Development Of E-Learning Pai and Budi Pekerti Based On Higher-Order Thinking Skills (Hots) To Increase Learning Motivation And Learning Achievement Assessment In Senior High Schools In The City Of Salatiga

Bekti Taufiq Ari Nugroho, Fatah Syukur, Ismail SM

Universitas Islam Negeri Walisongo Semarang & Indonesia (bektitaufiq65@gmail.com) (fatahsyu@walisongo.ac.id) (ismail@walisongo.ac.id)

ABSTRACT

Specifically, from the development of PAI and Budi Pekerti learning materials, with application specifications in the form of a web display that is synchronized with the application on the android menu include: teacher name, student name, PAI material classes X, XI, and XII, video PAI learning according to each of the chapters discussed, questions, system of evaluation of higher order thinking skills consisting of the domain of cognitive, affective and psychomotor evaluation, username and password given to teachers and students, then after PAI training treatment, then the e-learning can be validated on the part of materials, learning media and applications by the experts. This research method uses research and development (R&D) with the thiagarajan model, known as the 4-D model that is carried out through 4 stages, namely definition, design, development, and dissemination. (disseminate). The results of this study show that: 1) E-learning needs analysis of PAI and Budi Pekerti based HOTS Assessment will focus on the development of content, evaluation, and evaluation using high-level thinking skills to drive and improve student learning performance; 2) One important component in building PAI e-Learning platforms is the use of PHP boostraps, hosting, and domains for PAI learning. This allows for adding materials to PAI & Budipekerti e-learning sites that match themes and lesson materials; 3) the goal of achieving highly dignified product quality is used through e -learning pai and high-thinking skills (HOTS) development through group focus discussions (FGD) and product evaluation. The result of the responses of validators from the fields of IT, media, learning materials, PAI evaluation evaluations, and staff, as well as student responses that show that such applications are highly worthy to be used; 4) Development of Biji-Puri eLearning products based on effective learning performance and HOTS employees can provide students with effective learning motivation and motivation.

Keywords: e-learning PAI and Budi Pekerti assessment of higher order thinking skills (HOTS), learning motivation, learning achievement

A. INTRODUCTION

The process of mental formation that a person undertakes to develop positive behavior through experiences or exercises that include personal, physical and psychological aspects, is known as learning (M. Andi Setiawan, 2017: 3). Everyone can experience change in himself through learning, and this change has benefits for himself.

A learning activity that must be carried out by teachers and students so that the learning objectives can be achieved successfully (Olivia Cherly Wuwung, 2020: 32). In today's global era, the Internet is the fastest growing media. The Internet is a place where all information is easily accessible, flexible, fast, and accurate. This is what drives the idea of using the Internet as a learning medium to advance education in Indonesia.

Various forms of innovation and reform have begun from learning systems, curricula, teachers' scholarships to "standard schools" in all their forms.(Heryanto, Marioga Pardede, 2021) But it hasn't been able to describe the student's personality. Our educational outcomes appear to be still thick in the cognitive fields that have not yet touched the emotional and psychomotor aspects (Syahraini Tambak, 2013: 39).

One component that drives students to learn is motivation (Manizar, Elly, 2015). wo types of learning motivation include the instrumental factor (motivation that comes from the student's own mind that can drive them to learn) and the extrinsic factor (Emda, Amna, 2018). Students' learning success is strongly influenced by their level of motivation. Learning success can only be achieved with the desire and urge to learn on their own.

Students' learning motivation is hindered by: 1) the degree of development of retarded students means that students do not have clear dreams and aspirations; 2) no guidance to master the essence of learning material; 3) no sense of optimism and self-confidence to master learning essence; and 4) deteriorating health (Shilphy A. Octavia, 2020: 11).

Two types of student learning inhibitory cover both internal and external factors, the teacher being one of the external inhibitors (Setiadi, Devi, and Rediana Setiyani, 2018). Factors that indicate the teacher's pedagogical competence becoming low due to low class mastery, less loud teacher voice, and lack of innovation in learning. These things will interfere with the student's learning performance.

A condition that can give strength, drive, or move and that directs behavior towards a specific goal is called motivation. Instructive factors, including the desire and desire to succeed, the urge to learn, and the expectation of ambition, can provide motivation for learning. However, extrinsic factors arise when a person gets appreciation, the presence of conducive environmental conditions and the existence of interesting learning activities (Muhammad Iqbal

Harisuddin, 2019: 5). Existence of appreciation, a conducive learning environment, and an exciting learning activity are external factors. Moreover, learning motivation affects learning performance. When learning motivations are low, learning performance is less satisfactory.

