To Boost Students' Motivation and Achievement through Blended Learning

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Abstract. This study aims to determine differences in motivation and student achievement between students using direct learning model and students using blended learning model, improving motivation and student achievement by applying blended learning model of students of SMKN 1 Kraksaan. The quasi-experimental study used two groups, the experimental group using blended learning model and control group using direct learning model. The population of this research is the students of Eleven Grader of SMKN 1 Kraksaan. The result of the research shows that there is a significant difference between students' motivation and achievement using blended learning model and students using direct learning model, there is a significant increase of students' motivation and achievement as a result of the blended learning model, and there is no interaction of the influence of the application of learning model and motivation to student achievement.

1. Introduction

Education is one important element in the development of a nation. Education is the largest field of investment in building and shaping men [1]. The progress of a nation is determined by the quality of its human resources. Efforts aimed at bringing a positive influence on education in Indonesia [2]. Education in this case is also the main capital in facing the future [3]. The definition of education in the Law of the Republic of Indonesia No.20 of 2003 on the national education system article 1 is a conscious and planned effort to create an atmosphere of learning and learning process so that learners actively develop their potential to have spiritual strength, self-control, personality, intelligence, noble character, as well as the necessary skills of himself, society, nation and state. In other words education is a learning effort that aims to develop the potential of learners that make it mature in various aspects needed for him, society, nation and State. Each educational institution (kindergarten, elementary, junior high and high school) has its purpose, called an institutional purpose, consisting of a general purpose and a specific purpose. The general objectives of the institute lead to the establishment of good citizens, the mastery of general educational outcomes, the use of certain jobs, the provision of living in society, the basis for continuing study. Specific goals lead to the development of aspects of knowledge, values and attitudes, as well as skills.
The development of the information and communication technology sector as one of the changing products of the times offers new things for education. Utilization of information and communication technology in education, commonly referred to as e-learning is believed to improve the quality of learning [4]. First is the openness and ability of students in using information and communication technology. Forms of internet-based communication such as blogs, discussion forums (bulletin board), social networking, instant messaging and e-mail has become a common medium / everyday communication tool. The second thing is the cheaper cost of information and communication technology so that information technology becomes part of everyday life.

Learning by electronic method or so-called electronic learning (e-learning) offers a new methods of teaching and learning. E-learning can be considered as a tool self-study of students or also as a tool in the traditional classroom [5]. As an independent learning tool, e-learning provides teaching regardless of place and time of study. Students can learn anywhere and anytime. E-learning can act as a virtual teacher. As a learning aid tool, e-learning offers assistance when conventional learning that requires the process of face-to-face between students and lecturers cannot be done.

Conventional learning (classical learning) is no longer entirely a mainstay, but in the midst of technological advances today required a variety of methods that provide more opportunities to learn by utilizing various sources, not just from manpower as well as teachers. The learning required is to utilize the information technology element, leaving no direct guidance from the teacher and the wider use of learning resources. This concept is often also termed by the mixing of e-learning with conventional learning so-called blended learning [6].

Teachers are one of the important factors that can determine the success or failure of students in learning. The ability of teachers as an effort to improve the quality of school education needs attention [7]. Ability in question is the ability to teach by applying the right model of learning with fixed attention, among others, material, time and number of students in the classroom. Teachers in the ability of teaching is expected to deliver material to generate student creativity and easily accepted by students.

To achieve the educational goals of a teacher is required to make a learning revolution so as to improve student learning motivation [8]. With a high motivation to learn it will encourage student learning success with marked high learning results as well. The development of science and technology (IPTEK) in various spheres of life contribute to coloring the world of education.[9] With the development of Science and Technology is answering the problem demands a teacher who is required to innovate in applying the model, strategy and learning media so that students are not easily bored and can create new learning motivation. model or strategy as a way to convey information, while the media used to convey a message in the form of teaching materials and contained in it [10].

As stated by Hamalik, there are several factors that can encourage student's learning motivation: (1) meaning, (2) modeling, (3) open communication, (4) prerequisite, (5) novelty, (6) practice / practice active and meaningful, (7) divided exercise, (8) systematically reduce learning compulsion and (9) favorable conditions [8]. One of the factors that can encourage student learning motivation is novelty (something new). Hamalik suggests that new or individual learning styles and tools for students will be more interesting for them to learn, such as never before seen [11]. This study aims to determine the effectiveness of blended learning on student motivation and achievement.

