Project Based Learning on Creative Economy Competence at Vocational Schools in Bali

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Abstract

This study aims to analyze the implementation and implementation of industrial working practices (Prakerin) based on project-based blended learning in the field of creative economy expertise at Vocational Schools in Bali Province during the new normal. Industrial work practices (Prakerin) improve students' competence in work experience in the working world industry (IDUKA). The research model uses a qualitative method with a case study. This method is intended to know in depth the implementation of industry work practices (prakerin) based on project based learning online or offline in SMK Bali Province. The research began through direct observation (observation) of the activities of the implementation of industry work practice (Prakerin) based on blended learning projects in SMK Bali Province. Data collection techniques are carried out through in-depth interviews with informants who are directly involved in industry work practice activities (prakerin) based on blended learning projects. The research location was conducted at SMKN 1 Sukowati, Bali, SMKN 2 Negara Bali, SMKN 3 Denpasar and SMKN 5 Denpasar Bali Province. The results of this study indicate that: 1) The conditions for implementing project based learning Prakerin are constrained by the limitations of face-to-face learning activities in education units; (2) Project-based, blended learning-based Industrial Work Practice is one solution as a form of student industrial work practice program using online learning as well as face-to-face teaching and collaboration to design, repeat, and complete project-based learning tasks or creative economy products; (3) The industrial work practice curriculum is the result of synchronizing the curriculum in the education unit with the industrial working world curriculum (IDUKA).

How to Cite

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INTRODUCTION

Vocational High School (SMK) is an educational institution that is expected to provide more specifications to its graduates. Not only for educational achievements in the community but also the entrepreneurial mentality. One of the potential entrepreneurial sectors to be developed in vocational high schools in Bali Province is the creative economy sector. Economic development based on creative businesses is possible and has the potential to be developed in schools. Vocational High Schools can play a role as a driver of this economic industry in the community as a double achievement target other than in education. If this is successful, then the quality of SMK graduates will indeed become quality graduates who are highly expected. The quality of vocational education in SMK is expected to be developed more precisely to make its role visible in society.

However, the COVID-19 pandemic has made the development of creative economy competencies have a very concerning impact, especially on the industrial work practice system (Prakerin) with the world of work industry (IDUKA).

The Covid-19 pandemic in Indonesia has changed the learning system from face-to-face learning to online learning at home based on integrated blended learning (Hikmat, Aldim, & Irwandi, 2020). Since the emergence of positive cases of Covid-19 patients in Indonesia, based on Circular Letter Number 27/SE/2020 and Circular Letter Number 34/SE/2020 concerning Home Learning. Through the Ministry of Education and Culture and the Ministry of Religion of the Republic of Indonesia, the government has implemented studying and working from home policy since mid-March 2020. The impact of the COVID-19 pandemic has affected the activities of vocational students in Bali Province, especially in the field of creative economy expertise who are carrying out Industrial Work Practices (Prakerin) in several businesses and industries since February 1, 2020. Due to this epidemic, internship activities in the business and industrial worlds were terminated earlier than the original schedule.

Industrial work practice (Prakerin) is a form of placing students into a process of practical activities carried out as a means of learning. Prakerin prepares skilled individuals according to the skills program that has been learned in school. Students are equipped with several skills following the skill program they choose. It is hoped that students can become skilled workers who are ready to work. Students are prepared as skilled workers who can later increase the number of workers needed by various parties seeking workers (Ardiani & Ridwan, 2020).

