

Implementation of Productive Learning Innovations in Tourism Vocational Schools

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Abstract: The nation's productivity and competitiveness is one of the keys to the revitalization of vocational high schools currently being implemented in Indonesia. Revitalization of Vocational High Schools can be used as a solution to produce students who are modern, dignified, innovative and creative. This study aims to find out 1) Efforts that have been made by SMK in implementing learning innovations; 2) Implementation of quality-based productive innovative learning innovations at tourism vocational schools in the Greater Bandung area; 3) An innovative learning model that is used to improve the quality of graduates through productive learning at Tourism Vocational Schools. 4) The obstacles to the implementation of graduate quality-based innovative learning found in Tourism Vocational Schools in Bandung Raya. This research is descriptive research, taking place in Tourism Vocational Schools in Bandung Raya. The sample of teachers is productive teachers who are members of the Tourism Vocational High School MGMP in the Tourism Sector of Bandung Raya Regency, totaling 30 teachers. The sample of students is the students of SMK Binawisata Lembang who are taught by one of the MGMP teachers. The instruments used were questionnaires and FGD guidelines. Data were analyzed using quantitative and qualitative descriptive results. The results showed that: 1) Not all teachers mastered the 4K concept well; 2) Not all teachers are able to implement 4K in learning; 3) 4K learning based on graduate quality, shows that not all teachers apply quality awareness in both design, implementation and evaluation; 4) the obstacles that teachers feel when learning 4K-based innovation are: integrating 4K into learning, difficulty making syntax, developing learning methods; 5) the obstacles felt by students were that most students stated that it was not so difficult to complete 4K learning tasks. The implementation of graduate quality-based innovation learning with a 4K learning orientation still requires more in-depth study, both through FGDs, class observations and review of lesson plans.

Keywords: Learning Innovation; Graduate Quality; Tourism Vocational High School

1. Introduction

The classic problems found in various Tourism Vocational Schools are relevance, quality of graduates and productivity. This is understandable considering that there are still industry complaints related to graduate competencies that are not aligned with work competencies. Vocational High School graduates still need technical training before entering the world of work. Because of the lack of knowledge and mastery of existing technology in the company [1]. On the other hand, the Chairperson of the National Professional Certification Agency (BNSP) Many SMKs provide theories that are not in accordance with current practices in the industrial world. As a result, the knowledge obtained at SMK cannot be applied [2]. This shows that schools must make various learning changes that lead to graduate readiness. The unpreparedness of SMK graduates in carrying out existing jobs in the world of work has a domino effect on the user industry. As users of labor, industry must organize education within the industry to prepare its workforce. Thus, the industry must allocate extra costs outside of production costs. Actually, the industry and the school have their own limitations in forming and obtaining a ready-to-use workforce. The nation's productivity and competitiveness is one of the goals in the revitalization of vocational high schools currently being implemented in Indonesia. This Vocational High School revitalization can be used as a solution to produce students who are modern, dignified, innovative, and creative. Superior human resources are a key factor in improving the economy. The process of obtaining superior human resources can be pursued through education [3].

The education in question is education in accordance with the competencies needed to develop the superior potential of a region. These competencies enter the realm of vocational education. Vocational education is based on learning that leads to skills at the secondary level. In line with the above, it demands a change in learning and teaching patterns. Teachers must be able to develop the skills needed in the 21st century era. Students must be able to mobilize the ability to master routine work that prioritizes rules, repetition and procedures. But also work that is manual in nature which

prioritizes the ability to adapt to the work environment, and the ability to interact interpersonally [4]. The role of the teacher has shifted, not as the only source of learning but his presence is still needed to drive the learning process. Based on this, SMK students can obtain provisions with work competencies so that they have reliable competitiveness both in competing with Indonesian workers and with foreign workers. The work competence referred to in this case is the work ability of each individual which includes aspects of knowledge, skills, and work attitudes that are in accordance with established standards [5]. The expertise or skills possessed by vocational students and the suitability of the competencies provided by schools and having the main-required industry level are expected to be able to produce graduates who can ultimately be absorbed in the industry [6]–[8]. Vocational education must be able to deliver graduates to fill job formations, not to only result in unemployment. For this reason, it is necessary to revitalize vocational education as a whole, including carrying out learning innovations. One of the things that can be pursued through strengthening 21st century learning. Graduate quality-based learning is very important to support the implementation of revitalization in learning in SMK. Of course, what schools have done with the SMK revitalization program has not gone completely well. Therefore, this research will photograph the implementation of innovation-based learning for Tourism Vocational Schools towards graduate quality.

