science professionally. Worse yet, all the questions may be left to someone else so that the results are optimal. These students did various ways to receive better results. The duration of the test was also quite long and flexible. Based on experience and facts, it has happened that since the Coronavirus 19 has occurred for almost two years, almost all homework and answering school tests for students were done in groups or with older siblings, etc. This happened because many students did not understand the questions or were unable to answer the questions given by the lecturer. Especially English lessons. This complaint has become a common topic of discussion among students ([Soleimani et al., 2016](#); [Fryer & Bovee, 2016](#)).

On the one hand, some students did not attend the zoom meeting because their pulses were running out or the signal was intermittent because they were out of town or in a village far from the crowds. Some students use their time for side work. After coming home from work, they must study, and answer homework questions given by the lecturer from campus. From the experience of testing for students, lecturers believe that in-class exams for their students are more valid and reliable than exams or take-home tests. In addition, classroom tests were easy to administer and control and were limited in time ([Too et al., 2019](#)).

Although many students prefer to take home tests over classroom tests, classroom tests are also inevitable. Lecturers from all levels of education still assign students to take classroom tests. They may believe that classroom tests can help them better discover what their students know and don't know. Since classroom tests require students to prepare well, different strategies can be used to anticipate tests. Some students may review material with group classmates ([Zhang et al., 2006](#)). Others may practice doing the exercises on their own, focusing, or studying with their classmates. To prepare the model for class exams for students, it was necessary to do well. Good preparation was almost the key to confidence. Good self-confidence will reduce anxiety. To prepare for class exams.

[Brown \(2002\)](#), suggests that students: 1) find out everything they can about the test they are about to take; 2) create an action plan for review; 3) review the material; 4) work on practice questions or work on questions; 5) from the study group; 6) get a good night's sleep before the test. Once the exam is over, most students easily forget it.

However, test students ensure that the test is a learning experience (Brown 2002). They used the tests and feedback they get to help them continuously improve their mastery. Because of that, Brown says students after class exams: 1) check anything they think they might not be doing right; 2) ask the lecturer about specific points; 3) pay attention in class whether the lecturer says about the test answers, and 4) plan to pay special attention. Therefore, to do well, students were also advised; 1) to get to class early; 2) write the name and look at the test command carefully; 3) estimate how much time will be required for each part of the test; 4) to focus on the tests to be performed, and; 5) answer the test carefully; 6) take easy tests as a priority; 7) double-check answers to avoid carelessness during classroom tests.

Much research about the test has been carried out on approximation, test validity, and reliability. However, in contrast to the result of the present study, Ratnafuri (2011), reported moderate content validity of the English Final test. Sugianto (2011), asserted 46% content validity of the English Formative test. On the other hand, Wulandari (2017), stated that the English Summative Test was 51% valid in content, and Setiyana (2016), revealed that the validity of the English Summative test was not good since the percentage in content validity was below 73%. According to Rudner & Schafer (2002), teacher-made tests had the advantage of being directly related to the content already taught in the classroom. The content of tests would be based directly on a detailed course syllabus, books, and other materials used in the classroom.

The test developers should have been knowledgeable about the issue of constructing a good test. It is important because students' competence will not be reflected truly if the test cannot function properly. Research on how to anticipate class exams so far has not been done. Therefore, this study aims to determine a) how well the student class test takers are, and b) what strategies students can use to anticipate the class tests they will have to do. Thus, this research answers the following questions below:

- 1) What model learning did students test taking in class?
- 2) What model learning did students use before a test in class?
- 3) What model learning did students use during class tests?
- 4) What model learning did students use after the class test?

Methodology

To obtain research data, a structured questionnaire was distributed to seventy-two students of the Faculty of Economics at Undiknas University. The questionnaire was first introduced by Brown (2002), to measure students' strategies for taking class tests. The Model learning used by students is measured using a Linkert Scale ranging from 5 to refer to; 1) always; 2) often; 3) sometimes; 4) and 5) never. Their responses were then scored and analyzed to determine how well, or the type of student grade test assignments was. Brown parameters were then used in the study, as listed in table 1.

