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Application of Self-learning in Basic Teaching Skills at Vocational Program

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Abstract—The application of self-learning in basic teaching skills at vocational program as the practice to the prospective of student teacher was conducted at Mechanical Engineering **Education program Faculty of Teacher and Training Universitas** Palangka Raya. The problem in the prospective student teacher in Mechanical of Engineering Education program in to the practice of basic teaching skills. Therefore, there is a need for a method to be carried out in this learning, while the purpose of this research is to apply self-learning in practicing basic teaching skills. The application of self-learning in teaching basic skills was carried out with self-evaluation, self-improvement and selfstrengthening. The self-evaluation activities were carried out by identification of his/her weakness and his/her strength itself of they do every basic teaching skills then they were do to the selfimprovement and self-strengthening. Self-learning of the prospective of student teachers through a questionnaire with the instruments have validity and reliability. They were analysed for the self-evaluation in basic teaching skills in category is very difficult and very easy with the self-evaluation forms. The do activities were carried out by practice on the basic teaching skills in the lesson Micro Teaching. The self-learning teacher's were observed by questioner analysed using qualitative descriptive .The result showed teacher's self-learning in basic teaching skills through description method on the lesson were "very difficult" is to attract students' attention (55,81%), clarity of the voice (53,48%), reflecting off the breadth of insight (48,84%), to attention principal of media" (54,5%), "use the assessment relevant to specific learning objectives" (65,46%), and to review of the lesson (34,88%). The choice of "very difficult" and "very easy" is an application from him self-learning and for the selfimprovement, they do choose to learn from the self-weakness. While for "very easy" their do for the self-strengthening.

Keywords—self-learning; self-evaluation; self-improvement; self-strengthening; vocational

I. INTRODUCTION

A teacher professional must need the competence of basic teaching skills. Consequently his/her to learn always for to the change himself which it's relevant to the Law No. 14 of 2005 on Teachers and Lectures [1]. Especially prospective teacher student at a vocational program needs the basic teaching skills practice, because this student to prepared can be a teacher. To prepare as a teacher is starting in here they are studying at the Educational Personnel Education Institution, therefore for the study need a learning which it's to impact on learning that's the compare as if the impact of mental pollution on learning and

memory [2]. Therefore if the mental is good then will good on learning and memory.

What is this need for 21st-century learning? How about a teacher can do it? More again a teacher in the vocational program with the information technology unlimited? The self-learning can be as the choice of the strategies in to learn of the different condition and situation.

A. Self-Learning

The Self-Learning always interpreted as a learning without teacher guidance or in the other word that was carried out or organized learning itself and often called the Self-Regulated Learning [3]. Also, they researched about self-learning which has been done only compare how learning without any support from instructors and that shows the results are better self-learning without an instructor [4]. So, this self-learning in here is how students do independent learning with an arrangement that it is done on the either through the support of information of technology or from the encouragement by carried out a training conducted on it.

From an in-depth study of self-learning, it was studied not only as a set of one's own learning, but he knows more about himself as a learner [5]. So, the self-learning is different from self-study or self-regulated learning, but the self-learning is a learner only focus and how about he learned on himself of Independent learning. The independent learning very needed in the 21st century, because it is as supported by information and communication technologies, even in the learning and innovation skills to be one characteristic of 21st-century learning [6]. If a self-study as independent learning can also be done through training and the results are more efficient when using the web as an independent learning exercise [7], but the self-le (arning more focused to self-evaluation for self-improvement and self- strengthening and with it can access information and communication technologies.

What do you know about yourself as a leaners? And it is not only understand lost about from self-concept, but that is also to an understanding on himself [8], which can be connected with the self-concept in the learning influencing the field studied. So, what is the connection between self-concept and self-learning into self-understanding as a learner? Self-concept is the people about himself as the intact individual on physical, emotional, intellectual, social and spiritual [9]. So, if



people want independent study and not depend on other people, so that its can learn from anywhere and anytime. So that, Self-learning is deep self-understanding for himself on the learning through self-evaluation, self-Improvement, and self-strengthening. Any question, what did the self-learning can make a testing? Because the self-learning is the part of self-concept so can also be tested as well as the tests conducted on the Self-Concept [8]. If the student has a self-learning, by the way, they will do it, especially for application of basic teaching skills.