2. Blended Learning
The use of information technology application (e-learning) as a learning medium has increasingly been encountered in education. The concept of e-learning certainly gives a new nuance to the educational process that has been only based on the existence of teachers. According to Clark & Mayer that e-learning is learning that is presented with the help of computers [12]. The letter "e" in e-learning means that the given material is digital so it can be stored in an electronic device. E-learning illustrates that with the existence of information and communication technologies, especially the Internet, learning becomes more open and flexible, happens anytime, anywhere and with and to anyone in any location (distributed), based community. According to Castle and McGuire, e-learning
can enhance the learning experience because students can study anywhere and under any circumstances as long as they connect to the internet without having to follow direct learning [11].

Blended learning is a flexible approach to designing programs that support a mixture of different times and places to learn. According to Rovai and Jordan, blended learning model is essentially a combination of learning excellence that is done face to face (direct learning) and virtual (e-learning) [13]. Online learning or e-learning in blended learning becomes a natural extension of traditional classroom learning using direct learning.

Through the blended learning model, the learning process will be more effective because the conventional learning process will be assisted by e-learning learning which in this case stands on the information technology infrastructure and can be done anytime and anywhere. In addition, according to Jusoff and Khodabandelou, blended learning not only reduces the distance that has existed among students and teachers but also increase the interaction between the two sides [14].

Based on the proportion of content delivered online, Allen et al provides a clear categorization of blended learning, traditional learning, web-facilitated and online learning [15]. See table 1.

### Table 1. Proportion of Content Delivered Online

| Proportion of Content Delivered Online | Type of Course          | Typical Description                                                                 |
|---------------------------------------|-------------------------|-------------------------------------------------------------------------------------|
| 0%                                    | Traditional             | Course with no online technology used – content is delivered in writing or orally.   |
| 1 to 29%                              | Web Facilitated         | Course which uses web-based technology to facilitate what is essentially a face-to-face course. Uses a course management system (CMS) or web pages to post the syllabus and assignments, for example. |
| 30 to 79%                             | Blended/Hybrid          | Course that blends online and face-to-face delivery. Substantial proportion of the content is delivered online, typically uses online discussions, and typically has some face-to-face meetings. |
| 80+ %                                 | Online                  | A course where most or all of the content is delivered online. Typically have no face-to-face meetings. |

Source: Allen, E, Seaman, J & Garrett, R. (2007). Blending in: The extent and promise of blended education in United States, Annual Report, Sloan Consortium

From table 1 it can be seen that a lesson is said to be in the form of blended or hybrid when the portion of e-learning is at 30-79% range is combined with direct learning (direct learning). On the other hand, the model blended learning encourages educators to change the educational paradigm of teacher-centered learning toward student-centered learning.

According to Carman, there are five keys to implement learning by using blended learning, namely:

1. **Live Event**, direct learning synchronously in the same time and place or same time but different place.
2. **Self-Paced Learning**, ie combining with *self-paced learning* that enables participants to learn anytime, anywhere online.

3. **Collaboration**, combine collaboration, both teacher collaboration, and collaboration among study participants.

4. **Assessment**, the designer must be able concocting a combination of both testmen types *online* and *offline* that are both test and non-test.

5. **Performance Support Materials**, make sure learning materials prepared in digital form, accessible to learners both *offline* and *online* [16].

The blended learning integrates innovation and technological advancement through system *online learning* with the interaction and participation of traditional learning model. In the learning model to apply a combination of learning process model in face to face with the learning process *online*. Tayebinik & Puteh explained that in learning **Blended Learning**, students are not just relying on that material provided by the teacher, but can search the material in various ways, among others, searching the library, asking friends or classmates *online*, opening *websites*, searching for learning materials through *search engine, portal, or blog*, or it could be with the media other media in the form of learning software and also tutorial learning [17]. See figure 1.

![Figure 1. Scheme Blended Learning (Tayebinik & Puteh)]

Meanwhile, according to Graham, There are 3 reasons why using Blended Learning that is, (1) improved pedadogy; (2) increased access and flexibility; and (3) increased cost-effectiveness [18].

### 3. Learning Motivation

Winkel defines motivation to learn is all the efforts within oneself that leads to learning activities, and ensure the continuity of learning activities and give direction to the activities of learning activities so that the desired goal is achieved [19]. Learning motivation is a psychological factor that is non-intellectual and plays a role in growing the spirit of learning for individuals.