Table 1
Parameters of user model learning test

No.	Score	Category user model learning test
1	16 – 32	Model learning users perform low on tests
2	33 – 48	Average model learning users did the test
3	49 – 64	Moderate users of the test-taking model learning
4	65 – 80	High users of model learning took the test

Following Brown's parameters, as stated in Table 1, students were classified into the following four categories of users of test-taking model learning:

- 1) Users of the model learning perform the low test (who scored 16-32)
- 2) The average user of the model learning took the test (who scored 33-48)
- 3) Moderate users of the model learning took the test (who scored 49-64)
- 4) Users who are high on the model learning the test (who score 65-80)

Questionnaire responses were also analyzed to determine the model learning taken previously during and after class tests.

Results and Discussion

From the above theory from Bloom's theory, to get good and measurable results in the target giving questions to students is sequentially from remembering, understanding, implementing, analyzing, evaluating, and being creative or innovative. In general, new students do not understand how to study in college (Song et al., 2004). They are still carried away with the way of learning as in the previous high school, meaning that they learn according to the material given in class. In contrast to students studying at the higher education level or university. Students were expected to be able to broaden their horizons to implement theory and analyze problems further from the material provided by the lecturer in class. The types of questions in the test were used to find out how far the student's readiness to take the test with the test model explains. All questions were not multiple-choice, but tests provided insight into thinking by starting with the words why and how. These two questions would make students understand the problem further, seek answers, and think more critically.

Category of test-taking model learning users

Following Brown's parameters, as stated in Table 2, students were classified into the following four categories of test-taking model learning users:

Users of the model learning for taking the test low (who scored (16-32) scored 0 with a percentage of 0%; 2) The average user of the model learning for taking the test (who scored (33-48) scored number 4 with a percentage of 5.55%; 3) Moderate users of the model learning take the test (49-64) with a score of 56 with a percentage of 77.78%; 4) Users who were high on the model of doing the test (65-80), with a score of 12 with a percentage of 16.67%. Questionnaire responses were also analyzed to determine the model taken previously, during and after class tests.

Table 2
Category of test-taking model learning users

No.	Score	Categories of Test-Taking Model Users	Number	%
1	16-32	Low users of test-taking model learning	0	0
2	33-48	The average user of test-taking model learning	4	5.55
3	49-64	The moderate user of test-taking model learning	56	77.78
4	65-80	The high user of test-taking model learning	12	16.67

Category of model learning test before the exam

That student before taking the final class exam, I was prepared to learn to repeat the material that has been conveyed during the lecture, often did independent exercises to repeat the material that has been delivered where to train and hone our abilities where have we been regarding the material that has been explained previously.

And another view of students will Make time for studying. Setting aside regular time to study was critical for achieving high test performance. Recommend preparing a term calendar, weekly schedule and daily schedule that includes regular study sessions. It's so easy for work and other activities to quickly take precedence over studying, so plan your study time. As you progress through the term it's okay to amend your study schedule to meet your needs, but make sure you plan study sessions in advance and that you stick with them (Ahmad, 2022).

The study, as presented in Table 3: (1) Discovering everything they can about the model test, 4 students scored numbers with a percentage of 5.56%; (2) Creating a plan for a review, there were 8 students with a numerical score with a percentage of 11.11%; (3) Reviewing the material thoroughly there were 14 students with a numerical score with a percentage of 19.44%; (4) Taking practice exercise there are 14 students with a numerical score with a percentage of 19.44%; (5) Reviewing with a group of classmates there were 2 students with a numerical score with a percentage 2.76%; (6) Telling themselves to relax and feel confident there were 28 students with a numerical score with a percentage of 38.89%; (7) Getting a good night sleep there were 26 students with a numerical score with a percentage of 36.11%.

Table 3
Category of model learning test before exam

No.	Activities	5	%	4	%	3	%	2	%	1	%
1	Discovering everything they can about the test	4	5.56	16	22.22	38	52.78	12	16.67	0	0
2	Creating a plan for a review	8	11.11	18	25.00	28	38.89	16	22.22	2	2.78
3	Reviewing the material thoroughly	14	19.44	18	25.00	32	44.44	2	2.78	6	8.33
4	Taking practice exercise	14	19.44	18	25.00	24	33.33	10	13.89	6	8.33
5	Reviewing with a group of classmates	2	2.76	8	11.11	10	13.89	26	36.11	26	36.11
6	Telling themselves to relax and feel confident	28	38.89	18	25.00	22	30.56	2	2.78	2	2.78
7	Getting a good night's sleep	26	36.11	16	22.22	24	33.33	4	5.56	2	2.78

Category model learning middle test during exam

The study, as presented in Table 4: (1) there were 38 students with a numerical score or a percentage of 52.78% of students including Arriving at the school early; (2) There were 32 students with a score or percentage of 44.44% Quickly looking over the whole test before answering anything; (3) There were 14 students with a numerical scored or percentage of 19.44 % Estimating how much time each part of the test would take before answering anything; (4) There were 50 students with a numerical scored or percentage of 69.44% Concentrating very carefully (5) There were 18 students with a numerical scored or percentage of 25% Leaving enough time in the end to check all my answer.

