

## **The Increased of Capabilities Use of E-Learning Edmodo in Learning Through Techniques Of On Job Training For Teachers At Sman 1 Gandapura Bireuen**

Muhammad Daudy<sup>1)</sup>·Darwin<sup>2)</sup>·Rahmat Mulyana<sup>3)</sup>·

1) Senior High School Teacher SMAN 1 Gandapura, Bireuen, Aceh

2,3) Lecturer on the Departement of Educational Management, UNIMED, 2017.

---

**Abstract:** Regulation of the Minister of education and culture No. 65 Year 2013 on standard process of primary and secondary education in chapter I mentioned the utilization of information technology aims to improve the efficiency and effectiveness of learning. Edmodo is one of the fast-growing educational technology in this digital era and used millions of teachers across the world and applied in their learning. The importance of teachers to be applied correctly so that it can add to the scientific knowledge in the use of e-learning in learning activities Edmodo daily with the students. With the use of e-learning Edmodo's teacher can effectively and efficiently using time and achieve the desired learning goal, besides students can also feel the use of educational technology in their learning. This research took place at SMAN I Gandapura Bireuen Regency of Aceh, with a goal to increase the use of e-learning capabilities of Edmodo in learning by using the techniques of on job training, as for Engineering Research done is action research school (PTS). Conclusion of this research is the use of the technique on job training is highly effective in increasing the use of e-learning in the teacher on Edmodo learning.

**Keywords:** Edmodo, on job training, increased the ability of teachers

---

Date of Submission: 13-11-2017

Date of acceptance: 30-11-2017

---

### **I. Introduction**

The professional ability of a teacher is tested by the ability to master various methods, especially the active learning method, which is a learning method that invites students to actively learn, they actively use the brain, either to find the main idea of the subject matter, solve the problem, or apply what they learn into a real-life problem (Hisham Zaini, 2002 xvi).

Law of the Republic of Indonesia no. 14 of 2005 on Teachers and Lecturers, in Article 8 paragraph 1 explained that teachers must have academic qualifications, competence, certification educator, physically and mentally healthy, and have the ability to realize national goals. Then in Article 10 paragraph 1 the competence of teachers in article 8 is meant is pedagogic competence, personality competence, social competence and professional competence. These competencies are a set of knowledge, skills, and behaviors that a teacher must possess to be mastered, mastered and actualized by the teacher. Theoretically the four types of competence can be separated from each other, but practically in fact the four types of competence can not be separated, because the four competencies must be integrated in the teacher.

Speaking of the media is very instrumental in the process of teaching and learning, the presence of media has a significant meaning. Because in the event the obscurity of the material presented can be helped by presenting the media as an intermediary. The complexity of the materials to be presented to students can be simplified with the help of the media. The media can represent what the teacher is less able to say through certain words or sentences. Even material abundance can be concretized by the presence of educational media, so learners find it easier to find material than without the help of educational media. The development of the world of education today is very rapid, and the development is supported as the development of media that can be used for education. In developed countries the use of media is very obligatory because it makes it easier for teachers and students to interact in an educational goal to be achieved, and helped by the spread of internet connection which is the principle of the development of educational technology. The use of educational media makes the learning process more interesting, active, and creative. The goal is to encourage effective learning.

Minister of Education and Culture Regulation no. 65 of 2013 on the standard process of Basic and Secondary Education in Chapter I mentioned the utilization of information technology aims to improve the efficiency and effectiveness of learning. Thus, learning with integrated information technology can not be bargained to improve the quality and quality of teaching and learning. In addition, the use of the latest media should also be applied so that students can more easily in achieving the goals of learning. According to research made Kominfo and UNICEF Concerning Child and Adolescent Behavior In Using the Internet Children and

adolescents have three main motivations to access the internet: to find information, to connect with friends (old and new) and for entertainment. Information searching is often driven by schoolwork, while the use of social media and entertainment content is driven by personal needs.