The impact of high learning motivation students will always fill the absences well, have a fairly high score, have good understanding of PAI and Budi Pekerti learning, as well as have no obstacles in doing tasks and can try various ways of learning. Whereas the impact of low learning motivations students will have an empty absence at a meeting or session of online class, because not filling forums discussion and tasks, easy to give up when not understanding the PAI material well, there are obstacles when doing the task, and only try one way in learning. With the student's learning motivation, the student can complete the task despite the presence of internal and external obstacles.

Learning strategy is a form of teacher-centered approach, so it is said, because in this strategy the teacher has a very dominant role (Darmadi, 2018: 114). Through this strategy, the teacher delivers the learning material in a structured manner with the hope that the lesson material delivered will be well mastered by the student. The main focus of this strategy is students' academic achievement (Safriadi, 2017)

Teachers in a millennial era like this must be able to organize, organize attitudes, not too materially oriented, sincere in carrying out their professional duties, always able to inspire, and motivate students (Zakiyah Kholidah, 2018). Even sometimes it is not uncommon to be prepared as a companion for his pupils, able to create a supportive environment so that students can develop as expected (M Najib et al., 2014).

PAI learning evaluation system carried out by teachers in principle in accordance with Permendikbud No. 23 Year 2016 on the Appraisal Standards. In the learning process in the New Habits Regulation, the assessment provisions in this jurisprudence are divided into two aspects, namely: student learning results evaluation and independent evaluation of GPAI.

A qualified generation is the beginning of an educational output consistently understood from the very beginning of that education,(Muhammad Adlan Nawawi, 2020) the material is the material that will be given to the student according to the characteristics that he possesses both as an individual, social, and God-to-One (G. Gunawan Sulasmi, Emilda, A. Akrim, 2019). Thus, it is the basis of the education of Islam and Budi Pekerti is the Qur'an and the Sunnah of the Prophet. These two things are all the needs of every human being has been explained in detail, and on these two pillars are built the basic concepts of the Islamic religion and the Budi pekerti, which corresponds to the fitrah of human beings. Therefore, one of the efforts to stimulate motivation in student learning and learning achievement is to use PAI e-learning and HOTS-based employment advocacy, to support the process of learning activities.

The concept of high-level thinking (HOTS) derives from Bloom's cognitive domain taxonomy introduced in 1956. Cognitive domain involves knowledge and development of intellectual skills. It includes remembering or recognizing specific facts, procedural patterns, and concepts that serve to develop intellectual abilities and skills. There are six main categorizes of cognitive processes, ranging from the simplest to the most complex. Bloom categorizes intellectual behavior into six levels of thinking: knowledge, understanding, application, analysis, synthesis and evaluation. The categories in Bloom's taxonomy for cognitive development are hierarchically structured from the concrete to the abstract. Development hierarchy identifies low-level cognition processes to higher levels; the first three levels of Bloom' s taxology require the introduction or basic memory such as knowledge, comprehension and application and this is considered as a lower-level thinking skill (Ibrahim et al., 2020).

Instead, the other three levels of Bloom's taxonomy require students to use high-level thinking skills thereby improving their learning performance. Based on research on the cognitive domain among high school students, the first three categories of the Bloom taxonomics, knowledge, understanding and application measure the lower level of student thinking skills (LOTS), while the others three levels are analysis, synthesis and evaluation. measures the higher level of thinking skills or HOTS. On the basis of the revised Bloom Taxonomy, the three higher levels are analyzing, evaluating, and creating (Saido et al., 2018).

To distinguish the two categories of skills, lower skills require simple application and routine steps. On the contrary, high-level thinking skills "challenge students to interpret, analyze, or manipulate information". However, the higher and the lower the skill criteria are relative, certain subjects may require higher skills for certain students, while other students require lower skills. Dividing thinking skills into two categories will help teachers in developing activities that can be done by slow learning before they can switch to more complex higher skills. As well, to develop activities that can be done by quick learners and place them at their appropriate level (Abdullah et al., 2017).