Industrial Work Practices (Prakerin) at IDUKA or the world of work are integrated as a learning unit, aiming to produce graduates/capable workers who are relevant to the community’s needs. This is also following Government Regulation of the Republic of Indonesia Number 41 of 2015 organizers of Competency-Based Industrial Training can cooperate with Industrial Companies or Industrial Estate Companies (Directorate of Vocational High School Development, 2010). The cooperation is referred to in the form of: (a) curriculum development, (b) work practice, and/or (c) placement. Industrial Work Practice (Prakerin) is an educational activity oriented to introduce knowledge and skills, introduce the appearance of work assignments or professional activities. Both have theoretical and practical components, but when compared to other techniques, the prakerin is broader and has clearer aspects of the workers' professionalism. The context of the prakerin focuses on preparing the workforce in the industry. The internship program design is inseparable from the implementation of the syllabus into learning that requires methods, strategies, and evaluations of implementation that are following the prakerin design as part of learning that needs to pay attention to the readiness of the working world of partners in implementing the competency learning. This is necessary so that in its implementation, the placement of students for prakerin is right on target in accordance with the competencies learned. The following is a flowchart of the implementation of industrial work (prakerin), which can be seen in Figure 1.

![Flowchart of Industrial Work Implementation (Prakerin)](

This is supported by the statement (Mavrikios, Papakostas, Mourtzis, & Chryssolouris, 2013), that this prakerin program combined with classroom learning instructions is commonly applied in companies. According to (Akkoynulu & Soylu, 2006), several potentials can be capital for the development of the creative economy in schools and continue to the community, namely:
1) Availability of more knowledge in schools, not only in business but students are also equipped with implementable knowledge in business; 2) Schools become a place for young entrepreneurial talents who are still enthusiastic, easy to shape their mindset and have the spirit of daring to try without fear of failure; 3) The number of opportunities for assistance from the government for the development of the creative economy sector in SMK. Here it will be more helpful and easier for prospective young entrepreneurs to learn to find sources of business capital; 4) The students are young people who have contemporary creative business ideas that have the potential to be developed. Business following the times and ages; 4) Schools become a learning space for business development that does not need to stress young businessmen from thinking about many things because there will be mentors from schools, training, and the like that are easier and cheaper for students access.

Furthermore, it was said by (Wahjusaputri & Bunyamin, 2021), the obstacle to implementing prakerin competencies in the creative economy field at Vocational Schools in Bali Province, the reality in the field of prakerin implementation is still far from expectations such as ideal conditions. The implementation of Prakerin is still at the level of formality, where the internship program is carried out by all Vocational Schools, with technical students for 4-6 months carrying out Prakerin in industry or related agencies. only running for one and a half months has not met the achievement of competencies that have been determined in the syllabus and has not achieved maximum results. The supervisor at IDUKA has not been able to provide an internship value because the time of one and a half months is only used for company introduction, initial material and project observations. Based on the agreement between the school and IDUKA, the internship can be continued online under the guidance of the company and by monitoring from the supervisor at the school (supervisor teacher) with an integrated blended learning system. The learning program involving industry is expected to enable students to master the aspects of competence demanded by the industrial curriculum and get to know the world of work early. The implementation of Prakerin by involving industry in the form of cooperation between SMK and IDUKA, industry can play a role, including industry as a place of practice for students, providing funds for the implementation of a dual system, designing educational programs, and implementing programs to evaluating student learning outcomes in vocational education (Dziuban, 2004).

The management of work relations in industrial practice activities begins with proper planning by the school and the industry to be carried out effectively and efficiently. Indicators of synchronization of the school curriculum and the curriculum of each industry as a place for vocational students' internships have not reached the target of the Prakerin program optimally. There are still students who carry out Prakerin in industrial places that do not match their expertise competencies. The target of students when carrying out Prakerin in the industry to get a real picture of the real conditions at IDUKA has not been achieved (Wahjusaputri, Bunyamin, Fitria-ni, Nastiti, & Syukron, 2020).

This condition certainly requires the thought of every academic unit in the implementation of the SMK Prakerin program. Another problem with infrastructure is that the availability of Prakerin places for schools is not sufficient. While on the other hand, for now the condition of the Covid-19 pandemic is very influential on the implementation of the learning process in SMK. The government's policy on Distance Learning (PJJ) and Studying at Home (BDR) is an obstacle to the implementation of Prakerin.

According to (Akkoyunlu & Soylu, 2008), the project-based blended learning model is one way to keep the internship program running by following health protocols. The innovation of each educational unit is needed to support the implementation of the Prakerin program in the post-Covid-19 pandemic. Vocational learning focuses on practical learning, so students will find it difficult when implementing distance learning (PJJ). According to J.Bonk & Graham (2005), project-based blended learning is learning that combines online learning with face-to-face (face-to-face learning).