The concept of electronic learning (E-learning) is one of the growing media, teachers and students are not required to always be active in achieving the learning objectives to be achieved within a certain time. Through E-learning media that can connect students with teachers wherever they are of course with an internet connection. Parents and teachers are increasingly realizing the benefits of digital media to support children's education and learning. For example, more and more teachers are assigning students to gather information from the internet to do various tasks. This is a good step to improve the use of the internet as a means of education.

In SMAN 1 Gandapura there is a vision of the school mission of organizing the process of education-aided information technology and communication one of them with the use of email media, facebook and computerization in the delivery of material. On July 15-17, 2015, coaching teachers at SMAN 1 Gandapura on e-learning edmodo where there is ease of interaction with students and ease in achieving the desired educational goals, the coaching was attended by 30 teachers within 3 days with the aim that teachers know the educational technologies that have been used in developed countries in learning, in the hope that teachers can be applied in classroom learning

In 2008 Jeff'o created an E-learning learning system under the name of Edmodo. Edmodo is a social media platform, such as a facebook developed specifically for teachers and students in a virtual classroom that can serve to implement interesting and easy-to-use learning (Seamolec Team, 2013 145). Edmodo is an E-learning system that can be used by educators and their students virtually. Edmodo provides web features and also applications that can be accessed either using a computer or PC media, can also through a smartphone where the teachers and students now have a lot of both based on android or ios. Edmodo is E-learning that is free of charge for those who use and access it, teachers can send messages or assignments to their students either in the form of file, video, or music, and students can open the file, video and music via Laptop / Pc or Smartphone. In this way students are always able to access whatever tasks teachers provide even though sometimes they are not face to face with the teacher. With this technology wherever teachers and students are located, they can interact to discuss learning topics at school. Edmodo also provides Note, Assignment, Quiz, and Poll features, Snapshot which allows teachers to provide quiz tasks, and the results can be viewed in the Edmodo media, without having to master the complicated codes typically controlled by Web Developer for create web-based quizzes that are very burdensome for teachers and students. Before the researcher did the research, then did the testing of the ability of teachers in applying the features edmodo, while the initial results obtained can be seen in the table below

**Table 1.1.Pre-Cycle Interview Results**

Teacher	Observed (Edmodo's Indicator)										Ave	Cri
	1	2	3	4	5	6	7	8	9	10		
T 1	58.33	50.00	41.67	41.67	33.33	41.67	41.67	50.00	33.33	41.67	43.33	VL
T 2	58.33	50.00	33.33	33.33	50.00	33.33	50.00	50.00	41.67	25.00	42.50	VL
T 3	33.33	50.00	50.00	41.67	33.33	33.33	41.67	33.33	41.67	33.33	39.17	VL
T 4	66.67	41.67	25.00	41.67	25.00	33.33	33.33	33.33	50.00	41.67	39.17	VL
T 5	50.00	41.67	41.67	33.33	33.33	33.33	50.00	41.67	41.67	50.00	41.67	VL
<b>Av</b>	<b>53.33</b>	<b>46.67</b>	<b>36.67</b>	<b>38.33</b>	<b>35.00</b>	<b>35.00</b>	<b>43.33</b>	<b>40.00</b>	<b>43.33</b>	<b>38.33</b>	<b>41.00</b>	<b>VL</b>
<b>Cri</b>	<b>VL</b>	<b>VL</b>	<b>VL</b>	<b>VL</b>	<b>VL</b>	<b>VL</b>	<b>VL</b>	<b>VL</b>	<b>VL</b>	<b>VL</b>	<b>VL</b>	

It can be seen that the highest score in the implementation of e-learning Edmodo is Teacher I with a value of 42.50 and the lowest score is 39.17, the assessment category of both is very less. Teacher I got the highest score with an average score of three 42.50 assessors, and the lowest was Teachers III with a value of 39.17 from three assessors. while teacher II got 42.50, and teacher IV got 39.17, and teacher V got 41.67. The conclusion of all teachers is that all values are still 'Very Less' and should be improved as no one reaches the value according to the minimum predetermined success criteria.