The four aspects of HOTS are critical thinking, creative thinking, problem-solving thinking, decision-making thinking. This HOTS skill aspect is enabled when a student faces an unusual problem, uncertainty, question, or dilemma. The successful application of these skills in science classes produces explanations, decisions, performances, and valid products in the

context of available knowledge and experience and promotes sustained growth in these and other intellectual skills (Falloon, 2024).

Furthermore, these skills require students to transfer scientific knowledge and apply it to new situations. Growing students' ability to think at a higher level has become an important theme for redesigning and reforming learning systems (Double et al., 2023).

In addition, these HOTS skills are activated when students face unusual problems, uncertainties, questions, or dilemmas. The successful application of these skills in science classes produces explanations, decisions, performances, and valid products in the context of available knowledge and experience and promotes sustained growth in these and other intellectual skills. Furthermore, these skills require students to transfer scientific knowledge and apply it to new situations. Growing students' ability to think at a higher level has become an important theme for redesigning and reforming learning systems. The new science curriculum is largely focused on improving students' high-level thinking skills (HOTS), through carrying out a variety of activities that require them to use these skills (Lutfi & Dima, 2021).

In other words, the use of e-learning PAI and Budi Pekerti based on HOTS is a solution in a face-to-face learning process between teacher and student. Students can study anywhere and at any time with the help of electronic devices connected to the Internet, such as computers, laptops, HPs, or others (Lidia Simanihuruk, et.al., 2020: 112).

The limited space for live meetings, e-learning or electronic devices such as laptops or phones connected to the Internet is perfectly suitable for use in today's era. Although e-learning can broaden the roles, horizons, and learning reach of students, only 30% of students are aware of e-Learning, according to research conducted by LPTK researchers (Lidia Simanihuruk, et.al., 2019: 3).

The importance of e-learning today is that it can be integrated into learning, not just as a technological tool, but also to maximize its usefulness in learning.

Learning is a change that causes a person to change his attitude and behavior. Learning results include cognitive, affective, and psychomotor abilities. The cognitive domains of bloom taxonomy include: 1) knowledge / C1; 2) understanding / C2; 3) application / C3; 4) analysis / C5; and 6) evaluation / C6. However, as time progressed, the bloom Taxonomy was eventually revised by Lorin W. Anderson and David R. Karthwohl, who eventually changed the taxonomies of Bloom to: 1) remember / C1, 2) understand / C2, 3) apply / C3, 4) analyze / C4, 5) evaluate / C5, and 6) create (create)/ C6 (Lorin W. Anderson dan David R. Karthwohl, 2017: 40).

Affective domains include: receiving, responding, valuing, organizing, and practicing. (characterization) (Famahato, dkk., 2022: 19).

The psychomotor domain includes productive, technical, physical, social, managerial, and intellectual skills. Higher Order Thinking Skill is the ability to understand and find solutions to a problem in a variety of ways, different from the usual (divergence) from different perspectives according to the ability of each student (Nunung Fitriani, Husen Windayana dan Jenuri, 2015).

High Order Thinking Skills is a higher cognitive thinking process developed by students from different concepts and methods of cognition and learning taxonomies such as problem solving, bloom taxonomy, and learning, teaching, and evaluation taxonomics (Hatta Saputra, 2016: 91).

B. METHOD

This type of research is a research and development approach, which is a set of processes or steps in order to develop a new product or improve an existing product so that it can be held accountable and test the effectiveness of a product (Salim & Haidir, 2019: 58). This study is fundamental, in-depth and focused on the success of a learning program by knowing the effectiveness of its components, both ongoing and past learning programmes.

The development model used in this study is the Thiagarajan model. This model is known as the 4-D model that is carried out through four stages, namely definition, design, development, and dissemination (Thiagarajan, Sivasailam, dkk., 1974: 6).

Data analysis using double linear regression is an analysis tool that has the influence of two or more free variables on a bound variable to prove the existence or absence of a functional or causal relationship between two variables or more (Rostina Sundayana, 2014: 192).

To find out the e-learning development of PAI and Budi Pekerti based on the evaluation of higher order thinking skills (HOTS) (X) effective in conjunction with learning motivation (Y1) and learning achievement (Y2).

