

Development of Better Teaching and Learning Models in the Competence of Basic Teaching Skills of Students

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ARTICLE INFO

Article History

Received : 06/09/2022

Revised : 06/10/2022

15/10/2022

21/11/2022

Accepted: 30/11/2022

Keywords:

Better Teaching,

Learning models,

Basic teaching skills,

Students

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ABSTRACT

The objectives of this study are: (1) to develop a Better Teaching and Learning model that can foster character, increase student interest, activity, and learning outcomes in teaching exercises, and determine the validity, effectiveness, and practicality of the Better Teaching and Learning model. This research is a research development (R&D). The research was carried out in three stages: (1) Theoretical exploration and expert research on the Better Teaching and Learning model. (2) Empirical test to empirically validate the Better Teaching and Learning model. (3) The implementation stage to determine the effectiveness and practicality of the Better Teaching and Learning model. The results showed that the Better Teaching and Learning model was developed to integrate the basic teaching skills and was presented in eight stages of teaching skills. This model is declared valid by the validator and supported by empirically validated results through field trials. This model has also been tested for its effectiveness in fostering character and increasing student interest, activity, and cognitive learning outcomes. The practice of implementing the Better Teaching and Learning model has also been tested through observations of the ability of prospective teachers in classroom learning, learning responses to the ease with which prospective teachers use the Better Teaching and Learning model, and student acceptance responses to the Better Teaching and Learning model applied by a pre-service teacher. The final result shows that the Better Teaching and learning model developed has met the criteria of validity, effectiveness, and practice.

Citation:

Wahidah, S., Tobing, M., Ampera, D., Sitompul, A., & Anggraini, Y. (2022). Development of better teaching and learning models in the competence of basic teaching skills of students. *International Journal of Islamic Educational Psychology*, 3(2), 159-171. <http://dx.doi.org/10.18196/ijiep.v3i2.16051>

INTRODUCTION

A teacher has a major role in the learning process. Therefore, a teacher must master several competencies. Teacher competency is described by its ability to create and manage an effective learning process (Usman, 2005). In other words, it does not only have knowledge, skills, and attitudes but what is important is the application of these three aspects. According to Syah (2000), ability means that teachers must have the ability to carry out learning obligations with full responsibility.

According to Law Number 14 of 2005 it is stated that one of the competencies that must be possessed by a teacher is pedagogical competence which is one of the teacher's professional competencies. Pedagogic competence is learning management which includes planning, implementing, evaluating, and developing students' potential (Mulyani et al., 2010). To carry out the learning process well, a teacher must have good basic teaching skills. Basic teaching skills will make learning more effective, and students will be more active in learning (Ambarawati, 2016).

Basic teaching skills are teaching skills in carrying out professional tasks that refer to or refer to the competency approach concept of educational institutions and education staff (Alma et al., 2009). Basic teaching skills equip prospective teachers to convey subject matter so that it is right on target. Basic skills are traditional skills that must be owned by every individual who works as a teacher (Zainal, 2011).

According to Sitorus & Sojanah (2018), the learning process will go well if teachers with high teaching skills support it because basic teaching skills are abilities or skills that are specific (most specific instructional behavior) teachers must have. According Anitah (2009), Darmadi (2012), and Aqib (2003), there are eight components of basic teaching skills, namely questioning skills, reinforcement skills, variation skills, explaining skills, skills to open and close lessons, skills to guide small group discussions, management skills class, and small group teaching skills. Prospective student teachers must be able to master teaching skills acquired through on-campus training programs (Meha & Bullu, 2021). The aim is to equip students to become professional teacher candidates (Wijarini & Ilma, 2017) who can manage classes well to influence learning outcomes (Salma, 2020). This training can be carried out through various activities, including microteaching or real teaching practices at schools (Field Experience Practice) (Mulyatun, 2014).