## II. Research Methodology

The location of this research is SMA Negeri 1 Gandapura Kabupaten Bireuen. The study time is scheduled for four months from June 2017 to September 2017. The subjects of this study are language teachers at SMA Negeri 1 Gandapura. The number of teachers who became the subject of this study amounted to 5 language teachers consisting of English 2 teachers and Indonesian 3 teachers. This research uses School Action Research (PTS). Arikunto (2014 74) suggests that the School Action Research is an action directed towards a dynamic, participatory and collaborative school development. Furthermore Aqib (2013 49) suggests that the nature of action research that carries important implications for the process and procedures that must be taken by

a researcher. There are five steps that need to be taken in conducting action research, namely (1) establishing and developing the focus of research problem, (2) improvement action plan, (3) implementation of correction action, observation and interpretation, (4) analysis and reflection, (5) follow-up plan.

The implementation of this research using On Job Training technique. The research is designed with a cycle process consisting of four stages: planning, action, observation and the last one is reflection. The fourth is a cycle or round where from each of these stages continue to repeat until the problem is resolved or success indicators are achieved.

Data analysis technique used in this research as follows:

1. The quantitative data is the value of the ability of teachers to apply E-Learning Edmodo analyzed by finding the average value and percentage of success in application in the classroom. The data that has been collected in the analysis by comparing the data before the action with the data after the action, that is the data of teacher observation result in the implementation of E-Learning Edmodo. According to Endrayanto and Harumurti (2014 292) to determine the acquisition value in each cycle is determined by the formula

$$\text{Score} = \frac{\text{Total Rating Score}}{\text{Maximum Score}} \times 100$$

With the following criteria:

90 - 100	A very good (VG)
80 - 89	B good (G)
65 - 79	C enough (E)
55 - 64	D less (L)
< 55	E very less (VL)

2. Qualitative data is data in the form of sentence-shaped information that provides an overview of the activities of teachers apply E-Learning Edmodo. Sugiyono (2011 337) suggests that data analysis can be done with steps such as the following a). Data collection, b). Grouping data according to the same subject matter c).Data reduction is to summarize, select the essentials, focus on the important things, find the theme and pattern and remove unnecessary. d). Presentation of data in the form of tables and graphs. e). Inductive conclusion is interpreting the data that has been grouped.

Indicators are used as measures of success against actions taken in each research cycle. In determining the indicator of teacher's success in using E-Learning Edmodo in teaching and learning process can use Purposive Passed Limit, which refers to the determination of benchmark reference assessment. Means that the determination of teacher success indicator criteria is determined by the researcher himself. This action research is said to be successful if as many as 80% of the total participants are able to apply E-Learning Edmodo with a minimum value of 80%. In accordance with the opinion of Endrayanto and Harumurti (2014 292) stating that the value of 80- 89 has a good criterion.

### III. Results And Discussion

#### Cycle I

The first cycle begins on June 5, 2017 until June 20, 2017 with the following stages of action. Action planning I was implemented from 5 June to 20 June 2017 at SMAN 1 Gandapura, Bireuen. In this cycle researchers conduct planning on the use of Edmodo on the learning process, preparation of research instruments, schedule activities, and preparation of material to be delivered.

At the implementation stage, the researcher is assisted by the supervisor of English field. The researcher in the first cycle acts as a resource person explaining to the teacher about Edmodo Media, the menu functions contained in Edmodo, how to access it, and the use of teachers and students consisting of assignment, File and Links, Quiz, Polling, Gradebook, Library, Award Badges and Parent Codes. The steps applied in the implementation on job training are:

1) Preparing the teachers to be trained (a) School supervisors and researchers condition conditions so that good communication exists in the implementation of on job training, (b) Researchers explain the benefits of training that will be implemented so that teachers are interested to follow, (c) Supervisors and researchers cultivate teachers' interest in actively asking questions about training topics, as well as finding out about teacher's knowledge of the materials to be applied in the training, (d) Supervisors and researchers introducing equipment, stretching lessons before training.