As for the general equation of double linear regression is as follows:

 $\mathbf{X} = \mathbf{a} + b_1 Y_1 + b_2 Y_2 \dots \dots + b_n Y_n$

Description:

X : Dependent variable

Y₁, Y₂ : Independent variable

a : Constant (for X when Y1, Y2 = 0)

1570

b_1, b_2 : Regression coefficient

The value of a, b1, b2 on the double regression equation of a free variable can be determined, from the following formulas:

$$\begin{split} \sum X_1 Y &= b_1 \sum X_1^2 + b_2 \sum X_1 X_2 \\ \sum X_2 Y &= b_1 \sum X_1 X_2 + b_2 \sum X_2^2 \end{split}$$

C. RESULT AND DISCUSSION

Learning Application Needs Level

Results of identification of the level of usage requirements among others. The elearning application PAI & Budi Pekerti should be easy to use by anyone who wants to study the material. The material avoids student fighting, alcohol, and drugs and the learning evaluation developed using e-Learning PAI and BudiPekerti based on the evaluation of higher order thinking skills (HOTS), can be a solution to improve the motivation and learning performance of students, making it easier for students to absorb the learning material given compared to conventional learning media.

Instructional Review Stage

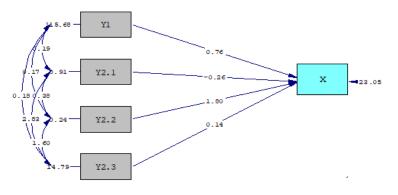
This phase is through the adaptation of student package books, and supporting material on PAI lesson load on material to avoid student fighting, alcohol, and drugs presented with the development of e-learning PAI and Budi Practi based on the evaluation of higher order thinking skills (HOTS) to motivate learning and learning achievement.

The promoters in PAI and Budi Workers based HOTS learning are as follows:

- 1. Research and information gathering, including in this step, among other things, literature studies relating to the problem being studied, needs measurement, large-scale research, and preparation for the formulation of a research framework.
- Planning, included in this stage, develops a research plan that includes formulating the competence and expertise related to the issue, determining the objectives to be achieved at each stage, the design or measures of research and, if possible or necessary, conducting a comprehensive qualification study.
- 3. Development of the initial form of the product, i.e. development of the starting form of a product to be produced. Included in this step is the preparation of supporting components, preparing a manual as an operation on e-learning, and conducting an evaluation of the validity of supported tools. Examples of development of learning materials, learning processes and evaluation instruments.

- 4. Initial field tests, i.e. conducting initial field tests on a limited scale. In this step, data collection and analysis can be done using a lift.
- 5. Product revision, i.e. making improvements to the original product produced based on the results of the initial test. This improvement is highly likely to be done more than once, according to the results shown in a large-scale trial.

Looking at the output of the standard value estimate, on the figure 1. parth diagram can be seen as follows:



Chi-Square=0.00, df=0, P-value=0.00000, RMSEA=0.000

Figure 1. Part of the Multiple Linear Regression Diagram

X = 0.764*Y1 + 0.263*Y2.1 + 1.800*Y2.2 + 0.140*Y2.3, Errorvar.= 23.054, R ² = 0.00855				
Standerr (0.026	6) (0.530)	(1.200)	(0.143)	(1.941)
Z-values 0.287	0.496	1.499	0.975	11.874
P-values 0.774	0.620	0.134	0.329	0.000

The result of diagram 1 above is that with a significance level of 5% (default Lisrel), then all significant variables or can be said to be influential against dependent variables, namely variables Y1 (Student Motivation), Y2 (Learning Performance) which includes Y2.1. (Cognitive Learning Performance), Y2.2. (Affective Learning Performance) and Y2.3. (Psychomotor Learning Achievement) influenced variables X. (E-Learning PAI dan Budi Pekerti berbasis HOTS).

It shows that, on the development of E-Learning products PAI and Budi Workers based HOTS effectively can provide motivation and learning achievement students.

The product developed in this research is a web packaged using the php boostrap application serves as a formulation of perfection from the previous application that is still separate. E-learning PAI and Budi Pekerti present a variety of innovations that can be used in learning. Because in the application of this product, it can add a variety of desired menus like material, videos, journals, and so on. However, in this application, there are also shortcomings, among them is not being able to judge about double-choice automatically. Despite that, this app is easy to run wherever you are. Because it provides screenshots, material appearances, videos, cognitive, affective and psychomotor assessments that comply with the Minimum Compliance Criteria and the Description of Passing or not passing students when answering questions in the e-learning PAI and Budi Pekerti based on the HOTS.

The overall percentage results of the expert validator team, teacher response and student response are summarized in Figure 2.