Table 4
Category model learning middle test during exam

No.	Activities	5	%	4	%	3	%	2	%	1	%
1	Arriving at the school early	38	52.78	16	22.22	8	11.11	6	8.33	4	5.56
2	Quickly looking over the whole test before answering anything	32	44.44	16	22.22	14	19.44	8	11.11	2	5.56
3	Estimating how much time each part of the test will take before answering anything	14	19.44	10	13.89	20	27.78	8	11.11	20	27.78
4	Concentrating very carefully	50	69.44	14	19.44	6	8.33	6	8.33	0	0
5	Leaving enough time in the end to check all my answer	18	25	24	33.33	28	38.89	0	0	0	0

Category model learning test after final exam

The study, as presented in Table 5 reveals that (1) There were 20 students with a numerical score or a percentage of 27.78% of students thinking of the test as an opportunity to learn something; (2) There were 36 students with a numerical score or percentage of 50% Looking up questions that they think they might have missed (3) There were 32 students with a numerical score or percentage of 44.44% Paying attention to their teacher's feedback on the test; (4) There were 34 students with a numerical scored or percentage of 47. 22% Using the test experience to be better prepared for the next test.

Table 5
Category model learning test after final exam

No.	Activities	5	%	4	%	3	%	2	%	1	%
1	Thinking of the test as an opportunity to learn something	20	27.78	18	25	32	44.48	2	2.78	0	0
2	Looking up questions that they think they might have missed	36	50	10	13.89	18	25	4	5.56	4	5.56
3	Paying attention to their teacher's feedback on the test	32	44.44	18	25	16	22.22	6	8.33	0	0
4	Using the test experience to be better prepared for the next test	34	47.22	28	38.89	6	8.33	4	5.56	0	0

This study aims to reveal students' strategies or learning methods in preparing for class tests. The results of the study revealed that in general the students studied did not prepare for class exams seriously. Few of them take it seriously because they don't know how to study in college yet. During the test, most students did not know what to do because they were guided by the material that the lecturer had given in class. They did not apply the correct strategy as suggested by Brown, namely 1) getting to class early, 2) looking through the entire test; 3) estimating how much time each section will take, 4) focusing on the task to be done, and 5) avoid careless mistakes. Moreover, they never learn from their experience to do better in the next exam.

For students, measuring test mastery in class and their learning strategies were not correct. This study, however, shows that most of the students who were studying did not realize that the test was for the achievement of their grades. They should be able to learn which parts of the teaching materials have been mastered, which parts must be mastered, which parts should be studied in literacy books, etc. In addition, they can find out whether their model learning was effective or not. Success in taking class tests was not solely determined by the mastery of teaching materials but also by the model students used in applying learning methods and knowing the correct question model from each lecturer to take the class test.

Therefore, lecturers needed to train their students to better use appropriate online or offline test-taking strategies during and after tests. In a campus environment, the intent and purpose of the test were to provide information on the extent to which students have mastered the theory given in class to make different decisions and then evaluate them. The evaluation consists of the following two components: 1) information and 2) an assessment of various criteria that have been determined by the campus or standard and standard value decisions. To justify the use of evaluation.

The quality and accountability of the information provided by the test should be reconsidered. In educational settings, decisions are generally made about people and have some effect on their lives. It was, therefore, important that the information on which the lecturer's decisions were based was reliable and valid. Good assessment information provides accurate estimates of student performance and enables faculty or other decision-makers to make informed decisions. Therefore, great efforts should always be made to develop appropriate instruments that demonstrate reliable test scores.

The test scores' reliability and validity were determined by the instrument or the test itself and how seriously students took the tests in class and independently. This was a critical factor that cannot be ignored in making decisions about persistence in following learning, such as actively answering quizzes in class, presentations, etc. This was also an indicator of the student's assessment and success. When students are not prepared to take a test, the information provided by the test may be invalid and unreliable.