Learning motivation is the drive of the learning process and the goal of learning is to benefit from the learning process. Some students have problems in learning that result in learning achievement not in accordance with the expected. To overcome the problems experienced, it is necessary to trace the factors that influence the learning outcomes of which is the learning motivation of students, where the motivation to learn is an absolute requirement for learning, and greatly give a big influence in providing passion or enthusiasm in learning [20]. Whereas, Alderfer states that learning motivation is the tendency of students in doing all learning activities driven by the desire to achieve the best achievement or learning outcomes [21]. Motivation to learn is a unique role is as a growth of passion in each individual, and creates a sense of motivation to learn. Students who have high motivation will have the spirit and a lot of energy to perform their daily According to Djamarah, the motivation to learn on each individual can be different, so there are students who just want to avoid bad grades even to avoid punishment from teachers, and orientation only to get high score, but there are also students who really want to develop insight and knowledge [22]. Motivation and learning are two things that are related. Motivation to learn is the main thing in doing learning activities, so that without motivation someone will not do learning activities. Motivation as a motivator for someone to do something for the purpose desired by the students. Starting from the motivation to learn a person has the spirit to be better than the learning activities.
4. Understanding of Learning Achievement

Learning achievement is a sentence consisting of two words, achievement and learning. To understand more about the meaning of learning achievement, researchers describe the meaning of both words. According to Djamarah in his book Achievement of Learning and Teacher Competence, that achievement is what has been created, the results of work, the results of the fun that is obtained by way of work perseverance [23]. In the same book Nasrun Harahap, argues that achievement is an educational assessment of the progress and progress of students with regard to mastery of the lesson material presented to the students.

From the above understanding, it can be concluded that the achievement is the result of an activity of a person or group that has been done, created and please the heart obtained by way of work.

Furthermore, to understand the notion of learning follows put forward some sense of learning among others according to Slameto that learning is an attempt made someone to obtain a new behavior change as a whole, as a result of his own experience in interaction with the environment [24]. While Muhibbin Syah (2010) that learning is the stages of change throughout the individual behavior is relatively settled as a result of experience and interaction with the environment that involves cognitive processes [24]. Likewise, according to James Whitaker, learning is a process whereby behavior is generated or changed through practice and experience [18].

Based on some opinions above that learning is a conscious and routine activities conducted on a person so that will experience individual changes both knowledge, skills, attitudes and behavior resulting from the process of exercise and experience of the individual itself in interacting with the environment.[25]

According to Winkel said that "learning achievement is a proof of the success of learning or ability of a student in doing learning activities in accordance with the weight achieved" [19]. According to Ahmadi and Supriyono (1990), learning achievement is the result of interaction between various factors influencing both internal and external factors [21].

Based on some of the above limitations, learning achievement can be interpreted as real skills that can be measured in the form of knowledge, attitude and skills as an active interaction between the subject of learning with learning objects during the learning process to achieve learning outcomes.

5. Research Method

This research is a quantitative research using experimental research method. The research design used in this research is Quasi-Experimental with Nonequivalent Control Group Design. The research site is located at SMKN 1 Kraksaan Probolinggo.

The population in this study is the class XI of all the competency of expertise in SMK Negeri 1 Kraksaan consisting of 4 classes with total students 120. The composition of the number of students of class is as follows: (1) class XI Multimedia 30 students, (2) class XI RPL27 students, 3) class XI AVI 30 students, and (4) class XI Intrik 33 students. All students in the four classes in principle have the same basic computer skills.

The determination of the control class and the experimental class is done by drawing technique from the four established classes, while the remaining 2 classes are drawn again to determine the instrument test class. The data collection instrument is a questionnaire sheet for student motivation and multiple-choice test sheet for student achievement. Both instruments were given before and after the learning in each sample group which lasted 6 meetings. The data obtained were then analyzed and tested with f-parametric statistic test, t-test and univariate test using SPSS v.20 application.
6. Result and Discussion

Data description of each group as a following:

Table 2 Data Description of Control Class

|                | N     | Pre Motivation | Post Motivation | Pretest | Posttest |
|----------------|-------|----------------|------------------|---------|----------|
| Mean           | 30    | 89.9666       | 90.7667          | 65.7633 | 74.8583  |
| Median         | 30    | 89.5000       | 92.0000          | 63.8600 | 75.2900  |
| Mode           | 30    | 93.00         | 92.00            | 54.29(a)| 74.29    |
| Std. Deviation | 30    | 5.86829       | 7.24775          | 10.10847| 8.03806  |
| Variance       |       | 34.437        | 52.530           | 102.181 | 64.610   |
| Minimum        |       | 71.00         | 72.00            | 48.57   | 60.00    |
| Maximum        |       | 99.00         | 103.00           | 82.86   | 88.57    |