The previous research shows that there is a direct effect of self-learning on teacher performance [5] and also the effect of self-learning teacher's on work culture [10]. For the reason that, implementation of self-Learning in learning can do it and are need on an era of globalization with the source learning it's unlimited. In the application of self-learning, this is not only done as an independent activity in regulated learning [11], but it is more to self-regulation in relation to the understanding of himself so that he can make the best choices for himself. Thus, in the self-learning on this research through are self-evaluation, self-improvement, and self-strengthening it as a stage in understanding and practicing the basic skills taught at school Practice Field at school. The components of self-learning are self-evaluation, self-improvement, and self-strengthening with details that show in Table 1.

TABLE I. COMPONENT OF SELF-LEARNING WITH INDICATOR DETAILS

No	Self-Evaluation	Self-Improvement	Self-Strengthening	
1	To know of the self- weakness	To learn from the self-weakness	Optimized and believe to self-capacity	
2	To know of the self- potential	To prepare the special time for the additional knowledge	Promise in the self for not stop learning	
3	The realization of the self-weakness as the challenge	To renew the teaching materials	To do learn with my friend	
4	To know the opportunity for the purpose life	To get the learning different resource	To learn from the digital information	
5	To evaluate my teaching every the end learning	To have the vision in concept life	To define the purpose of life	
6	To know the vision on the life	To learn from the education research	To use of the self- potential as the opportunity	

From the Table 1, we know that's the self-learning as a good mind in a learning for the long life learning. Application of self-learning on basic teaching skills to make students can do analysis with the self-evaluation, self-improvement, and self-strengthening on his competence on basic teaching skills.

1) Self-evaluation: Self-Evaluation in the practice of basic skills in line with what was done in the research that developed a Reflective model on teaching Microteaching, a reflection that produces new thoughts for the improvement of teaching [12]. From an understanding of self-assessment that contains deficiencies and strengths of self in conducting

learning, it is guided to do self-improvement, so that in the end can determine for themselves what methods are suitable for him in practicing the learning done and this is what is called self-strengthening [5]. So that the existence of self-learning that is applied in practicing basic teaching skills will improve students' abilities which will be continuously improved to be even better, through self-improvement and self-strengthening. In the application, self-learning students follow step by step, namely Self-Evaluation (can evaluate the strengths and weaknesses in practicing basic teaching skills), followed by self-improvement (improving what is a weakness in the practice of teaching basic skills) and self-strengthening (making efforts to improve perceived abilities as weaknesses and still maintaining what has become the ability to practice basic teaching skills results from self-evaluation and selfstrengthening.

2) Self-improvement and self-strengthening: The self-improvement is a people after doing self-evaluation and him/she has self-awareness for change itself. Based on Table 1 to know that he/she can do improvement with to learn from the self-weakness, a people have self-concept to know the self-weakness and this shows that's the adult's leaner. It's the same with the research on to they're understanding of regulating midwifery students' learning [13]. It shows that he/she has good self-awareness, then to improving himself. For further as a leaner is prepare the special time for the additional knowledge, to renew the teaching materials, to get the learning different resource and to learn from the education research.

Self-Strengthening is as a drug for the patient which through optimized and believe to self-capacity. The strengthening is a power for promise in the self for not stopping learning than to do learn with my friend, to learn from the digital information

B. Application of Self-Learning in Basic Teaching Skills

The several studies reveal approaches used in practicing basic teaching skills with the Clinical Supervision and the Collaborative approach [14], and through the Modelling approach [15] which shows an increase in basic teaching skills in prospective teacher students. The application of Self-Learning in Micro-teaching is not only to improve basic teaching skills but especially to the values of selfunderstanding by providing a reinforcement of self to face every rapid change in the 4.0 Industry era which certainly affects education. The challenges in the 4.0 era that marked a rapid change in every life order that needs to be anticipated by every vocational teacher who must be prepared by the University, especially for students of Mechanical Engineering Education Program who are expected to be teachers in vocational schools. With a competency-based education model that can develop a mindset, independence, and innovation [16].