This opinion is reinforced by the opinion Prinz et al., (2016) that project-based blended learning is learning designed by integrating the face-to-face learning process and the online learning process to improve student learning outcomes. Students will possess these skills when they practice directly, seeing the tools directly in the process of skills that must be mastered. The use of instructional media with video can only help give students an idea of how the conditions of practice and what skills should be mastered by students. In the blended learning model, three important components must be considered: 1) online learning; 2) face-to-face learning; 3) self-study. This blended learning model can create a conducive learning environment between stu-
dents and supervising teachers without being limited by space and time.

This statement is supported by (Albion, 2008) that four types of interactions that occur in blended learning have a positive impact, namely: 1) student interactions with content refer to users who are bound in instructional information; 2) interaction of students with technology interfaces; 3) interaction with instructors from the world of work industry (IDUKA) in providing teaching, guiding and providing motivation in solving problems experienced by students; 4) interaction between students is the way students communicate with fellow students in the learning process.

Figure 2. Project-Based Blended Learning Model

According to (Bersin, 2004), Project-Based Blended Learning is a learning model in which students use online learning and face-to-face teaching and collaboration to design, repeat, and complete project-based learning tasks or specific products. Online learning can take online learning with forms or materials that have been prepared or independent access to the learning resources needed (J.Bonk & Graham, 2005).

The main characteristic of this learning is the use of online resources to support project-based learning. Five keys to implementing blended learning in the creative economy sector at Vocational High Schools in Bali Province are as follows: (1). Live events. Blended learning is carried out face-to-face (instructor-led instruction), in the same time and place (classroom), or virtual classroom (same time but different place). Learning objectives can be achieved by innovatively designing a combination of behaviorism, cognitivism and constructivism so that meaningful learning occurs (Carman, 2009). (2). Self-Paced learning, learning with a combination of independently (self-paced learning) where participants can learn at any time, learn anywhere, using learning materials specifically designed for independent learning both text-based, multimedia-based (video, animation, simulation, image, audio, or a combination). Current developments in learning materials can be delivered online via the Web or mobile devices (e-books, streaming video, audio) or offline in print and CD form (Cox, Carr, & Hall, 2004); (3) Collaboration. Collaboration, by teachers and students, can be between schools. Blended learning designers design forms of collaboration, either between peers or between students and educators, through communication tools such as chatrooms, discussion forums, email, websites/weblogs, and mobile phones. This collaboration is directed to gain knowledge and skills through social interaction with others by way of deepening the material, offline problem solving, and project-based learning (J.Bonk & Graham, 2005); (4) Assessment. Learning assessment with blended learning can combine test or non-test assessments or portfolio tests. The form of assessment can be online or offline. (Donnelly, 2006); (5). Performance Support Materials (Donnelly, 2008). Study materials are prepared in digital form that can be accessed offline or online. Teachers can create learning applications that are easily accessible to students (Donnelly, 2010).

Implementing prakerin based on the project-based blended learning model in the competence of creative economy skills is a skill competency that learns about 1) Short Films. The film industry is one of the creative economy businesses loved by young people and has the potential to be developed in schools; 2) Design and Advertising. Students who have competence in designing various illustration programs can be directed to manage creative businesses in the advertising field; 3) Game Developer. The school can significantly facilitate students to be serious in becoming an application or game developer; 4) Craft and Art Products. Students who like to make handicrafts or innovative products with artistic value are also very suitable to be facilitated in craft and art products. The manufacture of these handicraft products can be done in collaboration with the community and the local community. Excellent products can be a selling point that produces economically; 5) Music. Students who tend to play music and the arts can be directed to develop the creative economy business sector in the music field. Start by building a quality music group, singers, poets and so on, performing in many places and finally having economic bargaining power. This method is somewhat more creative to accommodate all the potential of existing students to be useful for welfare. The welfare of the school and individual students are related and affect the development of the creative economy in a better society. Project-Based Learning is an
alternative learning model in vocational education (SMK) of Bali Province, where learners can plan, design, and reflect on their learning through projects and communicate reports to teachers and industry teaching staff. Thus, learners can measure their metacognitive thinking skills through the process of planning, monitoring, and evaluating their performance and the projects or products they create according to industry standards.