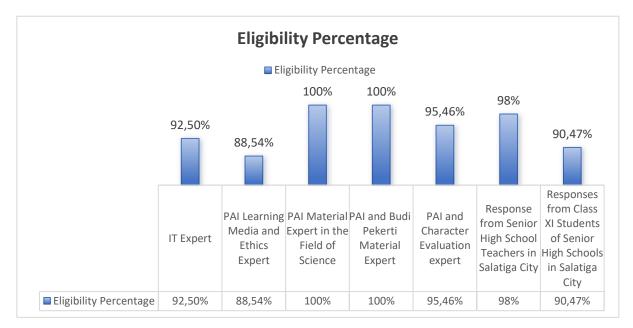


Figure 2. Feasibility Percentage Chart

In this case, the material is synchronized with the source of the Qur'an, the theme of drugs combined with the scientific article is the material of adaptive substances as well as the usefulness and emphasis on the use of substances containing Al-Qohol, also supported by the relevant learning video according to the material discussed in each sub-theme of the language. So we can train students to think critically.

The percentage of validators of IT experts obtaining a score of 92.50% means that in the application developed such indicates that the facilities provided in e-learning PAI and HOTS-based Budi Pekertie are very attractive to empower in the context of digital literacy and science literacy in PAI learning.

The percentage of learning media validators of 88.54% means that this development product is already in the category of useworthy, because the use of media, will be more responsive and compatible when balanced with the guidance of teachers and parents, so that the pupils can be guided in acting, behaving and able to perform their duties well.

The expert validator in PAI and Budi Pekerti evaluation scores a score of 95.46%. This is very worthy of use in such applications. Because it can help the teacher in evaluating the student's results, because the teacher can directly correct the students' results and teachers can provide both cognitive, affective and psychomotor assessment along with a description of whether the student is said to pass or not pass.

Teacher evaluation response to PAI and Budi Pekerti e-learning applications scored 98%, because teachers can easily run a learning process and the menus displayed are very supportive in learning, because material can be added to the application.

The student/student response score was as high as 90.47%, which indicates that the application is highly qualified and the student at the end of working on the issue can immediately know that he is graduating or not. It shows that the application on the PAI and Budi Pekerti e-learning products developed, has a technology that is focused.

Discussion

Research and development after product revision resulted in PAI and Budi Pekerti elearning based on HOTS to motivate learning and learning achievements in digital form. The web link address is https://elearning-pai-budipekerti.com/index.php. The PAI and Budi Pekerti e-learning website has advantages, including:

- 1. Have an easy-to-understand pupil name and keywords that are simple and easy to remember.
- 2. Make it easy for pupils to access PAI and Budi Pekerti e-learning through search platforms.
- On the PAI e-Learning application and the Budi pekerti can be used by the school instance and makes it easier for operators or teachers to add additional menus in PAI & Budipekerti learning.
- 4. Not only the material, but also the operator name, student name, teacher name, material accompanied by KI, KD and Learning Purpose in each chapter, topic link, topic template link, answer collection link, learning video link, 3 aspect value that covers cognitive, affective and psychomotor, and student graduation/ not graduation description on 3 aspects.
- Can be used independently, as it is already equipped with an operating manual on e-learning PAI and Budi Pekerti.

The limitations in the development of research and development on e-learning PAI and Budi Pekerti are:

1. The Sapaan link created by the teacher is not available. So the communication of the student can not go well.

2. The use of e-Learning PAi and Pudi Pekarti Based on HOTS, is carried out directly by the student by looking at the operating guidelines of e -learning Pai and Bodi Pekerți, the parties involved in learning not only students, but also teachers as teachers, so that it can be known how effective the e- learning is used.

D. CONCLUSION

The results of the above research suggest that:

- 1. The need analysis in the development of PAI e-learning and HOTS based assessment of Higher Order Thinking Skills (HOTS) involves the provision of student appointment packages, teachers, operators and PAI materials, with a focus on content development, assessment, and evaluation, using high-level thinking skills to motivate and student learning achievement.
- 2. The main thing in creating the PAI and Budi Puri e-Learning platform is the use of PHP boostraps, hosting, and domains for PAI learning so that it can add material through the website of scientific articles that correspond to the theme or learning material.
- 3. Development of e-learning pai and higher order thinking skills (HOTS) through Focus Group Discussion (FGD) and product review aimed at achieving quality and quality products that are highly worthy of use. Results of the responses of the validators of experts in the field of IT, field of learning media, material field, evaluation field of PAI assessment and Budi Employers, student responses indicate that the application is used very useful, because it can display menus of additional features that can facilitate teachers and students / pupils in teaching learning activities.
- 4. E-Learning product development of PAI and Budi Pekerti based on HOTS can effectively provide motivation and learning achievement of students.