From the implementation of Microteaching, generally a basic teaching training in the classroom still shows unsatisfactory results based on evaluation and the results of Microteaching implementation analysis [17], as well as in the implementation of teaching that is not in accordance with the



sequence of learning activities starting from the opening (apperception and motivation), core activities and closing activities [18]. Likewise, research conducted in the implementation of Microteaching lectures still varied in attainment in quality which indicated opportunities and the need for a method and model of learning in Microteaching as basic teaching training for students vocational teacher candidates [19,20]. Therefore, with the existence of a self-learning as a self-understanding of learning through self-evaluation, self-improvement, and self-strengthening become a necessity that must be possessed by prospective vocational teacher students who are certainly different from other general education teachers.

As for the application of self-learning, especially done in the Field Experience Practice course for the Vocational Program students who conducted learning in this Vocational school was chosen based on that in Vocational Education students having special challenges that were different from other education students. Therefore Vocational Education is an education that aims to teach a skill, therefore, as a prospective teacher, vocational education teachers should master more specialized teaching skills [21]. The common thing to do in training basic teaching skills is that students as prospective teachers can practice each of the basic teaching skills in front of the class [22]. In reality, in practicing each basic teaching skill, students cannot fully interpret each theory. In the basic teaching skills that are practiced, that can be detected by letting them do self-evaluation so that with the application of selflearning can improve understanding of the meaning of basic teaching skills practiced. Thus, in practice, students are able to practice basic teaching skills by first doing self-evaluation, self-improvement, and self-strengthening.

Applications of self-learning in teaching basic skills can be illustrated in Figure 1.

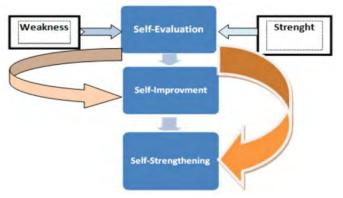


Fig. 1. The steps of implementation self-learning on basic teaching skills.

In the application of self-learning with details components as it shows in Table 1, then the practice it's on basic teaching skills with the steps of implementation self-learning.

The teacher in vocational program must be teach the student for working and its need the competence of the basic teaching skills. The teacher in vocational program must be teach the student for working and its need the competence of the basic teaching skills. The problem in the prospective

student teacher in Mechanical of Engineering Education program about how to the practice of basic teaching skills. Therefore, there is a need for a method to be carried out its, while the purpose of this research is to apply self-learning in practicing basic teaching skills. Thus a vocational teacher must have taught the basic skills that are not only trained them to perform with skilled teaching but can make teachers' confidence in doing his teaching [23] Therefore in limited teaching or micro-teaching becomes a necessity that is done in preparing teachers, especially vocational teachers. The application of self-learning in basic teaching skills provides opportunities for vocational teachers to evaluate, improve and strengthen with what they have done in the learning process. So, a teacher in vocational education also as a leaner with lifelong learning [24].

II. METHOD

Method of research using Descriptive analysis to describe of the self-learning's college students of prospective teacher Vocational Program in step by step application it's in Basic Teach Skills. Total of respondents were 44 people who take Practice course Field experience in school. Data collected with the instrument questionnaire of self-Learning and observation sheet of Basic Teaching Skills.

The sample included in this study were 44 students of Technical Education program who follows in the Practice of Micro Teaching at Vocational Education Program Faculty Teacher Training and Education Universitas Palangka Raya in 7th semester, they were 2 women (4,55%) and 42 men (95,45%). Students age is an average of 22 years and the adult's category.

The research instrument questionnaire with indicators of self-learning self-evaluation, self-improvement and self-strengthening (28 items), with a choice of five options ranging from 1) Always = score of 5, 2) Often = a score of 4, 3), Sometimes = score 3, 4) Rarely = score 2, 5) Never = score 1 (1-5 Likert scale) with all positive statements. The category of self-learning is score 5 = Very Good; score 4 = Good; 3 = Good enough and 2 = Not Good; 1 = Very Bad. Testing of Self-Learning instruments using Rasch Model it can be better explain the relationship between the person being tested and the test instrument to given

III. RESULT AND DISCUSSION

Instrument of self-learning has been reliability person is 0,63 and reliability item is 0,90. It is show that the consistency answer of respondent and the items quality was good category. While Alpha Cronbach value (KR-20) is 0.69 it's on the category as person reliability which to measure it is interaction among person and all item. (From Summary of 41 measured people in Table 2 summary of 28 measured item on Table 3)

The results of the average score of respondents for answers to items from self-learning were obtained 3.9 from the score of items 1-5, with a maximum score of 4.97 and a minimum score of 3.16. This indicated that the average respondent was in the area to agree on the statement (item score 4) it's mean often to do. For the measurement of Self-



Learning Respondents obtained 108.8 Mean, the standard deviation of 7.7, the maximum score of 125.0 and a minimum score of 89.0. The frequency distribution of scores on self-learning outcomes of respondents can be seen in **Table 4** From in **Table 4** that's show among relative frequency 45,45% and 34,09% in category "Good" and 4,45 % in category Bad.