The Field Practice Program is an integral part of the tertiary curriculum with the intent and purpose of dealing directly with the community or school. Field Experience Practice is designed as a forum for teaching practice and training in carrying out education for prospective teachers (Fathurrahman & Farih, 2018). The basis for its implementation, besides referring to the education system law or higher education decisions as a conceptual decision in achieving the vision

and mission forwarded to each study program as executor. Field Practice Program activities are activities that students must carry out by applying theory obtained from academic education of real activities or direct activities in learning, namely basic learning that intersects with the needs of future educators. This activity is expected to provide an experience that can increase the maturity and professionalism of prospective teacher students to renew and realize better education within the expected social structure.

In addition to developing regular lecture programs, each educational study program at tertiary institutions is also a field practice program. regular lectures are directed to provide theoretical provision in subject matter and pedagogical aspects (Iorio & Adler, 2013). After completing regular lectures, students prepare to become teachers. Before carrying out a field practice program at a training school, they were provided with a field practice program, including micro-teaching activities. In micro-teaching activities, it must be carried out by developing the right model and the student teacher's understanding of the learning model that can be applied in schools later.

Currently, the learning model has changed a lot from teacher-oriented learning to student-oriented learning. This condition must be addressed by prospective teacher students, so that students are able to apply various new learning models at school. Student-centered learning that is currently being developed has not yet touched the realm of character. Prospective teachers should already care about these conditions and must be familiar with various learning models to integrate morals into the subject. However, sometimes there is a gap between the material taught by lecturers and the development of learning models trained for teachers in the field. This issue will cause students to be less confident when carrying out field practice programs.

Classroom management is a classic problem that becomes an obstacle for prospective teachers in practice. The main obstacles during the teaching and learning process are the students' mental condition and limited understanding of the material due to lack of experience. In this case, understanding material is included in the category of important professional competence in providing learning to students. Another important factor to study is prospective teachers' mental attitude and readiness when appearing in front of the class. Readiness can include preparing strategies, methods, learning media, teaching materials, and learning evaluation. The design of learning models that include strategies, methods, and media must be able to touch the realm of character.

In designing learning, the teacher must be able to choose the right learning model according to the learning objectives and student development. Integrating character into subjects has been planned since the preparation of lesson plans, so real examples are needed for prospective teacher students on how to integrate the character into teaching materials without having to increase the time allocation specified in the curriculum. Therefore, it is

necessary to develop a Better Teaching and Learning learning model that can develop student character.

According to Karsidi (2015), Better Teaching and Learning was developed by Decentralized Basic Education 3 (DBE3). The Better Teaching and Learning model is an extension of the Better Teaching and Learning model, originally a training package implemented by DBE3 funded by USAID (USAID DBE3 Development Team, 2009). Better Teaching and Learning is developed based on the fact that learning is only teacher-oriented and does not involve students in character building. Students are only learning objects that rarely touch the realm of character and the lack of media use.

The approach used in the Better Teaching and learning model includes five elements, namely ICARE which stands for Introduction, Connection, Application, Reflection, and Extension. The ICARE framework ensures students can apply what they have learned (DBE3 Development Team, 2009). The learning process integrates skills that can empower students.

In the Better Teaching and Learning model, students are involved in developing learning media. The developed media has simple and affordable characteristics that are around us. The material in the media is developed according to Basic Competency.

Better Teaching and learning have been trained for Junior High School teachers in several cities in five provinces. The results of implementing Better Teaching and Learning in Junior High School in five provinces in 2009/2010 showed significant improvements in teacher activity, class situation, and student activity (DBE3 Newsletter, 2010). The results of implementing Better Teaching and Learning at Sekolah Menengah Pertama Negeri 31 Surabaya have contributed to increasing the national exam ranking from 39th to 8th in the city of Surabaya. The results of Suprpto's research (2010) on teachers at Sekolah Menengah Pertama Negeri 2 Kradenan Purwodadi show that Better Teaching and Learning can improve teachers' ability to design and implement contextual learning in developing students' life skills.