METHODS

This type of research is using a qualitative method with a case study of the implementation of prakerin in Vocational Schools in Bali Province. According to Sugiono, the qualitative research method is based on postpositivism philosophy, used to examine the condition of natural objects, where researchers are the key instrument, data collection techniques by triangulation (combined). The research locations are in four State Vocational High Schools in the Province of Bali, one of the vocational schools that have become a reference for researchers with research partners, namely the Director of Vocational Development at the Directorate of the Ministry of Education and Culture. The reference vocational schools are SMK Negeri 1 Sukawati, SMK Negeri 2 Negara, SMK Negeri 3 and SMK Negeri 5 Denpasar Bali. The data analysis is inductive/qualitative and the research results emphasize more on meaning than generalization (Sugiyono, 2015). This study seeks to collect data relating to implementing competency prakerin in the creative economy during the COVID-19 period through surveys, interviews, and documentation (Radhila, 2013). Through this qualitative data, it is hoped that it will reveal and describe how the implementation of competency prakerin in the creative economy during the Covid-19 period at the State Vocational School of Bali Province.

RESULT AND DISCUSSION

In the context of learning in vocational education, these two categories allow to be measured and assessed. However, considering performance-based and product-based assessment methods in vocational education, metacognitive regulation (planning, monitoring, and evaluation) is more likely to be measured. According to (Klerk et al, 2018) explained that vocational education emphasizes performance-based assessments where students learn by doing. This is affirmed by (Wimmers, 2016) that at the end of vocational education programs or professional education programs, every student must achieve standardized work competencies so that in project based learning-based education programs are a common method for assessing practical competence in industrial work practices (prakerin).

In the current covid-19 pandemic conditions, it does not dampen the spirit of vocational students in Bali Province to keep working and excelling in their fields. Therefore, one of the school programs requires a work practice program in the industry (Prakerin) to students online (online) or offline (face-to-face). If the student does not follow the working practices of the industry then it cannot be approved. Based on Minister of Education and Culture Republic of Indonesia regulation issued a circular no. 4 years 2020. Points 2 In SE No.4 of 2020 mentions that: a) learn from home through online/long-distance learning is carried out to provide a significant learning experience for students to complete all curriculum achievements for class increases; b). Learning from home can increase life skills education, among others about Covid-19 pandemic; c). Activities and learning tasks from home can vary between students, according to their respective interests and conditions, including considering the access gap/home study facility; d). Proof or product learning activity from home is given a qualitative and useful baik feed. The implications of the Minister of Education and Culture No.4 / 2020 make the school conduct learning from home for students. To produce meaningful learning according to point 2A, the teacher must choose the appropriate learning model to become meaningful learning. Learning from home continues until May 2 2020, a national education day where the Minister of Education and Culture provides a mandate as a coach to ceremonial activities commemorating the education day. In his speech, Mendikbud said effective education requires collaboration from teachers, students, and parents, and he also mentions when the Covid 19 pandemic is the right time to innovate and experiment. He has already mentioned the right learning in the Covid 19 pandemic period, which is a learning that collaborates, innovation, and experiments.

Furthermore, the Minister of Education and Culture also gave 7 learning tips from homes, among others, mentions to divide classes in small groups and try the project-based learning model/method because of training students collaborating cooperation and empathy. The project-based learning model or the Project-Based Learning mentioned by the Minister of Education and Culture is one learning model that makes students
active and independent in learning.