TABLE II. SUMMARY OF 41 MEASURED PERSON

	Total Score	Count	Measure	Model Error
Mean	109.1	28.0	.8	.24
S,D	7/8	.0	.01	.01
MAX	125;9	28.0	.25	.25
MIN	89.0	28.0	93	.19

Real RMSE .27 TrueSD .35 Separation 1.31 Person RELIABLITY .63 Model RMSE .24 True SD .37 Separation 1.56 Person RELIABLITY .71

TABLE III. SUMMARY OF 28 MEASURED ITEM

	Total Score	Count	Measure	Model Error
Mean	159.7	41.0	.00	.20
S,D	7/8	.0	.02	.02
MAX	125;9	41.0	.22	.22
MIN	89.0	41.0	-1.47	.15

Real RMSE .22 True SD .66 Separation 3.06 Item RELIABLITY .90 Model RMSE .24 True SD .67 Separation 3.35 Item RELIABLITY .92

TABLE IV. SELF-LEARNING FREQUENCY DISTRIBUTION OF RESPONDENTS

No	Class-Interval (score)	Absolute Frequency (f)	Relatively Frequency (%)	Cumulative Frequency
1	119-125	5	11,36	11,36
2	112-118	15	34,09	45,45
3	104 – 111	20	45,45	90.9
4	96 – 103	2	4,55	95,45
5	89 – 95	2	4,55	100,0
	Total	44		

A. Analysis Application of Self-Learning in Basic Teaching Skills

The results of the analysis of student self-evaluation of his ability in the practice of teaching basic skills are divided suitably of a type basic teaching skills. Measured of self-evaluation the students in doing the basic skills of teaching is the category of what can be done "very difficult" and "very easy", so if the student chose the category of "very difficult" to continue in the "self-improvement" and "self-strengthening. Because if the Respondent or student in they were choosing it's, then for next directed to self-strengthening and they can to do self-improvement.

1) Open the lesson: Open the lesson are (a) attract student's attention, (b) give rise to motivate,(c) provide the reference material for the learning, and (d) make a relation the old study materials with new ones. From they do it's in category "very difficult" is to attract students' attention (55,81%). While for "very easy" their do its raises of motivation (32,26%). Why did the attract students' attention is very difficult? This moment is any relation about the teacher

use the strategy learning, because that his/her use the strategy learning in process learning has any effect to the attract students' attention [25]. If in the strategy learning online that's research shows how to leaner's activating learning [26]. While, for raises of motivation is very easy they are doing it, that show motivation in learning it's the general on learning. This phenomenon will be interesting for the next time research, while any research give that's learning motivation does not have a significant impact on learning performance. [27].

2) Process of learning: Process of learning while on the clarity of the voice also very difficult (a) the voice of clarity, (b) the movement of teacher body's does not interfere with students' attention, (c) the suitability of the use of strategies / methods to the subject, (d) presentation of learning materials are relevant to the specific learning objectives, (e) Enthusiastic in responding to and use of the response, (f) the accuracy in? Utilization. From they do it is in category "very difficult" are clarity of the voice (53,48%) and the suitability of using of strategies methods to the subject (34,88%). While for "very easy" their do its the movement of teacher bodies does not interfere with students' attention (46,51%) and the accuracy in time utilization. (46,51%). Why a learning very difficult in the suitability used did on the process are strategies/methods to the subject? For the teacher is very important about strategies or method in the learning process, because of any effect of the learning method on performance student and learning result of the student [25]. In practice of Micro Teaching as a teacher use it as strategy learning [28]. While on the clarity of the voice also very difficult the clarity of the voice also very difficult. The new teacher has clarity of the voice it's very difficult, because they're in the level of learning in the training phase, while in vocational education is very important about communication skills [29].

