To develop vires assignment model to enhance students’ confidence and competence in vocational subjects

Nurul Chairani Rangkuti

¹SMKN 1 Pandak
E-mail: nurulchairani884@gmail.com

Abstract. The objective of this study is to develop assignment model for making practice report in the form of video by smartphone where students act as reporter (ViReS assignment model). This assignment model is implemented and able to enhance students' confidence and competence in vocational subjects. The research method used is Research and Development (RnD) with the model of ADDIE (Analysis, Design, Development, Implementation, and Evaluation). The product from this research is syntax model with ViReS assignment model. The research result shows that ViReS assignment model can be applied as assignment model in the practical learning. Students' self-confidence increases after the implementation from a less appropriate category to a fairly appropriate category. Student competencies increase after the implementation of the “appropriate enough” category to be “appropriate” category. Students give good respond to this assignment method.

Keywords: confidence, competence, reporter

Introduction

The purpose of vocational education contained in PP No. 19 of 2005 article 26 paragraph 3 is stated to improve intelligence, knowledge, personality, noble character and skills so that students can live independently and attend further education according to their vocational [1]. This formula is referred to as the Graduate Competency Standard (SKL) of vocational secondary education. Furthermore, in Permendiknas no. 23 of 2006, it was described the SKL of Vocational School, among others, showing an attitude of confidence and responsibility for behavior, actions and work and mastering competency skills programs to meet the demands of the world of work and higher education according to vocational [2].

According to [3], "Self-confidence is a person's belief in all the advantages of the aspects he has and that belief makes him feel able to achieve several goals in his life". People who are confident are able to develop motivation, be able to learn and work hard to progress and are full of confidence in the role they live.

From the results of the questionnaire on the teacher, it shows students' confidence is low. This can be seen from students afraid to ask questions, do not want to answer the teacher's questions for fear of being wrong, do not want to show the results of their work because of shame, and students do not show their creativity in learning activities. This has an impact on student competency in low productive learning or unskilled students which is shown by the students' low mastery in preparation, implementation and evaluation of competencies that must be mastered.

On the other hand students often selfie with their smartphone cameras, dare to express their opinions while chatting on WhatsApp (WA) groups or put up a status that shows their condition on social media. According to [4] self-confidence is a person's belief in him. Student confidence plays a role in the world of social media can be interpreted there is still a side of student confidence. The confidence that students have needs to be developed by the teacher so that the students' self-confidence can grow and will ultimately improve student competence.

Student competency is the main thing of student learning outcomes [2]. Most of the business world/industrial world will choose vocational graduates based on the competencies possessed by students. Competition between
graduates in the world of work is also based on their competencies. Students with low competence will lag behind labor competition. Various learning methods have been applied to improve student competence, such as group learning, peer tutorials, project work. But still students’ competencies still need to be improved.

Efforts that can be made to improve student competency are by giving students the opportunity to carry out competencies that must be mastered repeatedly so that students reach a skilled level. Besides that, there must be supervision from the teacher on the competencies trained by students so that there is no mastery of competencies that are wrong or not in accordance with the learning objectives set by the teacher and procedures desired by the business world / industry.

Almost all students in the class have a smartphone even though it is only used for selfies and communicating on social media. Students are also very close to this tool so that they quickly understand the use of facilities owned by a smartphone. Almost every time students always carry their smartphone. So far, smartphones have been used in learning only to the extent that students are asked to browse material, even though smartphones that students have can be developed into a tool on the task of being a reporter given by the teacher.s menjadi reporter yang diberikan oleh guru.

After completing practical learning, the teacher asks students to make a report on learning outcomes. Reports in the form of written reports containing tools, materials, work procedures and work results during practice. Reports like this tend to be done by only a few people in the practice group and are usually carried out by students who have the most mastery of learning. So that the assignment method like this is less effective for measuring student competency towards learning outcomes and efforts to increase students' self-confidence. According to [5] so far the form of assignments given by new teachers is in the form of group discussions. In this learning innovation research students and their groups make videos in the form of reports on learning practice activities that are packaged in the form of news and students act as reporters. Students get the opportunity to develop their creativity and skills, increase self-confidence and competencies that must be mastered.

On the basis of the above, it is necessary to develop an assignment method for producing practice reports in the form of Video Reporters using Smartphones (ViReS) to enhance students’ confidence and competence.

From the background, identification of the problems to be used as material for this study are (1) lack of confidence in students participating in learning, (2) still low mastery of student competence, (3) utilization of students’ smartphones for learning is not maximal, and (4) the ineffectiveness of the assignment of writing reports on learning outcomes in writing and (5) the potential of students to selfie and chat with social media groups not yet utilized for learning.

In order for this research to be more focused, perfect and in-depth, the problems in this study are limited to the development of assignment methods for making reporters 'video report results using smartphones (ViReS) to enhance students' confidence and competence. Based on the limitation of the problem, the research problems can be formulated as follows: (1) how is the method of assigning Video Reporters using Smartphones (ViReS) as a report on the results of practical learning made by students? (2) Does the ViReS assignment method increase students' confidence? and (3) Does the ViReS assignment method improve student competence?