Project-based learning-based prakerin program involves industry, it is expected that learners are able to master the aspects of competence that are the demands of the industry curriculum and learners can get to know earlier about the world of work. Industry as a place of practice for learners, provision of funds, designing educational programs, and implementation of programs to the evaluation of learners’ learning outcomes in vocational education. The management of working relationships in industrial work practice activities begins with proper planning by the school and the industry, so that it can be carried out effectively and efficiently. The reality in the field of prakerin implementation is still far from expectations such as ideal conditions. The implementation of Prakerin is still at the level of formality, where the prakerin program is implemented by all vocational schools, with technical learners for 4-6 months carrying out Prakerin in industry or in related agencies. Indicators of synchronization of school curriculum and curriculum of each industry as a place for vocational students have not reached the target of prakerin program. There are still students who carry out Prakerin in industrial places that are not in accordance with the competence of their expertise. The target of learners when carrying out Prakerin in the industry in order to get a picture of real conditions in IDUKA has not been achieved. This condition certainly requires the thought of every unit of education in the implementation of the Vocational Prakerin program.

The problem of the implementation of the prakerin program during the covid-19 pandemic that the increasing number of vocational schools, raises the problem of the availability of Prakerin places for schools is not fulfilled. While on the other hand, for now the condition of the Covid-19 pandemic is very influential on the implementation of the learning process in vocational schools. The government’s policy on Distance Learning (PJJ) and Home Learning (BDR) is an obstacle to the implementation of Prakerin. This certainly requires a solution, how the Prakerin program continues to run by following health protocols. The project-based learning is a learning model that can apply the knowledge that is already owned and train various thinking skills, attitudes, and concrete skills (Beebe, Vonderwell, & Boboc, 2010).

Planning prakerin program online competence of creative economic expertise in SMKN 1 Sukowati, SMKN 2 State, SMKN 3 Denpasar and SMKN 5 Denpasar Bali Province

Based on the findings, it is known that the industry, business world and the world of work (IDUKA) are adjusted to the competence of expertise and curriculum owned by the school, but not all basic competency programs in IDUKA are achieved. An example in one of IDUKA engaged in the field of craft arts, the work is only a picture planner does not cover to the calculation of the estimated construction cost. This is in accordance with the regulations of the Directorate of Vocational High School Development regarding the implementation of prakerin which states that mapping the world of work is very important before the prakerin program is designed. This aims that the world of work that is used as a relevant partner with the competence of expertise that is being pursued by learners so that the prakerin goal is well achieved. (Direktorat Pendidikan Menengah Kejuruan, 2008).

Based on the results of research interviews with the principal of SMKN 1 Sukowati, SMKN 2 State, SMKN 3 Denpasar and SMKN 5 Denpasar Bali Province regarding iduka joint partnership in terms of cooperation (MoU) explained before students carry out prakerin must be implemented MoU, but not all IDUKA is willing to do MoU on the grounds that the company is not absolute to accept graduates of students from the vocational school. The same thing is explained in the study (Sintha & Bunyamin, 2021) that the industrial work practice process involves industry during learners studying in vocational school.

Regulation of schools with IDUKA in the implementation of project-based learning-based prakerin competence of creative economy expertise

Based on the prekerin SOP in SMKN 1 Sukowati, SMKN 2 Negara, SMKN 3 Denpasar and SMKN 5 Denpasar Bali Province, the implementation of project-based learning-based prakerin at IDUKA uses zoom meet for material and email provision for task collection. The guidance teacher monitors the tasks of learners given by the supervisor at IDUKA through the whattapp group, then the learner sends the task to the gui-
dance teacher. The basic competency e-learning portal repairing cd audio video signal reproduction tools is allegedly very appropriate to optimize the achievement of basic competence of learners. Utilization of e-learning-based teaching materials is expected to overcome the problems caused by learning by using print media for learners who carry out Prakerin (Zyainuri & Marpanaji, 2013). This is in line with research from (Nurita & Astuti, 2020) That the evaluation of the Prakerin Program that has been done by learners needs to be evaluated to see the conformity between the program and its implementation. This is intended as a basis for the preparation of follow-up programs that must be done both on the achievement of learners’ competencies and against the Prakerin program. Evaluation is carried out by: (1) conducting an analysis of the results of reports made by learners and the results of assessments by supervisors from IDUKA; (2) Learners make presentations of the results of prakerin implementation.