What is very easy to do it's the movement of the teacher body's does not interfere with students' attention, why is it easy to do? Because this is a "necessity" done by a teacher standing in front of the class? Therefore, by implementing self-learning which is learning directed at itself as the development of selfpotential. Therefore, by implementing self-learning which is learning directed at itself as the development of self-potential, so it is with the suitability of the use of strategies/methods to the subject as a very difficult thing to do is a common thing for young teachers, because of lacking the mastery in learning material. While a very easy thing to do is "The movement of teacher body's does not interfere with student's attention," and "The Accuracy in time utilization" so the result of this research that shown reality is easy, because they were thing to do on learning follow the format learning that has been determined as a teacher. While for "very easy" their do its clarity in giving the examples (39,54%).

3) Mastery of teaching materials: Mastery of teaching materials are (a).learning materials are presented in accordance with the planned steps, (b) clarity in explaining the material; (c) clarity in giving examples, (d) reflecting off the breadth on insight. From they do it's in category "very difficult" is reflecting off the breadth of insight (48,84%). The



mastery learning resources are very difficult to do in the component "reflecting off the breadth on insight "the results of the implementation of self-learning, students can generally be aware of the shortcomings and weaknesses itself to a more broaden the learning material that will be taught. While a very easy thing to do is "clarity in giving an example". Why is it an easy thing to do? In this study it has not been investigated why this is easy to do because of the purpose of this study in the application of self-learning in basic teaching skills is the emphasis on things that are very difficult to do a self-improvement and self-strengthening.

- 4) Using media: Using media are (a) to attention principal of media, (b) accuracy used the media, (c) the skill in operational of media, (d) Help improve the learning process. Using of media that is very difficult to do is in terms of "to attention principal of media" and what is very easy of the media used is to "help improve the learning process". Based on the respondent's answer analysis, respondents are aware of their weaknesses in the use of media principles and try to do more learning about them. Media influence of a lesson with a variety of media that can be used.
- 5) Do an evaluation: Do an evaluation were (a) using the oral evaluation to the specific learning objectives, (b) using the written test relevant with the specific learning objectives, (c) using the assessment relevant to specific learning objectives, (d) do the Assessment in accordance with was written in the learning implementation plan. An evaluating is very difficult to "use the assessment relevant to specific learning objectives" and it's very easy is doing the assessment in accordance with was written in the learning implementation plan. Evaluation in principle can be done in the learning process or at the end of learning [30]. The closing of lesson actives is very difficult for the "review of the Lesson" and it's very easy to do "give a chance to ask". Asking questions about learning activities is not a complementary activity, but an activity that requires a skill. The questioning skill component used in this observation sheet is a component of teaching basic skills used so far in Field Experience Practitioners who basically still need renewal and point to the complete component of questioning skills [23].
- 6) Close the lesson: Close of the lesson are (a) review the lesson, (b) give a chance to ask, (c) give a homework, (d) give the lesson information for next time. At the close of the lesson is very difficult to review of the lesson (34,88%) and it's very easy is give a chance to ask (65,12%).

Based on the result analysis of based teaching skills on vocational education if the teacher has the self-learning (self-evaluation, self-improvement and self-strengthening, he can improve his competence, even though in the category different from one another and it's different as based on competence increase again. The increase of teacher competence that shows as the self-strengthening through the training as well as the research from a LIFE2 project in order to identify the need of vocational teachers and trainers on what would help them to embed life skills into their specialist subject teaching [31]. That is relevant from the component in self-strengthening is

"promise on the self for not stop learning". With the application of self-learning, then the students are knowing about his self-weakness and his a self-potential for his self-improvement and his potential for his self-strengthening.

Application of self-learning on basic teaching skills is relevant on the 21st Century learning to be marked with 4 C (Critical Thinking and Problem Solving, Collaboration, Creativity and Innovation, and Communication) which need in class at school. While a teacher as a professional to practice and try always try it [6]. Why is it relevant in 21st Century Learning especially in the vocational program? 21st Century learning because it's to teach how about as a leaner and it's relevant in the Critical thinking as one of the 21st Century Learning? Thus, into the vocational program a teacher has a self-learning to guide the students in 21st Century Learning.

IV. CONCLUSION

Based on the results of research about Application of Self-Learning on Based Teaching Skills can be described as follows.