Table 3 Data Description of Experimental Class

|               | Pre Motivation | Post Motivation | Pretest | Posttest |
|---------------|----------------|------------------|---------|----------|
| N  Valid      | 27             | 27               | 27      | 27       |
| Mean          | 96.8031        | 99.5034          | 63.0119 | 79.6848  |
| Median        | 95.5000        | 99.0000          | 60.0000 | 80.0000  |
| Mode          | 97.00          | 103.00           | 54.29(a)| 85.72    |
| Std. Deviation| 6.35982        | 7.36551          | 8.70922 | 8.01610  |
| Variance      | 40.447         | 54.251           | 75.850  | 64.258   |
| Minimum       | 84.00          | 83.00            | 45.72   | 62.86    |
| Maximum       | 110.00         | 117.00           | 80.00   | 91.43    |

Based on the results of normality and homogeneity test, then the entire group of data has been declared eligible.
**Table 4.** Result of Analysis Requirement

| Data Skor     | Normality test                  | Homogeneity test          |
|---------------|---------------------------------|---------------------------|
|               | P-value to α                     |                           |
| **Control Class** |                                 |                           |
| Pre Motivation| 0,758 > 0,05 → Normal            | 0,166 > 0,05 → Homogeneous|
| Post Motivation| 0,472 > 0,05 → Normal            |                           |
| Pretest       | 0,560 > 0,05 → Normal            |                           |
| Posttest      | 0,696 > 0,05 → Normal            |                           |
| **Experimental Class** |                                 |                           |
| Pre Motivation| 0,594 > 0,05 → Normal            | 0,385 > 0,05 → Homogeneous|
| Post Motivation| 0,990 > 0,05 → Normal            |                           |
| Pretest       | 0,605 > 0,05 → Normal            |                           |
| Posttest      | 0,335 > 0,05 → Normal            |                           |
| **Gain Score** |                                 |                           |
| Motivation    | 0,124 > 0,05 → Normal            | 0,201 > 0,05 → Homogeneous|
| Learning      | 0,377 > 0,05 → Normal            |                           |
| Achievemnt    | 0,715 > 0,05 → Homogeneous       |                           |
Table 5. Output Anova Gain Score for Motivation

| Sum of Squares | Df | Mean Square | F   | Sig. |
|----------------|----|-------------|-----|------|
| Between Groups | 96,337 | 1 | 96,337 | 4,211 | 0,045 |
| Within Groups  | 1258,330 | 55 | 22,879 |     |      |
| Total          | 1354,667 | 56 |         |     |      |

The results of the analysis in table 5 prove significantly the differences in student learning motivation between direct learning compared with blended learning. It is seen from the sig value. output (P) 0.045 which is below 0.05 (α).

Table 6. Output Paired Samples t-Test Students Learning Motivation

| Paired Differences | 95% Confidence of the Difference | Sig. |
|--------------------|---------------------------------|------|
| Mean               | Std. Deviation | Std. Error | Mean | t | df | (2tailed) |
|                    | Lower | Upper | Sig. |

-2,70370 5,08251 0,97813 -4,71428 -0,69313 -2,764 26 0,010

In Table 6, to significantly increase in student motivation SMK 1 Kraksaan with the application of blended learning. It is seen from the sig value. output (P) 0.010 which is below 0.05 (α).

Table 7 Average Score Students Learning Motivation

| Direct Model | Blended Learning |
|--------------|------------------|
| Pre (A)      | Post (B)         | B – A |
| 89.97        | 90.77            | 0.8   |
|              | 96.80            | 99.50 |
|              | 2.70             |       |

Increasing point 0.8 (0.9%) Increasing point 2.7 point (2.8%)

Based on table 7 it can be seen that the mean score of students' learning motivation score of control increases 0.8 points (0.9%). Meanwhile, the average score of learning motivation of experiment class students increased 2.70 points (2.8%). Compared with the increase of mean score of learning
motivation of both groups, the improvement of students' motivation in experimental class is 1.9 points (19 fold) compared to the increase of learning motivation score of control class students.