2. Literature Review

Vocational education plays an important role in preparing young people to work, by developing skills that are adequate and in line with market needs in responding to global economic challenges. Moreover, in the era of global competition, innovation and creativity are guarantees to increase competitiveness. Innovation should foster creativity through education, so that teachers and students "harvest" creativity in a sustainable manner [9]. Moreover, there are symptoms of an economic mismatch between the output of vocational education and market needs (including the types of jobs offered, the competencies students acquire compared to industry minimum requirements, and practical experience opportunities for students) [10], [11], causing low absorption graduates and "superior" complaints about graduate performance. Several studies conducted by ADB stated that identification of vocational learning materials is often not based on regular and systematic assessment of labor market needs, even if the curriculum meets the requirements of industry needs (but the competencies obtained may not match industry needs). The aim of the policy is to achieve higher skills standards and more effective acquisition of skills, namely the quality of graduates. So, to meet the demand for vocational learning and economic demand, vocational learning must be linked to economic development strategies by analyzing the skills implications of economic investment. In other words, there is a need for vocational learning that is centered on student skills and in accordance with the requirements of the job market. Indonesia has been implementing industrial partnership-based learning methods⁷ for vocational learning for the last few years. Relations with industry (in the learning process) are an important factor for successful learning and are carried out in various ways, including: apprenticeships employment, certification, and job placement, where students are tested by industry on their practical skills. Innovation and creativity are two words that go hand in hand [12]. Creativity is an important part of innovation, and teaching creativity means creative efforts made by teachers to foster innovation (students) in (learning in) class [13]. Innovation in teaching is often related to an 'invention' such as an idea, technology or technique into a product, process or service that is successful because it meets the needs of students. Innovation in vocational teaching practice is critical as a response to learner-centered learning in the national training system. Where teachers need to build practical skills, increase knowledge base and skills, and adapt vocational pedagogy to realize and maintain the critical role that teachers and trainers play between student aspirations and learning achievement [14]. Learning innovation has meaning as a form of learning renewal. There is a nuance of teaching and learning renewal that can be separated from the learning strategies that the teacher usually does or a combination of various strategies as a form of renewal. Learning innovation refers to patterns of diverse learning experiences, challenging students to use all their learning potential and fostering a desire for continuous learning. In line with the demands of the 21st century era or the era of digital literacy, it causes changes in learning and learning patterns. The teacher is no longer the only source of learning but a variety of learning resources are widely available and without limits. Teachers must be able to take various roles so that a learning process occurs that is able to make students independent in learning. Culinary Productive Subject Subjects consist of 3 groups: production group, catering business management and food service. Various learning experiences can be developed by teachers as a form of learning innovation, by looking at the balance of the roles of teachers and students.

The following describes the structure and components needed for successful life and work in the 21st century. The following figure shows life and carrier skills, learning and innovation, and information, media and technology skills as the embodiment of skills, knowledge and expertise which are subjects of mastery in the 21st century In line with this,

the teaching and learning process cannot ignore the demands of the 21st century as a manifestation of the quality of graduates.

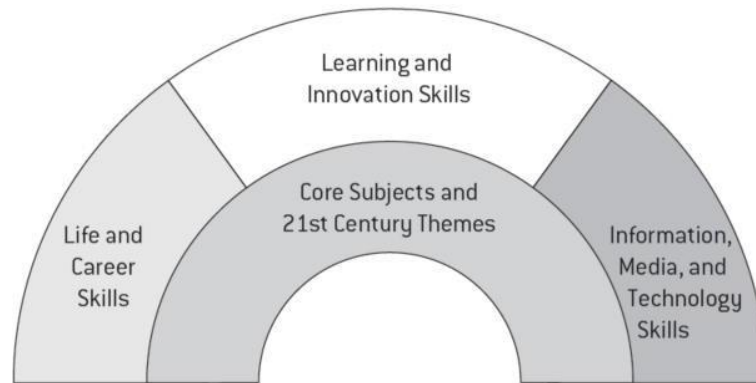


Fig. 1. The 21st Century knowledge –and skills rainbow [4]

Changes in future career roles that will be dominated by the digital era and this needs to get attention from the teacher. Teachers must be able to provide innovative learning experiences that serve to prepare future students. Students must be grown in mental self-driving, self-power, creativity and innovation, and pleasant and good behavior or speech, especially related to communication in cyberspace.