- a. The category of self-learning students are more in the good category and can do the application of self-learning in basic teaching skills the students can do it. Then with they have a good of self-learning can their choice and analysis from basic teaching skills with a category "very difficult" and "very easy". The choice of "very difficult" and "very easy" is an application from him self-learning and for the self-improvement, they do choose to learn from the self-weakness. While for "very easy" their do for the self-strengthening.
- Analysis of basic teaching skills with self-learning is very difficult as follows:
 - On open the lesson is the attract student's attention.
 - In the process of learning are clarity of the voice and the accuracy in time utilization.
 - On mastery of teaching materials is reflecting off the breadth of insight and reflecting off the breadth of insight.
 - Using of the media is in terms of "to attention principal of media".
 - On do an evaluation is to review of the lesson.
 - At the close of the lesson is to review of the lesson.
- c. Analysis of basic teaching skills with self-learning is very easy as follows.
 - On open the lesson is theirs do its raises of motivation.
 - On the process of learning are theirs do its the movement of teacher bodies does not interfere with students' attention and the accuracy in time utilization.
 - On mastery of teaching materials is to help improve the learning process.
 - Using of the media is to help improve the learning process.
 - On do an evaluation is doing the Assessment in accordance with was written in the learning



implementation plan.

• At the close of the lesson is to give a chance to ask.

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REFERENCES

- Undang-Undang Republik Indonesia No. 14 Tahun 2005 "Tentang Guru dan Dosen". 2005.
- [2] Y. Cetin, "Impact of Mental Pollution on Learning and Memory," 4th WORLD Conf. Educ. Sci. WCES-2012 02-05 Febr. 2012 Barc. Spain, vol. 46, hlm. 5320–5323, Jan 2012.
- [3] Cho MH, Kim Y, Choi D. "The effect of self-regulated learning on college students' perceptions of community of inquiry and affective outcomes in online learning." The Internet and Higher Education. 2017 Jul 1;34:10-7.
- [4] Pedersen TH, Kasper N, Roman H, Egloff M, Marx D, Abegglen S, Greif R. "Self-learning basic life support: A randomised controlled trial on learning conditions." Resuscitation. 2018 May 1;126:147-53.
- [5] D. Debora, "Self-Learning in Teacher Performance," Indones. J. Educ. Rev., vol. 2, no. 2, hlm. 38–45, 2015.
- [6] N. Ongardwanich, S. Kanjanawasee, dan C. Tuipae, "Development of 21st Century Skill Scales as Perceived by Students," Proc. 6th World Conf. Educ. Sci., vol. 191, hlm. 737–741, Jun 2015.
- [7] Bellhäuser H, Lösch T, Winter C, Schmitz B. "Applying a web-based training to foster self-regulated learning—Effects of an intervention for large numbers of participants". The Internet and Higher Education. 2016 Oct 1;31:87-100.
- [8] Wolff F, Nagy N, Helm F, Möller J. "Testing the internal/external frame of reference model of academic achievement and academic self-concept with open self-concept reports". Learning and Instruction. 2018 Jun 1;55:58-66.
- [9] Wylie HW, Wylie ML. "The older analysand: Countertransference issues in psychoanalysis". InIs It Too Late? 2018 Mar 26 (pp. 111-129). Routledge.
- [10] D. Debora, "The Effect of Self-Learning on Work Culture," Educ. Adm. Res. Rev., vol. 1, no. 1, hlm. 42–48, Des 2017.
- [11] J. Jakešová dan J. Kalenda, "Self-regulated Learning: Critical-realistic Conceptualization," 5th ICEEPSY Int. Conf. Educ. Educ. Psychol., vol. 171, no. Supplement C, hlm. 178–189, Jan 2015.
- [12] L. I. Sumardiyani Intan, "Pengembangan Model Reflective Microteaching Untuk Pembentukan Calon Guru Profesional," AKSIOMA, no. Vol 1, No 1/Maret (2010): AKSIOMA, 2010.
- [13] M. Embo dan M. Valcke, "Improving student midwives' workplace learning by moving from self- to co-regulated learning!," Women Birth, Agu 2018.
- [14] Z. Barus, S. Siagian, dan S. Purba, "Upaya Peningkatan Ketrampilan Dasar Mengajar Guru Melalui SupervisiI Klinis Dengan Pendekatan Kolaboratif Di SMK Negeri1 Berastagi Kabupaten Karo," J. Pendidik. Dan Kepengawsan, vol. 3, no. 2, hlm. 16–32, Okt 2016.