Thus, the test scores obtained by the studied students were not valid and reliable information for making decisions about their performance because they did not take the test seriously. Many lecturers, however, were unaware of the invalid and unreliable scores of the students studied; they took students for granted who were serious and ready for class tests. The most important thing was that the decisions made by the lecturer must be based on the criteria that the campus has determined to give the final grade for the student and the results so that the score can be accounted for. All students know those class exams were essential in determining their passing grades.

They also realize the importance of good preparation for exams. But why weren't they ready for the exams in class? Do they have a negative attitude towards class exams, or do the lecturers rarely come to teach or do most presentations without giving theory? Were their lecturers too lenient to them, giving too little marks, and giving inappropriate test material for exams in class? This was a big question to which we must find the answer so that both parties get the right and good method of learning.

Both lecturers and students should be informed that tests are part of the teaching-learning process. In addition, they must realize that the test was only a subject of assessment; they were not the only form of assessment a lecturer could

undertake. Tests can be a helpful tool, but they are only one of many procedures, and tasks teachers can use to assess students (Brown, 2004).

Conclusion

The study revealed that most of the students studied in the economics class were moderate users of the test-taking model learning. The result was that they were not good test takers. They were not ready to take class tests. Most did not know what to do before, during, and after class tests. They didn't realize that preparing and changing the way they study at university model. Sorting out subjects to absorb from the lecturer before taking class exams was very important. They also didn't realize that class tests were to get the results of their learning achievements and find out what models were used to achieve good grades score. With this approach, students would have a more focused and critical thinking framework so that students were able to do better, faster, and more precise tests in the future. Students from the beginning of the first meeting in class were given signs as a reference guide that must be followed in Semester Learning Plan several things need to be considered in achieving achievement; seven basic assessments need to be used as student guidelines in achieving its achievements include: 1) quiz; 2) individual tasks; 3) group assignments; 4) activeness in discussion; 5) compelling/personality; 6) practicum/presentation; 7) middle test and final test. The seven things mentioned above are part of mental and primary character education that every student needs to consider seriously because the suitable model was influential in taking class tests.

Students needed to be well informed about the suitable model to take in taking class tests. In addition, lecturers must train students and be responsible with the profession as role models for students, what to do before, during, and after taking class tests so that both parties pay attention to each other and provide constructive motivation so that students are successful in the model learning process in the class. In the era of digitalization, all millennial students must also be good at using technology, open concepts adding close to literacy books to find out theories that support their model learning activities. With a combination of information technology and assisted by strengthening literacy, the computer will support quick response and strengthen the unpredictable factors that anticipate impact from students who are not ready to face class during the middle and final tests. Therefore, they will find solutions to overcome their problems of weaknesses in this situation—studying hard for students only a few hours the night or one day before the test isn't going to help much to ensure perfect scores. If you want to ace those exams, study old and new material every day, and repeat and do exercises at least several times a week.

In the future young millennial generation, they must be able to collaborate with quantitative and qualitative research. Why? Because students do not need to be assessed in terms of achievement with numbers only but also need to be given material and a guided or module model learning process. Then tell them the question model and give answers to improve understanding and creativity. So, they prefer reading books and open concepts for literacy and a friendly environment.

References

- Ahmad, A. (2022). Management strategies of school principles in developing teachers' professional competency to improve the quality of education in SMK Kesehatan Darus Salam Lhokseumawe Aceh. *International Journal of Business, Economics & Management*, 5(3), 238-245. <https://doi.org/10.21744/ijbem.v5n3.1960>
- Brown, H. D. (2000). *Principles of language learning and teaching* (Vol. 4). New York: Longman.
- Brown, H. D. (2002). *Strategies for Success: A Practical Guide to Learning English*. Addison Wesley Longman, Inc., a Pearson Education Company, Order Processing Center, PO box 11071, Des Moines, IA 50336.
- Brown, H. D., & Abeywickrama, P. (2004). Language assessment. *Principles and Classroom Practices*. White Plains, NY: Pearson Education.
- Farchi, A., Bocquet, M., Laloyaux, P., Bonavita, M., & Malartic, Q. (2021). A comparison of combined data assimilation and machine learning methods for offline and online model error correction. *Journal of computational science*, 55, 101468. <https://doi.org/10.1016/j.jocs.2021.101468>
- Finocchiaro, M., & Sako, S. (1983). *Foreign Language Testing: A Practical Approach*. Regents Publishing Company, Inc., 2 Park Ave., New York, NY 10016.
- Fryer, L. K., & Bovee, H. N. (2016). Supporting students' motivation for e-learning: Teachers matter on and offline. *The Internet and Higher Education*, 30, 21-29. <https://doi.org/10.1016/j.iheduc.2016.03.003>
- Fulcher, G. (2012). Assessment literacy for the language classroom. *Language Assessment Quarterly*, 9(2), 113-132.
- Groundland, N. E. (1984). *Constructing achievement test*. New York. Prentice Hall.
- Hughes, A. (2003). *Testing for language teachers*. Cambridge university press.