The demands of the 2013 curriculum are that every Tourism Vocational School student must get 4K learning experience, critical thinking, communication, collaboration, creativity and innovation. The 4K learning experience is managed using the PBJL, PBL, Inquiry and discovery approaches, so that students will be moved independently and continuously in mastering 4K well. Teachers' understanding of 4K and its implementation will affect teacher performance in managing 4K. Various efforts have been made by the government through upgrading, mentoring and monitoring by supervision to make teachers more able to manage 4-based innovation learning towards quality graduates. Students who have had a variety of 4K learning experiences will be better able to face life's challenges and be ready to face life's problems. Therefore, the teacher's ability to manage 4K-based innovation learning is a must. Teachers must change and want to change. Teachers are required to always be active to find a variety of learning innovations that continue to develop. The use of media or online learning patterns will be mandatory when teachers teach. This is important so that students compete in the free market.

3. Methods

This research is survey research to obtain an overview of the implementation of learning innovations in productive culinary subjects that are oriented to the quality of graduates using quantitative methods. In terms of the level of explanation, this research uses a quantitative approach, a quantitative approach, namely research where data is expressed in numbers and analyzed using statistical techniques. This research took place at the Vocational School pilot project for the revitalization program of the Vocational Tourism Tourism Vocational School in Greater Bandung. The research time is planned for 8 months. This study took a sample of class XI Michael's Tourism Vocational High School students with a significance level of 5%. The teacher sample was taken from all productive sector teachers representing productive subjects, food service and catering business management, totaling 30 teachers. The teacher sample was taken using a purposive sampling technique, namely teachers who are members of the MGMP in the productive field throughout Greater Bandung. The student sample was purposive sampling, namely students representing schools totaling 1 class, each Tourism Vocational School in the Greater Bandung area.

4. Results

Learning innovation illustrates the ability of productive teachers in the Culinary field to use innovative learning patterns related to the 4K. In this case, the competence to think critically, collaboratively, communicate, creatively and innovatively. There are two abilities that must be mastered by teachers in the productive field of Boga in order to apply

learning innovations, namely: the teacher's understanding of the 4K concept and the teacher's ability to develop learning for each competency contained in the curriculum with 4K content.

A. Understanding the 4K Concepts

Understanding the 4K concept, namely critical thinking, collaborative, communication and creativity as well as innovative skills, is a must for every productive teacher. The teacher must understand what and how learning filled with 4K occurs. Through a questionnaire with one correct answer, an overview of the understanding of the 4K concept was found as follows:

Table 1. Understanding of Boga Vocational School teachers in Sleman Regency about the 4K concept

No	Concept	Percent
1	Think critically	60%
2	Collaboration	50%
3	Communication	70%
4	Creativity and innovation	60%

The table above explains that not all respondents have mastered the learning concept to develop each of the 4K. It can be seen that there are 70% of teachers who master learning to develop communication skills, 60% of teachers who master learning to develop critical thinking and creativity and innovation, and 50% of teachers who master learning to develop collaboration skills. This situation shows that there are still quite a number of teachers who do not understand how to implement each of the 4 K's in learning. Can this situation be a problem for SMKs related to the demands of the 2013 curriculum which emphasizes strengthening the 4K in every lesson. Therefore the teacher's understanding of what and how to implement 4K into learning is a must. Teachers must change, teachers must be able to play various roles, in order to be able to create learning experiences that support the mastery of 21st century competencies.

B. Implementation of Communication Skills in learning

Communication skills that are implemented in innovative productive learning for Culinary Vocational High School students can be in the form of: the ability to write reports following the rules of writing; the ability to summarize reading results in their own language; the ability to interpret reading results and convey them in their own language; designing assigned activities or programs; product promotion with impressive language; and communication globally with various media. The results of the study show that most teachers (75%) are able to apply learning innovations to develop communication. It can be seen that the teacher has been able to practice communication both orally and in writing in the form of readings or practical work. Skills that have not been trained are: global communication with various cultures through various communication media. Practice writing with correct grammar to avoid plagiarism. These results explain that teachers have not been able to develop the ability of learning subjects to welcome the industrial era 4.0 and disruption. Teachers should have the ability to develop online-based learning. Teachers can use blended learning patterns, or flipped classrooms, develop learning media that can be downloaded, and various forms of learning media that develop the ability of learning subjects to use information, media, and technology skills.