Table 8. Output Anova Gain Score Learning Achievement

|                      | Sum of Squares | Df | Mean Square | F    | Sig. |
|----------------------|----------------|----|-------------|------|------|
| Between Groups       | 826.047        | 1  | 826.047     | 8.311| .006 |
| Within Groups        | 5400.212       | 55 | 98.186      |      |      |
| Total                | 6216.259       | 56 |             |      |      |

Results of analysis in Table 8 demonstrate significant differences in student achievement between direct learning compared to learning blended learning. It is seen from the value sig. output (P) 0.006 which is below 0.05 (α).

Table 9 Output Paired Samples t-Test Learning Achievement

| Paired Differences | 95% Confidence of the Difference | Sig. |
|--------------------|---------------------------------|------|
| Mean Deviation     | Mean                            |      |
| Std.               | Std. Error                      |      |
|                   | t                               | df (2tailed) |
|                   | Mean Difference                 |      |
|                   | Lower                           | Upper |
|                   | -17.67296                       | 10.11815 | 1.94724 | -21.67557 | -13.67036 | -9.076 | 26 | 0.000 |

Furthermore, the results of subsequent analysis in table 9, proves significantly an increase in student achievement of SMKN 1 Kraksaan with the application of model blended learning. It is seen from the sig value. output (P) 0.000 which is below 0.05 (α).

According to Sofyan and Uno motives is a potential energy for the occurrence of behavior or action [26]. In the above tables it is seen how the stimulus in the form of learning model has increased the motivation of both groups to learn, but the motive of both groups tends to produce the same relative potential energy (TB-TF = 72.14% and RB-RF = 76.95%). Low motivated group of students are not able to maximally respond to stimuli in the form of learning models to achieve the same or higher learning achievement than the highly motivated group of students. This can be seen from the difference of learning achievement of both groups in both treatment (X and Y).

Based on attribution theory, there are 3 dimensions that influence attribution characteristics: (1) locus, (2) stability, and (3) controllability [27]. The learning model is applied to the second class is a stimulus from the outside (external) which is stable (stable) and the resulting response is uncontrollable [28]. Therefore, the learning motivation formed by the influence of the application of blended learning has no significant effect on the improvement of student achievement. Increased learning achievement significantly only caused by the treatment given to students is the application of learning models.
In control theory (cybernetics), described how the individual controls each stimulus he receives according to the control setpoint in itself [29]. Every stimulus responded according to setpoint on each individual. Group low motivated students and highly motivated student groups respond to stimuli in the form of learning models in their respective set points. If we note, it can be illustrated the existence of a set point that gives rise to achievement motivation in both groups of students. Highly motivated students are accustomed to learning activities and achievement motives that tend to continue to maintain its position. Meanwhile, low motivated students also behave the same way without set point a higher, such as the desire to improve learning achievement beyond the student's better achievement. According to Wade & Travis achievement motivation will result in maximal learning achievement if students are able to combine both intrinsic and extrinsic motivation due to the learning model with the ability to demonstrate its performance [21].

Therefore the application of learning models that have a significant effect on the increase of motivation to learn actually become the basic capital for the next response in the form of student achievement improvement. But we need to realize that motivation is a complex psychical factor. According to Sofyan and Uno, the strongest motivation is intrinsic motivation rather than extrinsic motivation [3]. In line with that Woolfolk in educational psychology (2004) states that the learning process should be able to create students 'intrinsic motivation by linking students' interests and supporting their competence development In addition, to apply the learning model is to generate motivation externally then the teacher must strive for intrinsic motivation to be developed because that motivation is able to give the biggest impetus for the development of student potential into a capability.