2) Demonstrate training materials and trainees (a) Researchers explain about e-learning Edmodo, and features to be applied, (b) Researchers carry out training tailored to the ability of teachers to absorb training materials, as well as repetition of materials as necessary to increase teachers' understanding in its application in

learning (c) The researcher gives teachers time to ask questions and discuss about the difficulties experienced in applying Edmodo's features, (d) The researcher provides an opportunity for the teacher to explain all the steps that have been taken during the training process.

3) Researchers train teachers to practice (guided instruction); (a) The resource person provides the opportunity for the teacher to apply Edmodo features in accordance with the steps already learned, (b) The researcher gives the teacher time to apply the features learned in the learning process gradually and pleasantly, (c) Researchers provide assistance in the form of instructions if teachers experience obstacles in the process of applying edmodo features so that teachers can directly get directions if there are obstacles in the learning process.

4) Resource persons provide follow-up; (a) The resource person informs the teachers to whom they may request assistance if there are obstacles in the implementation of e-learning Edmodo, (b) The informant provides input if there is an error in the application of Edmodo in the lesson.

**Table 1.2. Values of Teacher Competence in preparing RPP In Cycle I**

Teacher	Observed (Edmodo's Indicator)										Ave	Cri
	1	2	3	4	5	6	7	8	9	10		
T 1	91.67	83.33	83.33	75.00	66.67	75.00	75.00	75.00	66.76	66.67	75.83	Enough
T 2	91.67	91.67	91.67	83.33	83.33	83.33	75.00	75.00	66.67	66.67	80.83	Good
T 3	100	66.67	66.67	66.67	75.00	75.00	66.67	75.00	83.33	75.00	75.00	Enough
T 4	100	66.67	75.00	75.00	58.33	58.33	66.67	58.33	75.00	75.00	70.83	Enough
T 5	100	83.33	75.00	75.00	50.00	66.67	75.00	66.67	66.67	75.00	73.33	Enough
Av	96.67	76.67	73.33	75.00	66.67	71.67	71.67	75.00	71.67	71.67	74.50	Enough
Cat	VG	E	E	E	E	E	E	E	E	E	E	

From the table above can be seen that the teacher I has a value of 88.83 and into the category of Good, Teacher's weakness I is on the application of the 10th feature is Parent Code with only a percentage of 66. 67. Teacher II got an average score of 80.83 with the mastery of indicator 1 , 2, and 3 with the value of 91.67, and still get the value of Enough on indicator 9 and 10 with got value 66.67.As Teachers III got an average score of 78.33 and entered into the category enough, the weakness experienced is on indicator 2 where the teacher is still experiencing obstacles in registration because there are too many stages to be lived, and constraints are also experienced on the 7th indicator of Gradebook, where teachers are faced with filling in the students' grades of each assigned task.

Furthermore Teachers IV got an average score of 70.83, where the teacher is still having constraints on the 5th, 6th, and 7th indicator, the 5th indicator is Quiz where the teacher gives the Quiz in multiple choice form, the 6th indicator is Polling where the teacher asks the question students to provide answers that can be taken most votes in decision making, The indicator to 7 is Gradebook.

Teacher V still got the obstacle that happened on the 5th indicator that is on the giving of Quiz to the students by getting the value 50.00, Then the next constraint on applying the feature of polling and award badges where each got 66.67 value included into enough category, As for the highest score obtained is in open web Edmodo and register as a member in Edmodo with each score of 100.00 and 83.33 and included in the category very good and good.