Whereas in complex problems, learning is needed through investigations, collaboration, and experiments to do a project and integrate various subjects (material) in learning. Implementing a project-based learning model is expected to train independence, collaboration, and experiment in students or students. According to research conducted by (Wahjusaputri & Bunyamin, 2021) that the implementation of the Project Based Blended Learning in Indonesia during the Covid pandemic period is carried out in groups or collaborating between students, but the implementation can be carried out can be done by work from home assisted by parents with the aim of agar Communication involvement between teachers, students and parents. The Project-Based Blended Learning Model solves the problem of creative economics that experience a very alarming impact on the working world industry (IDUKA) in the province of Bali.

For the program implementation program, the Project-Based Blended Learning model went well, there were several ways made by the State Vocational School, which was in the province of Bali. According to the Principal of SMK Negeri 1 Sukawati, explaining the Prakerin program in the future this new normality is to fulfill competence as a curriculum demand. Mastery of the competence of creative economics (short films, design and advertising, game developers, craft and art products and music) is determined by the school’s learning facilities. If the availability of facilities is limited, the school needs to design competency learning outside the school, namely with the industry of the world of work (IDUKA). The implementation of the learning of competency in the field of the creative economy is not fully submitted to the IDUKA. However, the school needs to give direction about what should be taught to students. In addition, according to the Principal of SMK 1 Sukawati, the Prakerin program can foster work spirit and work experience. In Post Pandemic Covid-19, Online Prakerin with the Project Based Learning model is a collaborative approach to learning and teaching that placing students in this pandemic situation can solve a problem of creative economics starting from Project planning, processes to work in complex tasks and can Assessing their performance and progress online and offline together with the idol.

The statement is following the research conducted by (Bukit, 2014), that the implementation of the Project-Based Learning Project includes: 1) Performance-oriented in real needs in the field; 2) there is a real need in the field of the creative economy; 3) Focus curriculum on psychomotor, affective and cognitive aspects; 4) Reject the measure of success is not only limited to school; 5) sensitivity to the development of the workforce; 6) requires sufficient school facilities and infrastructure; and 7) support from the community for economical products produced by the school.

The same expression was also conveyed by the Principal of SMK 3 and 5 Denpasar Bali. Students carry out activities both individually and in small groups in supervision and guidance of guidance teachers. Entrepreneurial activities include manufacturing business plans (business plans) approved by the guide teacher, and performance statements or portfolios prove the results. The success of the development of creative economy in vocational high schools (SMK) is the school’s success in preparing high-quality graduate students who understand the actual business. Graduates are ready in terms of quality and have competitiveness. The development of competencies in creative economics in Vocational School in Bali (SMKN-1 Sukawati, 2 countries, SMK 3 and SMKN 5 Denpasar) in the pandemic period until the pandemic new normal adaptation did not all run smoothly. According to the Head of Vocational Development and Chairperson of the Bali Provincial Education Curriculum Division, there are several obstacles in development of Vocational High School creative economic activities during Covid-19 Pandemic, which is important and searched for a solution, including: 1) Curriculum that has not succeeded in building a business mindset actually for students; 2) Not yet understanding the manager and policy makers.
CONCLUSION

From the description above it can be concluded that the Project Based Learning is a suitable learning model for use in learning activities from home because through Project Based Learning students are invited to collaborate, independently and explore, the assessment used is in accordance with the Circular of the Minister of Education and Culture No. 4 of 2020 That is a portfolio-based assessment by adjusting the condition of the student (access gap). The learning process is done by prioritizing positive interaction patterns and or communication between educators and parents and parents therefore need to choose the right media in learning and assessment. Project Based Learning makes students develop because when students learn in their own way, they develop the ability to focus and reflect. Working in their own way also gives students the opportunity to assume personal responsibility for what they learn. Not Mistaken Minister of Education Nadiem Makarim Choose the Project Based Learning as a Learning Model in the Pandemic Covid 19 because it is time for students, teachers and parents innovate by doing many questions, many try, and many works.

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