Practicing Better Teaching and Learning for student teacher candidates allows for continuous improvement in learning. This training can equip prospective teacher students to carry out learning in schools in a professional manner (Chew & Sim, 2020). the learning delivered follows the flow of the Better Teaching and Learning model and becomes a real example for students. With this direct example, it is hoped that students can feel how this learning model can attract interest and increase their learning activities and results. students can apply this model when practicing teaching at school and when they become teachers later.

METHODS

This research is research & development (R&D). The development model used is ADDIE (Analysis, Design, Development, Implementation, and Evaluation)

(Branch, 2009). In the development process, several tests were carried out by a team of experts and research subjects to perfect the final product and the product met the criteria for a good product, tested empirically and had no more errors (Cahyadi, 2019). Briefly, the planned design can be seen in Figure 1.

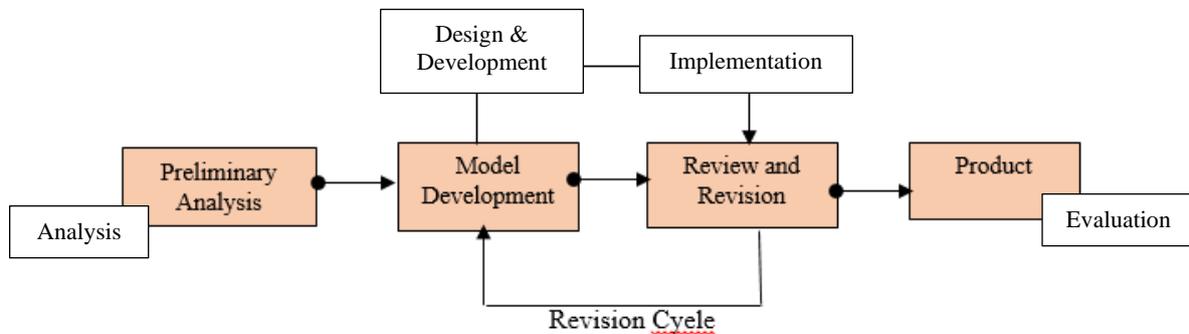


Figure 1. Learning Model Development Model

The learning model trials carried out in this study were individual tests and field tests. Individual trials were carried out by learning experts, subject teachers, and several students (5-10 people). The field test was conducted in a model school (80-100 students). The individual trial subjects were learning design and educational practice experts. While the subjects of the limited field trials were several prospective teacher students, namely students of the Cosmetology Education Study Program who practiced in the field and students of Beringin 1 State Vocational School who were used as school models. The techniques for taking field trial subjects were purposive and cluster sampling.

the data used in this study are qualitative and quantitative. Qualitative data were obtained from expert input, either verbally/interviews or by filling out questionnaires. Quantitative data was obtained from students' opinions on the tests being tested. The questionnaire is intended to determine the validity of the product which includes the suitability of the material, the legibility of the teaching materials, and the suitability of the test with the learning objectives. product effectiveness is determined by a scale of attitudes, interests, activities, and tests while product practicality uses an observation sheet

The results of the effectiveness of applying the model were analyzed by t-test and the practicality of the model was analyzed descriptively by using percentages. while to see student activity, interest and learning outcomes using the normalized gain formula. Development research is said to be successful if it meets the success indicators as follows:

- a. Product validity is seen from: the validator's average score on learning tools, teaching materials, and readability levels are at moderate or high levels. while the evaluation tool has a reliability coefficient ($r \geq 0.7$), difficulty level (0.0 - 1.0), and a good difference (≥ 0.3)

- b. Increased interest, activity, and learning outcomes as indicated by the average acquisition of at least 70 learning outcomes and 85% classical completeness.
- c. The learning model is said to be practical if the average opinion of teachers and students states that the model is easy and practical to use and the learning model is considered fun.

RESULT AND DISCUSSION

The development stage of the Better Teaching and Learning model begins with an analysis of the needs of teachers and students as well as a literature review of the research problem. The model set for the basic competence of teaching students consists of learning tools that use a collaborative approach in which character values are integrated. Model sets developed include syllabus, lesson plans, worksheets, and assessment sheets.