## Cycle II

The activity of the second cycle planning was carried out from 14 July to 14 September 2017 at SMAN 1 Gandapura Bireuen District. Things planned to be done in cycle II include 1) Designing On Job Training training to improve Edmodo's e-learning ability in learning; 2) prepare the necessary instruments; 3) Prepare a schedule of activities followed by Language teachers; 4) prepare necessary equipment such as computer, internet network, and camera for documentation material.The implementation of cycle two is as follows; 1). Collect five Language teachers at SMAN 1 Gandapura who have attended on job training in cycle I. Implementation of activities carried out as follows; a) Supervisors and researchers create an atmosphere of intimacy; b) Supervisor explains the benefits of training; c) the supervisor provides an opportunity for the teacher to ask questions about the unknown;2). The researcher explains all the indicators to be achieved in cycle II and the teachers listen carefully; a) In cycle II it focuses on topics that have not been mastered during cycle I like the application of Quiz, Grabebook, and Parent Code features; b) Teachers are given the opportunity to ask again about the features to be practiced; c) Supervisors and researchers give teachers time to explain how to use the feature; 3). Researchers train teachers to practice (guided instruction); (a) The resource person provides an opportunity for the teacher to apply Edmodo features according to the steps already learned, (b) The researcher gives the teacher time to apply the features learned in the learning process gradually and fun, (c) The researcher provides instruction in the form of instruction if the teacher experiences obstacles in the process of applying the edmodo features so that the teachers can directly get directions if there is a constraint in the learning process; 4) Resource persons provide follow-up; (a) The resource person informs the teachers to whom they may request

assistance if there are obstacles in the implementation of e-learning Edmodo, (b) The informant provides input if there is an error in the application of Edmodo in the lesson.

**Table 1.3. Values of Teacher Competence in preparing RPP In Cycle II**

Teacher	Observed (Edmodo's Indicator)										Ave	Cri
	1	2	3	4	5	6	7	8	9	10		
T 1	100	100	100	91.67	100	91.67	100	100	91.67	83.33	95.83	VG
T 2	100	100	100	100	100	91.67	91.67	91.67	83.33	91.67	95.00	VG
T 3	100	100	100	100	83.33	91.67	83.33	83.33	91.67	91.67	92.50	VG
T 4	100	100	100	100	83.33	83.33	91.67	100	100	75.00	93.33	VG
T 5	100	100	100	91.67	100	91.67	91.67	91.67	91.67	83.33	94.17	VG
Av	100	98.33	100	96.67	93.33	90.00	91.67	93.33	93.33	85.00	94.17	VG
Cri	VG	VG	VG	VG	VG	VG	VG	VG	VG	VG	VG	

From the table above it can be seen that Teacher 1 got the highest score with score of 95.83 with very good category, Teacher 2 got 95.00 also with very good category, Next Teacher 3 got value 92.50 still got into very good category, then Teacher 4 with value 93.33 and teacher 5 with a score of 94.17 are both excellent.

**Table 1.4 the competence of teachers in preparing the RPP Cycle II**

Teacher's Code	Cycle	Score	Category
T1	Pre	43.33	Very Less
	I	75.83	Enough
	II	95.83	Very Good
T2	Pre	42.50	Very Less
	I	80.83	Good
	II	95.00	Very Good
T3	Pre	39.17	Very Less
	I	75.00	Enough
	II	92.50	Very Good
T4	Pre	41.67	Very Less
	I	70.83	Enough
	II	93.33	Very Good
T5	Pre	41.67	Very Less
	I	73.33	Enough
	II	94.17	Very Good

Based on the results of action between cycles can be seen that there are increasing in teacher competence in implementing e-learning Edmodo in the classroom with the predicted success of the action.

#### IV. Conclusion

Based on the discussion of the results of research that has been done, obtained the following conclusions:

- In the Pre cycle, there are no teachers who have scores in either category, All teachers get very less score in the implementation of e-learning edmodo with an average value of 41.00
- In the first cycle, all teachers experienced an increase in the implementation of e-learning edmodo, and the five teachers got an average score of 74.00 with enough categories. so with the value it needs a continuation to the second cycle.
- In the second cycle, the teachers experienced a further increase in the use of e-learning edmodo in learning with an average score of 94.33 by entering into a good syllogistic.
- The findings in this research that the technique on job training can improve the ability of teachers in applying e-learning edmodo in learning.