References

[1] H. Baharun, “PENDIDIKAN ANAK DALAM KELUARGA; TELAAH EPISTEMOLOGIS,” Pedagogik, vol. 3, no. 2, pp. 96–107, 2016.
[2] N. Soyomukti, “Teori-teori pendidikan,” Jogjakarta: Ar-Ruzz Media, 2010.
[3] H. Baharun and R. Awwaliyah, “Pendidikan Multikultural dalam Menanggulangi Narasi Islamisme di Indonesia,” J. Pendidik. Agama Islam (Journal Islam. Educ. Stud.), vol. 5, no. 2, pp. 224–243, 2017.
[4] D. R. Garrison, E-learning in the 21st century: A framework for research and practice. Routledge, 2011.
[5] M. J. Rosenberg and R. Foshay, “E-learning: Strategies for delivering knowledge in the digital age,” Perform. Improv., vol. 41, no. 5, pp. 50–51, 2002.
[6] S. Islam, “KARAKTERISTIK PENDIDIKAN KARAKTER; MENJAWAB TANTANGAN MULTIDIMENSIONAL MELALUI IMPLEMENTASI KURIKULUM 2013,” J. EDURELIGIA, vol. 1, no. 1, pp. 89–100, 2017.
[7] H. Baharun, “Penerapan Pembelajaran Active Learning untuk Meningkatkan Hasil Belajar Siswa di Madrasah,” J. Pendidik. Pedagog., vol. 1, no. 1, pp. 34–46, 2015.
[8] O. Hamalik, “Belajar dan Teori Belajar,” Jakarta Bumi Aksara, 2008.
[9] A. Mundir, “Pendidikan Teknohumanistik Berbasis Core Ethical Values,” At-Tajdid, vol. 1, no. 1, pp. 37–47, 2012.
[10] H. Baharun, “Pengembangan Media Pembelajaran PAI Berbasis Lingkungan Melalui Model ASSURE,” Cendekia J. Educ. Soc., vol. 14, no. 2, pp. 231–246, 2016.
[11] A. P. Rovai and H. Jordan, “Blended learning and sense of community: A comparative analysis with traditional and fully online graduate courses,” Int. Rev. Res. Open Distrib. Learn., vol. 5, no. 2, 2004.
[12] S. R. Castle and C. McGuire, “An analysis of student self-assessment of online, blended, and face-to-face learning environments: Implications for sustainable education delivery,” Int. Educ. Stud., vol. 3, no. 3, p. 36, 2010.
[13] K. Jusoff and R. Khodabandelou, “Preliminary study on the role of social presence in blended
learning environment in higher education,” *Int. Educ. Stud.*, vol. 2, no. 4, pp. 79–83, 2009.

[14] I. E. Allen, J. Seaman, and R. Garrett, *Blending in: The extent and promise of blended education in the United States*. ERIC, 2007.

[15] J. M. Carman, “Blended learning design: Five key ingredients,” *Retrieved August*, vol. 18, p. 2009, 2002.

[16] M. Tayebinik and M. Puteh, “Blended Learning or E-learning?,” 2013.

[17] C. R. Graham, “Blended learning systems,” *Handb. blended Learn.*, pp. 3–21, 2006.

[18] I. Syarif, “Pengaruh model blended learning terhadap motivasi dan prestasi belajar siswa SMK,” *J. Pendidik. Vokasi*, vol. 2, no. 2, 2012.

[19] K. Puspitasari, “Effects of Learning Strategy Intervention and Study Time Management Intervention on Students’ Self-Regulated Learning, Achievement, and Course Completion in a Distance Education Learning Environment,” 2012.

[20] C. P. Alderfer, “An empirical test of a new theory of human needs,” *Organ. Behav. Hum. Perform.*, vol. 4, no. 2, pp. 142–175, 1969.

[21] H. Sofyan and H. B. Uno, “Teori motivasi dan aplikasinya dalam penelitian,” *Gorontalo: Nurul Jannah*, 2004.

[22] S. B. Djamarah, “Prestasi belajar dan kompetensi guru,” 1994.

[23] M. Fathurrohman, “Model-Model Pembelajaran,” 2015.

[24] L. Wijnia, S. M. Loyens, and E. Derous, “Investigating effects of problem-based versus lecture-based learning environments on student motivation,” *Contemp. Educ. Psychol.*, vol. 36, no. 2, pp. 101–113, 2011.

[25] A. Mundiri, “Strategi Lembaga Pendidikan Islam dalam Membangun Branding Image,” *Pedagogik*, vol. 3, no. 2, pp. 58–72, 2016.

[26] W. K. Fikriningrum and M. Syafruddin, “Analisis Faktor-Faktor Yang Mempengaruhi Wajib Pajak Orang Pribadi Dalam Memenuhi Kewajiban Membayar Pajak (Studi Kasus Pada Kantor Pelayanan Pajak Pratama Semarang Candisari),” 2012.

[27] I. Minauli and I. B. Butar-butar, “Hubungan Antara Efikasi Diri Dan Regulasi Diri Dalam Belajar Dengan Prestasi Akademik Mahasiswa,” *Analitika*, vol. 3, no. 2, pp. 79–84, 2017.

[28] J. B. Hale *et al.*, “Executive impairment determines ADHD medication response: implications for academic achievement,” *J. Learn. Disabil.*, vol. 44, no. 2, pp. 196–212, 2011.

[29] R. Colvin Clark and R. E. Mayer, “E-learning and the science of instruction,” *Proven Guidel. Consum. Des. Multimed. Learn. San Fr. Pfeiffer*, 2008.