The syllabus and lesson plans are prepared based on the stages of the Better Teaching and Learning model and the integration of character values. The apperception stage in lesson plans, namely the introduction, contains question and answer activities that stimulate curiosity and train students to answer questions smoothly. Students are invited to get used to expressing opinions and answering a question related to make-up materials.

The next stage is the connection in the form of motivation which is integrated into the lesson plan. At this stage, students are guided to connect students prior knowledge with new concepts. Activities are carried out by showing learning videos related to material and loading character values.

The next stages in the Learning Implementation Plan are application and reflection, which consist of exploration, elaboration, and confirmation. This stage aims to provide opportunities for students to practice the knowledge they have acquired and to reflect on what students have learned. Students are accustomed to discipline, responsibility, and communication at the application and reflection stages and participate in learning with curiosity. At this stage, students are given worksheets to guide students in learning make-up material that has integrated character values. The character values developed in this study are responsibility, discipline, curiosity, and communicative. Character values are integrated through invitation sentences on student worksheets and instructions for implementing activities.

The final stage of the Learning Implementation Plan is the extension. At this closing stage, the teacher expands learning by giving assignments to train students' sense of responsibility and evaluation abilities.

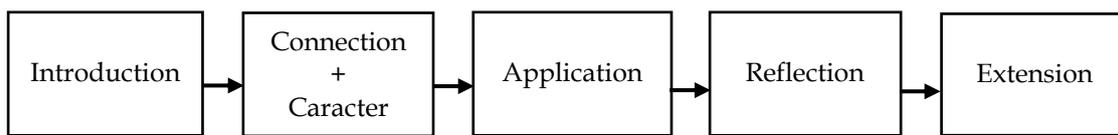


Figure 2. Better Teaching and Learning Model

The learning model developed was validated by experts, namely subject matter experts (lecturers) and make-up teachers who teach at SMK Negeri 1 Beringin. The results of the validation show that the developed model is suitable for building student character because the developed model has integrated the characters in the make-up material and is delivered at the joining stage. The format of the Learning Implementation Plan and Student Worksheets that have been developed is good (average score 4.5), but still needs improvement. The part that needs to be revised is the suitability of the Better Teaching and Learning model steps with the RPP design. The results of these improvements were then validated again and declared valid for use because the validator's average score was ≥ 4.0 .

The results of the validation of the learning model are carried out in several stages namely:

- a. Limited trials and the Better Teaching and Learning model have been validated by learning design experts and then socialized to prospective teacher students who will carry out teaching practices in schools so that they implement the learning model when teaching in class. The success of students in implementing the Better Teaching and Learning model can be seen from the preparation of the syllabus, lesson plans, teaching materials, and evaluation tools as well as their ability to apply Better Teaching and Learning in class. The results of the assessment showed that students were able to make learning tools according to the Better Teaching and Learning model that was developed. Then, the learning tools were tested on three students and the test results showed that the readability level of teaching materials is included in the medium category and the test and non-test evaluation tools need improvement.
- b. Broad-scale Testing, a Better Teaching and Learning tool that has been improved is then used to teach Make-up materials in class as a broad-scale trial step. The results of large-scale trials are also used to determine the developed model's suitability and effectiveness in fostering student character, interest in learning, activities, and learning outcomes.
- c. The acquisition of an average learning result of at least 70 and 75% classical completeness indicates that the Better Teaching and Learning model is effectively used in learning. Indicators of achieving effectiveness are character growth, increased interest, activeness, and learning outcomes.
- d. Cultivating character, the results of implementing Better Teaching and Learning show an increase in student character which is starting to develop. The instilled traits include discipline, respect, attention, diligence,

responsibility, cooperation, and thoroughness. the character that grows in students is seen in cooperation. The character of respecting and caring for others experienced the lowest increase.