#### V. Suggestion

Based on the above research findings it is suggested:

- Principals can use on-job training techniques to improve teachers' skills in mastering educational technology and other learning media.
- Teachers must increase their commitment to the importance of using online-based education technology. Cooperation between school principals and teachers is a determinant factor for the achievement of quality schools for that teachers also always improve their competence independently and adjust to the development of technology.
- Supervisors of schools always provide advice, guidance and thought contribution to the progress of schools for the achievement of quality schools.
- Local Government, in this case the Provincial Education Office to prioritize the use of e-learning in learning so as to improve the quality of schools.

### Bibliography

- [1]. Al-Said, Khaleel M. 2015. "Students Perception of Edmodo and Mobile Learning and Their Real Barriers towards Them". Saudi Arabia. Department of Education Technology, College of Education, Taibah University. Vol. 14. No. 2. 167-180
- [2]. Aqib, Zainal. 2006. Penelitian Tindakan Kelas. Bandung: Yrama Widya
- [3]. Basori. 2013. Pemanfaatan Social Learning Network "Edmodo" Dalam Membantu Perkuliahan Teori Bodi Otomotif di Prodi PTM JPTK FKIP UNS. JIPTEK
- [4]. Departemen Agama. 2006. UU RI No.14 Tahun 2005 Tentang Guru dan Dosen, Serta UU RI No.20 Tahun 2003 Tentang Sisdiknas. Dilengkapi Permendiknas No.11 Tahun 2005 Tentang Buku Teks Pelajaran dan PP RI No.19 Tahun 2005 Tentang SNP, Jakarta: Departemen Agama RI.
- [5]. Gary. D. 2009. Manajemen Sumber Daya Manusia, Jakarta: Edisi Kesepuluh Jilid Dua. PT Indeks.
- [6]. Kamarga. H. 2002. Belajar Sejarah melalui E-Learning; Alternatif Mengakses Sumber Informasi Kesejarahan, Jakarta: Inti Media.
- [7]. Hisyam. Dkk. 2002. Strategi Pembelajaran Aktif. Yogyakarta: CTSD IAIN Sunan Kali Jaga.
- [8]. Horton. W. 2012. E-Learning by Design Second Edition. Pfeiffer. 989 Market Street, San Fransisco.
- [9]. Istiqomah, & Ninik Azizah. 2013. Penerapan Metode Blended Learning Berbasis ICT. Jurnal Eduhealth.
- [10]. Koran. Jaya K, 2002, Aplikasi E-Learning dalam Pengajaran dan Pembelajaran di Sekolah Malaysia. Kementerian Pendidikan Malaysia.
- [11]. Lawson. Karen. 1997. Improving On-The-Job Training and Coaching. Alexandria, USA, www.astd.org. Diakses pada tanggal 25 Maret 2017 Pukul 22.00
- [12]. Kristiani. D. 2016. "E-Learning dengan Aplikasi Edmodo di Sekolah Menengah Kejuaraan". Universitas Kristen Satya Wacana. 36-45
- [13]. Kong, SC. et al. 2014. "A Review of e-Learning policy in school education in Singapore, Hongkong, Taiwan, and Beijing: implication to future policy planning". Beijing. Beijing Normal University. 187-212
- [14]. Maurya & Kaushik (2013). "On the Job Training: A Step Towards Job Satisfaction-A Case Study of Public Sector Organization in Indian Scenario". International Journal of Mathematical Modeling and Applied Computing Vol. 1, No. 2, PP: 11- 17
- [15]. Murtiyasa. Budi. 2012. Pemanfaatan Teknologi Informatika dan Komunikasi untuk meningkatkan Kualitas Pembelajaran Matematika. Surakarta: FKIP Univ. Muhammadiyah Surakarta. (on-Line) tersedia: am%20pendidikan/TIK inEduMath.pdf.