E. SUGGESTIONS AND ACKNOWLEDGMENTS

The recommendation for PAI teachers, the head of the school and for further research is as follows:

1. For PAI Teachers

Teachers can make this application product as an alternative to learning in teaching activities that want to develop a variety of PAI and Budi Pekerti learning materials.

2. For the Head of the School

Applications developed by researchers can be developed and accepted in learning activities in other schools.

3. For Advanced Research

This learning media product as a development effort is a facility to support the creation of an interesting animation, so that the attention of the pupils and can grow the motivation and learning achievement of pupils.

Overall, the operation of HOTS and PAI-based e-learning applications at the Salatiga State High School has many benefits, such as ease of access to PAI and Budi Pekerti e-Learning, interactive learning, fast feedback, and the availability of a variety of digital resources. It shows that these benefits can improve learning efficiency, facilitate more flexible teaching, can motivate students and improve student learning experience.

REFERENCES

- Abdullah, A. H., Liyana, N., Abidin, Z., & Mokhtar, M. (2017). Using Thinking Blocks to Encourage the Use of Higher Order Thinking Skills among Students When Solving Problems on Fractions. *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, 11(2), 252–258.
- Anderson, Lorin W. & Karthwohl, David R. (2017). *Kerangka Landasan Untuk Pembelajaran, Pengajaran dan Asesmen*. Yogyakarta: Pustaka Pelajar.
- Bloom, Benjamin S. et, al. (1956). *Taxonomy of Educational Objectives: The Classification of Educational Goals, Handbook 1 Cogniti Domain*. New York: Longmans, Green and Co.
- Darmadi. (2018). Optimalisasi Strategi Pembelajaran (Inovasi Tiada Henti Untuk Meningkatkan Proses dan Hasil Belajar Peserta Didik). Bogor: Guepedia.
- Double, K. S., Masri, Y. El, McGrane, J. A., & Hopfenbeck, T. N. (2023). Do IB students have higher critical thinking? A comparison of IB with national education programs. *Thinking Skills and Creativity*, 50(November), 101416. https://doi.org/10.1016/j.tsc.2023.101416
- Emda, Amna. "Kedudukan motivasi belajar siswa dalam pembelajaran." *Lantanida journal* 5.2 (2018): 172-182.
- Falloon, G. (2024). Investigating pedagogical, technological and school factors underpinning effective 'critical thinking curricula' in K-6 education. *Thinking Skills and Creativity*, 51(September 2023). https://doi.org/10.1016/j.tsc.2023.101447
- Famahato, dkk. (2022). *Model Pembelajaran Pendidikan Karakter Cerdas*, Yogyakarta: Nas Media Pustaka, 2022, 19.
- Harisuddin, Muhammad Iqbal. (2019). Secuil Esensi Berpikir Kreatif & Motivasi Belajar Siswa. Bandung: Pantera Publishing.
- Heryanto, Marioga Pardede, A. O. T. (2021). Hubungan Keteladanan Guru Pak Dengan Pembentukan Karakter Siswa. *Jurnal Pendidikan Religius*, 3(1), 84–98.
- Ibrahim, N. N., Ayub, A. F. M., & Yunus, A. S. M. (2020). Impact of Higher Order Thinking Skills (HOTS) Module Based on the Cognitive Apprenticeship Model (CAM) on student's performance. *International Journal of Learning, Teaching and Educational Research*, 19(7), 246–262. https://doi.org/10.26803/IJLTER.19.7.14
- Kholidah, Z. (2018). Relevansi Pemikiran Muhammad Iqbal dalam Pembentukan Karakter Siswa di Era Millenium Pendahuluan Dalam kehidupan di masyarakat setiap individu butuh mengembangkan diri demi melangsungkan kehidupan yang lebih baik . Pendidikan menjadi fasilitas penting bag. *Jurnal Studi Pendidikan Islam*, 1(2), 288–308.
- Lutfi, M., & Dima, B. (2021). ISSN 2303 3037 (Print) ISSN 2503 2291 (Online) The Implementation of Higher Order Thinking Skills (HOTS) in English Language Teaching: The Case of Indonesian Senior High School EFL Teachers ISSN 2303 3037 (Print) ISSN 2503 2291 (Online). *Journal of English Language Teaching*, 8(2), 255–268.
- Manizar, Elly. "Peran guru sebagai motivator dalam belajar." Tadrib 1.2 (2015): 204-222.
- Muhammad Adlan Nawawi, A. L. (2020). Urgensi Peningkatan Mutu Dengan Menggunakan Total Quality Manajemen (TQM) Dalam Pendidikan Islam di Era Millenial. *Andragogi: Jurnal Pendidikan Islam Dan Manajemen Pendidikan Islam*, 2(2), 188–204.
- Najib, M., Ardy, N., Sholichin, W., Tinggi, S., Islam, A., & Purwokerto, N. (2014). Manajemen Masjid Sekolah Sebagai Laboratorium Pendidikan Karakter Bagi Peserta Didik. *Ta'dib*, *XIX*(01), 85–110. http://www.republika.co.id/berita/dunia-islam/islam-nusantara/13/03/30/
- Nunung Fitriani, Husen Windayana dan Jenuri. "The Influence Of Hots Through SPPKB Model In Mathematics Learning To Students' Creative Thinking Ability". Juni 2015.
- Octavia, Shilphy A. (2020). *Motivasi Belajar Dalam Perkembangan Remaja*. Yogyakarta: Deepublish.