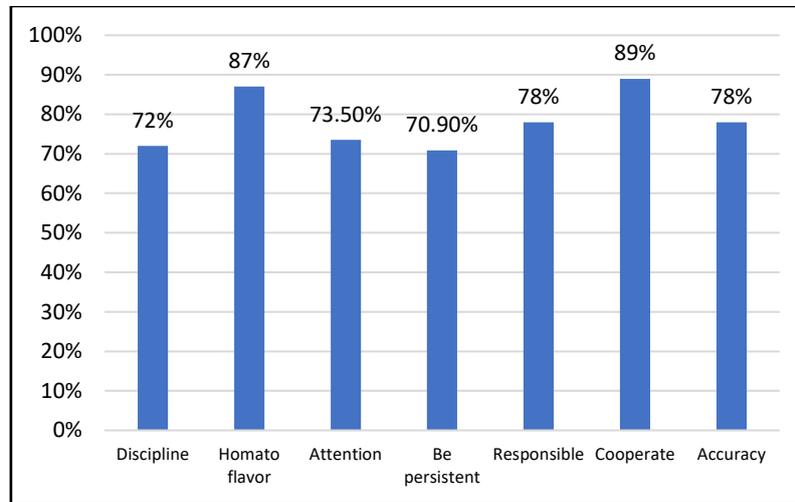


Figure 3. The character of respect and concern

Following are the results of each success indicator to see the effectiveness of the learning model:

- a. The results of the analysis of student interest found that there was a significant increase in student interest after being taught with the Better Teaching and Learning model. Increased student learning interest of 0.6 (moderate category). These results were tested significantly, with t count 4.22. This price is greater than the t table with dk = 62 and $\alpha = 0.05$ at 2.00. Because t count > t table, it means that the increase in student interest is quite significant.
- b. Based on the results of observations, it can be seen that there is a significant increase in student activity after students are taught with the Better Teaching and Learning model. Student learning activity data is 0.70. These results were tested significantly, with t count 4.55. This value is greater than the t table with dk = 62 and $\alpha = 0.05$ at 2.00. Because t count > t table, it means that student activity has increased significantly.
- c. There was an increase in student learning outcomes with an average pre and post test score, from 43.37 to 76.2 and 85.2 at the end of learning. student learning outcomes in the form of cognitive level.

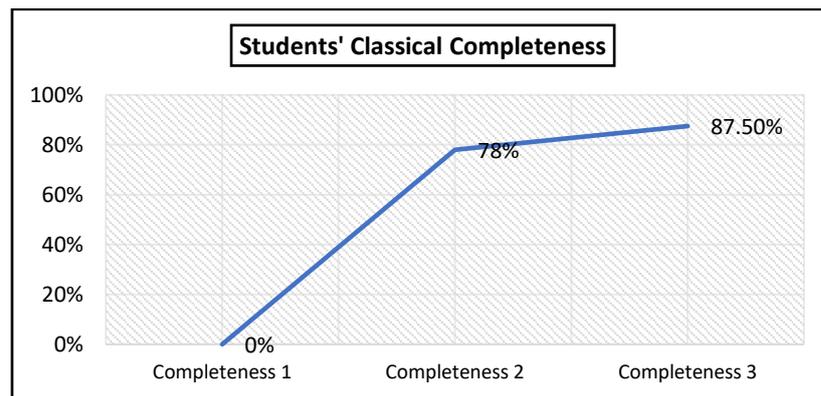


Figure 4. Students learning completeness

d. Student completeness and students' classical completeness increased from 0% to 78% and at the end of the lesson was 87.5%. The average value of students ≥ 70 , and 87.5% classical completeness.

Based on the results of observing learning with the Better Teaching and Learning model, it was found that teachers were able to apply the Better Teaching and Learning model well, as indicated by the learning assessment score in the high category. The results of giving questionnaires to teachers show that the Better Teaching and Learning model takes longer time to prepare but this model is very easy to apply in learning.