- [16]. Puji Permana. Mahendra. 2016. "Edmodo virtual learning environments in teaching English", University of Nusantara PGRI Kediri. Vol. 1, No. 1. 77-88
- [17]. Usman. Moh. Uzer. 2004. Menjadi Guru Profesional. Bandung: Remaja Rosda Karya
- [18]. \_\_\_\_\_ 2006. Menjadi Guru Profesional. Bandung: Remaja Rosda Karya
- [19]. Olojo O. Jethro, dkk. 2012. "E-Learning and its Effect on Teaching and Learning in Global Age". Nigeria. International Journal of Academic Research in Business and Social Science. Vol. 2, No. 1. 203-210
- [20]. Putranti. Nurita. 2013. Cara Membuat Media Pembelajaran Online Menggunakan Edmodo. Jurnal Pendidikan Informatika dan Sains. <http://sindikter.dikti.go.id/dok/UU/UU20-2003-Sisdiknas.pdf>, diakses pada tgl 8 Maret 2017 Pukul 10.00
- [21]. Riyanto. Agus. dkk. 2015. Model Supervisi Klinis berbasis "OJT" Sebagai layanan Peningkatan Kompetensi Guru Melaksanakan Evaluasi Pembelajaran Praktik Produktif. PPS Universitas Semarang. Jurnal Penelitian Tindakan Sekolah Kepangawasan. Vol. 2, No. 1. 1-8
- [22]. Rusman, dkk. 2013. Pembelajaran Berbasis Teknologi Informasi dan Komunikasi, Jakarta: Rajawali Press Zaini
- [23]. Sahertian, Piet, Teknik dan Prinsip Supervisi Pendidikan, Surabaya: Usaha Nasional, 1981
- [24]. Sardiman. 1994. Interaksi dan Motivasi Belajar Mengajar. Jakarta: Raja Grafindo
- [25]. Sanaky, H. 2013. Media Pembelajaran Interaktif-Inovatif. Yogyakarta: Kaukaban Dipantara.
- [26]. Sastroprawiro, W.N. 2011. The Missing Abundance Mentality in Our Curriculum dalam Seri Pemikiran Mahasiswa: Ekonomi Indonesia di Mata Anak Muda UI. FEUI: Baduose Media
- [27]. Seamolec. T. 2013. Simulasi Digital Jilid I. Jakarta: Kementerian Pendidikan dan Kebudayaan.
- [28]. Slameto. 2003. Belajar dan Faktor-faktor yang Mempengaruhinya. Jakarta: Rineka Cipta
- [29]. Sudarwan Danim. 2002. Inovasi Pendidikan Dalam Upaya Peningkatan Profesionalisme Tenaga Kependidikan. Bandung: Pustaka Setia.
- [30]. Sudibjo. A. 2013. Penggunaan Media Pembelajaran Fisika Dengan E- Learning Berbasis Edmodo Blog Education Pada Materi Alat Optik Untuk Meningkatkan Respon Motivasi Dan Hasil Belajar Siswa Di SMP Negeri 4 Surabaya Surabaya: Universitas Negeri Surabaya
- [31]. Sunday Tunmibi. dkk. 2015. "Impact of E-Learning and Digitalization in Primary and Secondary Schools". Nigeria: Journal of Education and Practice. Vol. 6, No 17. 53-58
- [32]. Anderson. Terry. 2011. "The Theory and Practice of Online Learning", Au Press, Athabasca University, Canada
- [33]. Undang-undang RI No. 20 tahun 2003 tentang Sistem Pendidikan Nasional Pasal 31
- [34]. Wilson. Gail, Stacey. E. 2004. "Online Interaction Impact on Learning: Teaching the teachers to teach online", Australia. Australian Journal of Educational Technology. 20(1), 33-48
- [35]. Yousef Alhaggass. 2015. "Increasing the Effectiveness of the On-Job-Training for Physics Teachers in Saudi Arabia". Saudi Arabia. International Journal of Information and Education Technology. Vol. 5, No. 11. 847-850
- [36]. Zuraina. Ali. 2015. "A Case of Tertiary Students' Experiences Using Edmodo in Language Learning". Malaysia. University Malaysia Pahang. 39-48

Muhammad Daudy The Increased of Capabilities Use of E-Learning Edmodo in Learning Through Techniques Of On Job Training For Teachers At Sman 1 Gandapura Bireuen." IOSR Journal of Research & Method in Education (IOSR-JRME) , vol. 7, no. 6, 2017, pp. 40-45.