Purwanto. (2016). Evaluasi Hasil Belajar. Yogyakarta: Pustaka Belajar.

- Safriadi. (2017). Prosedur Pelaksanaan Strategi Pembelajaran. *Jurnal Mudarrisuna*, 7(1), 47–65. https://eprints.uns.ac.id/1754/
- Salim & Haidir. (2019). *Penelitian Pendidikan: Metode, Pendekatan dan Jenis*. Jakarta: Kencana Prenadamedia Group.
- Saputra, Hatta. (2016). Pengembangan Mutu Pendidikan Menuju Era Global: Penguatan Mutu Pembelajaran dengan Penerapan HOTS (High Order Thinking Skills). Bandung: SMILE's Publishing.
- Saido, G. A. M., Siraj, S., DeWitt, D., & Al-Amedy, O. S. (2018). Development of an instructional model for higher order thinking in science among secondary school students: a fuzzy Delphi approach. *International Journal of Science Education*, 40(8), 847–866. https://doi.org/10.1080/09500693.2018.1452307
- Setiadi, Devi, and Rediana Setiyani. "Pengaruh Kompetensi Pedagogik Guru dan Fasilitas Belajar Terhadap Prestasi Belajar Melalui Motivasi Belajar." *Economic Education Analysis Journal* 7.2 (2018): 390-399.

Setiawan, M. Andi. (2017). Belajar dan Pembelajaran. Sidoarjo, Uwais Inspirasi Indonesia.

- Simanihuruk, Lidia et.al. (2019). Implementasi, Strategi Dan Inovasinya. Medan: Yayasan Kita Menulis.
- Simanihuruk, Lidia et.al. (2020). *Pembelajaran STEM Berbasis HOTS dan Penerapannya*. Medan: Yayasan Kita Menulis.

Sugiyono. (2017). Statistika Untuk Penelitian. Bandung: Alfabeta.

- Sulasmi, Emilda, A. Akrim, and G. G. (2019). Konsep Pendidikan Humanis Dalam Pengelolaan Pendidikan Di Indonesia. *Kumpulan Buku Dosen*, 1(1).
- Sundayana, Rostina. (2014). Statistika Penelitian Pendidikan. Bandung: Alfabeta.
- Suprijono, Anas. (2011). *Cooperative Learning: Teori dan Aplikasi PIKEM*. Yogyakarta: Pustaka Belajar.
- Tambak, Syahraini. (2013). *Membangun Bangsa Melalui Pendidikan*. Yogyakarta: Graha Ilmu.
- Thiagarajan, Sivasailam, dkk. (1974). Instructional Development for Training Teachers of Exceptional Children. Washinton DC: National Center for Improvement Educational System.
- Wuwung, Olivia Cherly. (2020). *Strategi Pembelajaran dan Kecerdasan Emosional*. Surabaya: Scopindo.