The questionnaire given to students showed that students enjoyed being taught with the Better Teaching and Learning model applied by student teacher candidates, learning is more fun, makes students excited and not sleepy and students are always active during the learning process.

The Better Teaching and Learning model integrates character into Makeup material which is delivered using a collaborative approach, using the environment, and student worksheets. This can empower students to become active and productive students. The effectiveness of better teaching and learning models in instilling student character is marked by an increase in student character from behaviors that are starting to develop such as discipline, mutual respect, caring for others, tenacity, responsibility, cooperation, and thoroughness (Purwanto et al., 2020).

Learning media that students usually underutilize have turned into students who can take advantage of learning media. The touch of character which is characteristic of Medan State University students can be presented explicitly without being planned during learning with the Better Teaching and Learning model. The learning steps used in the Better Teaching and Learning model are ICARE (Ampera, 2018). Character integration is performed during the Connection step.

The Better Teaching and Learning model that has been developed has been validated by experts and empirically through field trials. The validation results

show that the Better Teaching and Learning model and its supporting tools are valid, seen from the average validator assessment, which is ≥ 4.0 .

The field trials showed that student-teacher candidates have developed the Better Teaching and Learning model of learning tools and applied them in learning. prospective teachers already have basic competencies in teaching, namely managing learning which includes identifying student characters, making learning plans, and carrying out the learning process, conducting learning evaluations, and developing students' self-potential. According to Mulyani et al. (2010) & Ampera (2017), when designing learning, a teacher and prospective teachers must be able to choose the right learning model according to the goals and development of students' thinking.

Large-scale trials are carried out by implementing the Better Teaching and Learning model in the classroom. the model proved to be effective and practical so as to increase interest, activity, learning outcomes and able to grow student character. this is indicated by changes in student character from the starting category to the growing stage. Therefore, this model needs to be applied to cultivate a positive attitude/character can be achieved.

The model's effectiveness can also be seen from the significance of increasing learning outcomes, including activities, interests, and cognitive learning outcomes. The increase in student activity can be seen from the change in students' attention, responding to what is conveyed by the teacher, as well as asking questions to the teacher and answering teacher questions. Increased student interest in learning can be seen from changes in their involvement in learning, enthusiasm in learning, having learning notes, trying to understand learning material. In addition, student attendance in learning and seriousness in preparing learning media also increased. The results of the research show that the Better Teaching and Learning model improves learning outcomes significantly.

The practicality of using the Better Teaching and Learning model in teaching integrated characters in make-up material is seen from the ability of prospective teacher students to apply it in the classroom. The results showed that student-teacher candidates could learn material according to the learning syntax of Better Teaching and Learning. In addition, practicality can also be seen from the recognition of prospective teacher students that the Better Teaching and Learning model can be applied easily. It only takes time when preparing it. Students can accept the Better Teaching and Learning model by seeing the results of the questionnaire given to students, and when learning takes place, students feel happy while taking the lessons. Increased Student Interest Based on the analysis of giving a questionnaire about student interest, it was found that there was a significant increase in student interest in learning. the result of the data on student learning interest is 0.6 (medium category), data on increasing student learning activity is 0.70. Data on improving learning outcomes can be seen from the average pre-test and post-test scores, from 43.37

to 76.2 and 85.2 at the end of learning. Student completeness increased from 0% to 78%, and at the end of learning to 87.5%.

The study's results are strengthened by previous research by Karsidi (2015), stating that the Better Teaching and Learning Learning Model can Improve Eye Learning Activities and Outcomes. In line with that, Rusilowati (2012) also emphasized that the Better Teaching and Learning Learning Model can foster student character and interest in learning.

CONCLUSIONS

The Better Teaching and Learning model integrates character into makeup material and is delivered using ICARE steps. The validator stated that this model is valid and effective in growing character and increasing interest, activeness, and student learning outcomes. The practicality of implementing the Better Teaching and Learning model has also been tested by observing the teacher's ability to teach in class. The final results show that the Better Teaching and Learning model developed is feasible, effective and practical to use in learning.

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