Research by assigning assignments to students to become reporters on making practice reports aims: (1) Development of methods for assigning Video Reporters using Smartphones (ViReS), (2) Increasing students’ self-confidence, and (3) Improving student competence in productive subjects.

The product specifications developed are: 1) Product name: ViReS Assignment Method. 2) Product content: the assignment method to students as a practice learning outcome report with the form of students with their groups making videos and reporting the results of their practice in the form of news, students and their groups act as reporters using students' smartphones. 3) The usefulness of the product: by getting the task of making a video reporter, it is expected to be able to increase students'
confidence and competence compared to making reports in writing as usual.

The task of being a reporter on productive subjects is expected to provide benefits for improving the quality of learning, including: (1) providing examples of assigning assignments to students in an educational and fun way, but still contain learning, (2) facilitating learning and practicing subject matter (3) provide a place for students to channel their creativity, (4) provide a place for students to display their competencies, (5) provide a place for students to increase their self-confidence, and (6) provide a place for students to work together.

**Research Methods**

This research is a development research using the ADDIE model developed by Dick and Caray [6]. ADDIE stands for Analysis (Analysis), Design (Design), Development (Development), Implementation (Implementation), and Evaluation (Evaluation). Product Implementation is carried out on class XI PPT students on Seed Quality Testing subjects at Pandak Bantul N 1 Vocational School in June to September 2018.

Sources of data in this study are 1) Material Experts, in this case material experts are School Supervisors / Principals / Teachers who are considered to have competence in terms of learning methods, 2) Vocational Productive Teachers who are considered to have the ability in productive learning practices, 3) Students The XI PPT class consisted of 25 students who became product users (ViReS assignment method) as well as the experimental class and the XII PPT class as many as 18 students as the comparison class.

Data collection research was carried out by observation and questionnaire. 1) Questionnaires were used to determine the assessment of material experts on the suitability of ViReS assignment methods namely to increase students' confidence and competence and validate ViReS assignment methods. In addition the questionnaire was also used to measure students' responses to the ViReS assignment method. 2) Observations were made to measure students' confidence and competence before and after the application of the ViReS assignment method, and to measure the effectiveness of applying the ViReS assignment method in learning. Observations are carried out by productive teachers and researchers who also act as observers when learning takes place. The observation results used as research data are observations at the time of the final observation. The instrument of this research is a validation sheet from the material expert and teacher, the observation sheet by the teacher and the questionnaire by the students.

According to [7], there are five stages in the ADDIE model, each of which has been applied in the research and can be briefly described as follows:

**Results**

**Results of Need Analysis**

There is a gap between ideal conditions and conditions in the field on students' self-confidence and student competency after learning productive / vocational practices. Based on the normal curve assessment criteria, students' self-confidence with an average score of 1.98 which included the inappropriate category and students' competencies with an average score of 2.46 which included quite appropriate categories.

The model of assigning reports on the practice results that are usually given by teachers to students after learning productive / vocational practices is a written report. Students in groups or individuals are asked to write down the things that have been done in the implementation of the practice, namely writing the title of the practice activities, tools and materials used, details of the procedure of the practical activities carried out and the results of the practice. Some teachers ask students to present practice reports in the form of class discussions.

**Student Characteristics**

From the results of the needs analysis, researchers plan to use students' smartphones in
making practice report results. Therefore the characteristics of students are analyzed to see the percentage of smartphone ownership, the purpose of smartphone use by students and the ability of students to use their smartphone facilities with the following results: 1) 100% of students have smartphones, 2) The most frequently used goal is to communicate while the most rarely used is making videos. Based on the criteria for the normal curve of smartphone use goals by students shows the average score of 2.74 with the appropriate category, 3) The average ability of students to use the highest smartphone is to use facilities to communicate while the lowest ability of smartphone use is making videos based on normal curve criteria shows an average score of 2.84 with the category of students' ability to use a smartphone quite appropriate.

Design Results

Based on the results of the needs analysis, it was concluded that the level of confidence and competency of students needed to be improved and the need for a new assignment model that was able to enhance students' confidence and competence. The planned assignment model is a model of assigning practice reports in the form of videos. This assignment model is called the ViReS assignment model.

Validation of the ViReS assignment model on syntax, RPP and research instruments conducted by learning experts shows that ViReS assignment models meet the requirements and are worth testing according to the recommendations.

Application Results

Based on the assessment criteria for normal curves, students' confidence after the implementation of ViReS assignments with an average score of 3.833 which included appropriate categories, student competencies with an average score of 3.8 which included appropriate categories, and implementation of ViReS assignments with an average score of 3.867 which belongs to the appropriate category. Teacher observation data in the experimental class compared with observational data before implementation showed an increase compared to before implementation of students' self-confidence, namely from the less appropriate category to a fairly appropriate category and an increase in student competency before implementation ie from the appropriate categories to appropriate categories.