Table 2. Implementation of Communication learning by Boga Vocational School teachers throughout Greater Bandung

No Implementation of the selected learning	
1	Gives the task of making a written report of reading results using a standard format
2	Give a presentation assignment of the results of reading review
3	Give the assignment of creating a recipe and practice the results
4	Give the task of presenting the results of the evaluation of other groups' practical work
5	Marketing products to school residents

C. Implementation of 21st century skills, namely critical thinking, collaboration, communication, and critical thinking and innovation

Critical thinking skills that are implemented in innovative productive learning for Boga Vocational High School students can be in the form of learning experiences such as concept development; make a summary of the results of thought; train students to express their opinions confidently; using a systematic mindset, able to evaluate opinions well, coherently and logically. The results showed that some of the teachers (60%) were able to apply learning innovations to

develop critical thinking. It can be seen that some teachers have tried to develop the potential of learning subjects towards a 21st century mindset. By making a summary, at least the teacher has trained them to think systematically. By comparing the processed results between friends and processing the data from the trial results the teacher has trained the learning subjects to give opinions based on facts associated with the standard results. By solving problems, the teacher has been trained to evaluate his opinions in an organized manner accompanied by good assumptions.

Table 3. Implementation of learning to think critically by Boga Vocational School teachers in Sleman Regency

No Implementation of the selected learning	
1	Read a variety of readings then make a summary for find meaning and scope
2	Comparing the results of processed food between friends and then finding the advantages and disadvantages of each processed product
3	Give problems according to the material, followed by finding solutions based on reading results
4	Discuss problem solving to find the most appropriate solution
5	Critique the presentation
6	Processing the trial results data

D. Implementation of Graduate Innovations at Tourism Vocational Schools in Greater Bandung

Productive learning must be properly designed while still paying attention to the quality of graduates. That is, when the teacher teaches practice, he must provide space for the emergence of quality-conscious competence. This awareness will transform into quality conscious work habits when every practical learning experience always emphasizes sustainable quality conscious behavior. Mastery of quality awareness will affect the quality of graduates. Quality performance that gets the teacher's attention: 1) work in the right way, 2) work with the right work steps, 3) the right work attitude, 4) the quality of work that is acceptable to the market, 5) work with the principles of proper hygiene sanitation, 6) quality-oriented work without supervision, 7) work efficiently, 8) adequate work productivity. In line with productive innovative learning that is oriented towards the quality of graduates, teachers must do various things. The learning experiences to cultivate the quality-oriented critical thinking skills of graduates used by teachers are shown in Table 4.

Table 4. Implementation of graduate quality-oriented critical thinking learning by Tourism Vocational School teachers throughout Greater Bandung

Implementation of learning used		Number of teachers
1	Train students to find an understanding of aspects that cause the product to have the desired result uniform over time	16%
2	Train students to find product standards, based on recipe review	62.5%
3	Train students to find basic material criteria for selected product	53%
4	Train students to find the causes of product failure	15%

It can be seen that almost half of the teachers have been able to use two quality-oriented critical thinking learning experiences. While the other two options are not used by many teachers. This shows that developing critical thinking skills for Boga Vocational High School students still requires study through the MGMP on an ongoing basis

5. Conclusion

Although when viewed from an understanding of the concept of each 4 K it is not satisfactory, teachers (70%) have tried to develop learning that supports the achievement of 4 K. Regarding graduate quality-based learning, most teachers have not been able to use the concept of quality awareness, awareness of standards work as a learning reference. Practical activities are still running as it is. This means that it happened every day. The model used for learning is guided by the 2013 curriculum. There are almost no teachers who develop learning by utilizing teacher-made media. The obstacles found when the teacher implements 4K in the selected learning are: a) translating the 4K concept into learning, b) developing 4K syntax according to the guidelines, c) integrating 4K into learning, d) choosing the appropriate material for each 4K , e) develop innovative methods for each 4K. Barriers felt by students, almost the majority of students can easily complete tasks related to 4K easily

6. References

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