- [15] S. A. Triyanto, A. Ulfa, I. Ibrohim, dan M. Masjhudi, "Upaya Peningkatan Kemampuan Dasar Mengajar Mahasiswa Biologi Melalui Modeling Dipadu Student Investation Berbasis Lesson Study," J. Pendidik. Biol., vol. 6, no. 2, hlm. 117–127, Feb 2015.
- [16] Munastiwi, E. "The Management Model of Vocational Education Quality Assurance Using 'Holistic Skills Education (Holsked)". Procedia - Social and Behavioral Sciences. 2015. 204, 218 – 230.
- [17] B. Hidayat, "Analisis Keterlaksanaan Program Perkuliahan Micro Teaching Berbasis Lesson Study Di Program Studi Pendidikan Sejarah FKIP UM Metro," J. Hist., vol. 4, no. 2, hlm. 75–80, 2016.
- [18] S. Slamet dan S. Sri, "Evaluasi Pengajaran Micro Teaching Berbahasa Inggris Pada Jurusan Non Bahasa Inggris UMS," Semin. Nas. Eval. Pendidik., 2014.
- [19] P. Parijo dan A. Asriati, "Evaluasi Pelaksanaan Micro Teaching Mahasiswa Prodi Ekonomi Reguler B FKIP Untan Pontianak," J. Pendidik. Dan Pembelajaran, vol. 2, no. 3, Mar 2013.
- [20] G. Kasta, "Studi Evaluasi Perkuliahan Microteaching Berdasarkan KKNI Level 6 Pada Program Studi Pendidikan Kimia di UIN Sunan Kalijaga." e Prints@UNY, 2015.
- [21] Blinova TV, Vyalshina AA. "Structure of informal employment of youth in the Russian labor market". Sociological Studies. 2018 May 16:4(4):61-72.
- [22] K. I. M. Eka Arifin, "Pelatihan Penerapan Ketrampilan Dasar Mengajar Di Dalam Mengefektifkan Pelaksanaan Pembelajaran Kurikulum 2013 Di Sekolah Dasar UMP," Proceeding Semin. LPPM UMP, no. 2015: Buku II Bidang Ilmu Pendidikan dan Sosial Humaniora, Proceeding Seminar Nasional LPPM 2015, 2, 2015.
- [23] S. D, Ketrampilan Dasar Mengajar. Bandung: Universitas Pendidikan Indonesia, 2015.
- [24] M. TENNANT dan L. YATES, "Issues of identity and knowledge in the schooling of VET: a case study of lifelong learning," Int. J. Lifelong Educ., vol. 24, no. 3, hlm. 213–225, Mei 2005.
- [25] M. van Wermeskerken, S. Ravensbergen, dan T. van Gog, "Effects of instructor presence in video modeling examples on attention and learning," Comput. Hum. Behav., Des 2017.
- [26] D. Davis, G. Chen, C. Hauff, dan G.-J. Houben, "Activating learning at scale: A review of innovations in online learning strategies," Comput. Educ., vol. 125, hlm. 327–344, Okt 2018.
- [27] H.-H. Lin, W.-C. Yen, dan Y.-S. Wang, "Investigating the effect of learning method and motivation on learning performance in a business simulation system context: An experimental study," Comput. Educ., vol. 127, hlm. 30–40, Des 2018.
- [28] A. Higgins dan H. Nicholl, "The experiences of lecturers and students in the use of microteaching as a teaching strategy," Nurse Educ. Pract., vol. 3, no. 4, hlm. 220–227, Des 2003.
- [29] L. Zlatić, D. Bjekić, S. Marinković, dan M. Bojović, "Development of Teacher Communication Competence," 5th World Conf. Educ. Sci., vol. 116, no. Supplement C, hlm. 606–610, Feb 2014.
- [30] C. J. Goodall, "A student tutor's evaluation of his teaching placement," Nurse Educ. Today, vol. 5, no. 3, hlm. 95–100, Jun 1985.
- [31] G. Simona, "Teacher Training for Embedding Life Skills into Vocational Teaching," 6th Int. Conf. Edu World 2014 "Education Facing Contemp. World Issues" 7th - 9th Novemb. 2014, vol. 180, hlm. 814–819, Mei 2015.