The results of students' responses to ViReS assignments after implementation are as follows: based on normal curve assessment criteria, self-confidence with an average score of 3.7 which includes a fairly good category, on student competence based on normal curve assessment criteria, student competency with average the score of 3.91 is included in the good category, while the response of students to the task with an average score of 3.94 is included in the good category.

Discussion

This study aims to produce new assignment methods to students after students carry out practical learning. The application of this assignment method (ViReS / Video Reporter assignment method using a Smartphone) is expected to increase students' self-confidence and student competence.

The character of self-confidence and competency in the field are two things that must be attached to students, especially in preparing students for the millennial era industry 4.0. According to [8] the first industrial revolution was marked by the mechanization of production using hydropower and steam. Then mass production became an open possibility thanks to the presence of electricity in the second Industrial revolution. The industrial sector produces production automation in the third revolution due to the support of the electronics industry and information technology. Industry era 4.0 will produce a lot of changes that cannot be stopped. All these changes encourage people to adapt and eventually change behavior, how to work to the demands of skills.

Teachers play a role in the formation of character and competency of students to produce generations that are ready to compete in the industrial era 4.0. especially the teacher carries the responsibility to realize national education, namely the development of the potential of students to become human beings who believe and devote to God the Almighty, have noble character, knowledge, skillful, creative, independent, and become citizens of a democratic and responsible country. The ViReS assignment model is an effort by teachers to improve the character of students' self-confidence and student competence so that vocational school graduates can play a role in the business world / industry.
The implementation of the ViReS assignment model increases the confidence of students from less suitable categories to be quite appropriate. After implementing the ViReS learning model 3 times, an increase in students' self-confidence experienced an increase of 1 category (less suitable to be quite appropriate). According to [9] character education should be carried out continuously with habituation of refraction so that strong character will be formed desired by the teacher. The author believes that the continuous application of the ViReS learning model is one of the ways to cultivate the character of self-confidence in students which will eventually become a character for each student. In this assignment model, students who are in a state of having to be in front of the camera reiterate what they already know. This condition is not easy for students who have low self-esteem (with the characteristic embarrassment to ask, shy about answering questions, ashamed to show work results).

This assignment model also requires students to be able to work together on teams in making videos. Collaboration is one dimension that must be possessed by students in this millennial era. Many work fields of graduates of vocational students demand that they must be able to collaborate. To produce a report in the form of a video that is feasible to watch, which shows the correct sequence of work from the results of reported practice and the integration of images, sounds and other effects of a video requires students to work together in groups that have been formed by the teacher. The impact of this collaboration will result in the habituation of students to express opinions, accept the opinions of others, consult, be loyal, and motivate themselves to be able to produce the best for the team / group.

Videos that contain reports on students' practical activities in addition to showing the correct selection of materials / tools, correct work procedures, appropriate techniques / ways of work (part of student competency assessment) also require students to produce videos that are worth watching, thus becoming a means for students to pouring all the creativity they have. Starting from the selection of location / place of shooting, selection of background sounds on the video, selection of subtitles, to other creativity that can be poured freely on the video. Creativity is a very important educational demand at this time. Creativity will produce various types of innovations and new developments in life. Because creative individuals will be able to deal with changes very quickly in life. Actually the creative potential is basically owned by every student, with the characteristics of great curiosity, love to ask, high imagination, courage to face risks, to be happy with new things and so on. So that the role of teachers in schools is important in developing student creativity. The implementation of the ViReS assignment model is expected to also be a means of developing students' creativity, so graduates will eventually be produced who are ready to face the very rapid changes in this millennium era.

The learning process that occurs when applying the ViReS assignment model is as follows: 1) the teacher explains the practice material, 2) the student observes, 3) the students do the practice, 4) the students make the report. From this process, it can be seen that the practice competencies received by students occur repeatedly, namely first when the teacher explains the practice material, then when the teacher demonstrates practical material, third when students practice under teacher guidance, the fourth stage when students conceptualize the practice learning video report , the fifth stage when students make a report on the implementation of practice, at this stage students can do several practice material when it has not produced the right practice, at this time there is also a process of transfer of knowledge from students who have mastered / understood the practice material with those who have not mastered it, or students have the opportunity to open other references if needed because the practice that will be shown is the result of correct practice. In the final stage after the video reports on the results of the practice are gathered to the teacher, there is still a discussion stage. In the discussion stage students watch videos made by other groups, all students can comment on the videos that have been made. So that it can be concluded that there are 5 repetitions in the practical learning process and 1 time during class discussions in the same practice learning material. Repetition of practical material carried out in the ViReS learning model is expected to be able to improve student competence, so that vocational students become skilled and competent in their fields of expertise. Likewise the substance of the discussion explains in more detail the analysis of the researcher as a reinforcement related to how the results of the study are able to answer the research objectives.
Conclusion

Based on the data obtained from this study it can be concluded that the ViReS assignment method can be used as an assignment method to students, the ViReS assignment method is able to increase students' confidence and competence.

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