- Lee, M. C. (2010). Explaining and predicting users' continuance intention toward e-learning: An extension of the expectation–confirmation model. *Computers & Education*, 54(2), 506-516. <https://doi.org/10.1016/j.compedu.2009.09.002>
- MacWhinney, B., & Leinbach, J. (1991). Implementations are not conceptualizations: Revising the verb learning model. *Cognition*, 40(1-2), 121-157. [https://doi.org/10.1016/0010-0277\(91\)90048-9](https://doi.org/10.1016/0010-0277(91)90048-9)
- Patrick, H., Ryan, A. M., & Kaplan, A. (2007). Early adolescents' perceptions of the classroom social environment, motivational beliefs, and engagement. *Journal of educational psychology*, 99(1), 83.
- Primadani, A. E. (2013). *An analysis of midterm English test of the 7th grade accelerated class at SMPN 3 Malang* (Doctoral dissertation, Universitas Negeri Malang).
- Ratnafuri, W. F. (2011). *An Analysis of the teacher-made english test in the final test of the 2nd semester of 2010/2011 of the first year student of SMPN 1 Kauman, Tulungagung* (Doctoral dissertation, Universitas Negeri Malang).
- Rudner, L. M., & Schafer, W. D. (2002). What teachers need to know about assessment.
- Setiyana, R. (2016). Analysis of summative tests for English. *English Education Journal*, 7(4), 433-447.
- Soleimani, A., Araabi, B. N., & Fouladi, K. (2016). Deep multitask metric learning for offline signature verification. *Pattern Recognition Letters*, 80, 84-90. <https://doi.org/10.1016/j.patrec.2016.05.023>
- Song, L., Singleton, E. S., Hill, J. R., & Koh, M. H. (2004). Improving online learning: Student perceptions of useful and challenging characteristics. *The internet and higher education*, 7(1), 59-70. <https://doi.org/10.1016/j.iheduc.2003.11.003>
- Sugianto, A. (2017). Validity and reliability of English summative test for senior high school. *Indonesian EFL Journal: Journal of ELT, Linguistics, and Literature*, 3(2), 22-38.
- Too, E. C., Yujian, L., Njuki, S., & Yingchun, L. (2019). A comparative study of fine-tuning deep learning models for plant disease identification. *Computers and Electronics in Agriculture*, 161, 272-279. <https://doi.org/10.1016/j.compag.2018.03.032>
- Van Popta, E., Kral, M., Camp, G., Martens, R. L., & Simons, P. R. J. (2017). Exploring the value of peer feedback in online learning for the provider. *Educational Research Review*, 20, 24-34. <https://doi.org/10.1016/j.edurev.2016.10.003>
- Wasserman, L. (2000). Bayesian model selection and model averaging. *Journal of mathematical psychology*, 44(1), 92-107. <https://doi.org/10.1006/jmps.1999.1278>
- Wulandari, D. T. (2017). *Classroom Assessment Techniques (CATs) Used By The English Teacher On The Tenth Grade at SMA Muhammadiyah 1 Malang* (Doctoral dissertation, University of Muhammadiyah Malang).
- Zhang, Z., Li, J., Zhao, X. Q., Wang, J., Wong, G. K. S., & Yu, J. (2006). KaKs_Calculator: calculating Ka and Ks through model selection and model averaging. *Genomics, proteomics & bioinformatics*, 4(4), 259-263. [https://doi.org/10.1016/S1672-0229\(07\)60007-2](https://doi.org/10.1016/S1672-0229(07)60007-2)