

Project-Based Learning Model to Develop Business Management Capabilities

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ABSTRACT

This research was conducted to produce a project-based learning model with three variations of business activities and its five components in an integrated manner to improve the ability to manage a business. The output to be achieved with this model is the strengthening of entrepreneurial character, improvement of operational capabilities and strengthening of managerial capabilities, as well as business development through improving product quality and expanding access to digital markets. The design used is research and development (R&D), starting from the analysis of entrepreneurial needs, determining components and making product prototypes, testing and revising, continuing to implementation. Data on increasing managerial and operational abilities, changes in self-character, as well as business development data for the 30 student entrepreneurs and alumni were analyzed descriptively. The efforts to improve the ability to manage business and the ability to capture market opportunities are analyzed by SWOT and t-test. Data analyses by using descriptive view show that operational skills and managerial abilities can be improved by utilizing feedback information from interactions with expert teams, colleagues on campus and alumni groups in the field. The results of the data analysis show that the developed model has been successfully implemented in the field to achieve the proposed competency standard. The results of data analysis show that the ability to manage a business develops in a sustainable manner, with variations in acceleration that vary according to the type of business chosen, as well as internal and external factors that influence the business.

Keywords: entrepreneurial capability, project-based learning, business management, managerial skills, operational skills.

1. Introduction

The appearance of a group of entrepreneurs from among college alumni can be a trigger for the nation's economic progress, but how to make it happen? The entrepreneurial profession requires ownership of basic capital, the ability to manage a business that can be grown and developed by incorporating the teachings of values and basic principles of entrepreneurship in the lectures and training of entrepreneurial students at universities (Suharsono, 2018). However, in reality it is not easy to realize. This research was conducted to produce an alternative model of project-based learning that can provide empirical experience, practical assistance and business development support to students and alumni of UMK business actors in order to apply values and basic principles of entrepreneurship through theoretical mastery and consolidation in practice.

The results of a field survey (Suharsono, et.al, 2021) show that the basic problem faced by pioneering students and alumni managing UMK is the limited ability to access domestic and

export markets due to regulatory barriers, distribution channels and a number of human resources capabilities, thereby weakening the position of offer superior products. One alternative solution is to apply a project-based learning model to improve the ability of students and alumni to manage and develop businesses, followed by mentoring and providing facilities that can provide opportunities for advancement. It is hoped that this progress will be transmitted to new students through future business practice programs

2. Literature Review

2.1 Project Based Learning

Project-based learning (PjBL) is an inquiry-based instructional model that engages learners to construct knowledge to accomplish meaningful projects and actions based on their own believe or confidence. Krajcik and Shin (2014) indicated six hallmarks of PjBL, including a driving question, the focus on learning goals, participation in educational activities, collaboration among students, the use of scaffolding technologies, and the creation of tangible artifacts. Among all these features, the creation of artifacts to solve authentic problems is most crucial and need to apply the new ideas and creativity.

The formation of the entrepreneurial profession requires pioneering efforts, training, mentoring, environmental support, and sustainable development. As recommended by the Belmawa Directorate (2018), the solution that can be taken is to develop certain strategies and policies in each university to create an entrepreneurial campus that can improve work competence and productivity for entrepreneurial students and alumni. Therefore, it is necessary to work together and jointly develop models of entrepreneurship education to start a business while still in college and continue after graduating from college.

The problems that have arisen so far can occur because of pioneering efforts and basic training in higher education by inculcating essential values, concepts, principles, laws and theories that have been optimal, while the introduction of real conditions in the field and the ability to act quickly to overcome problems have not been able to produce results. optimal results. This includes the affective domain towards the development of entrepreneurial actions and character competencies, as well as the cultivation of values to develop entrepreneurial character.

In relation to the process of forming the entrepreneurial character, Suharsono (2018) has developed the PATRIOT learning model with a description of how to structure scientific content and scenarios of learning activities to achieve optimal competency standards. As synthesized by Suharsono et al4) that academically, what universities should do is build a conceptual framework and learning process based on phasing out certain theoretical models or 'life-cycle theory' according to their needs. In other words, each university should be able to determine a simultaneous approach and learning strategy between inculcating the teachings of values, mastering the content of basic scientific material, understanding the phenomena of life in the field, and building the ability to take smart actions in the process of forming the identity of prospective independent entrepreneurs.

2.2 Entrepreneurship Competency Development

Entrepreneurial competence is one type of integrated high-level ability. The activities can be scripted by combining independent, interactive learning activities with audio-visual media, the real world in the field, and the virtual-online world combined with activities for working on training tasks, and assessing productive performance on an ongoing basis. Implementation

of learning products can be done in the classroom, laboratory and SMEs in the field. This integrated learning is designed in an online format, which is supported by network facilities with google meet, online laboratories, and field activities based on the premise that increasing the ability to innovate creatively, courage to face risks, and turn challenges into opportunities are the basic characteristics of business managerial behavior. Field data is obtained through online interaction and student performance assessments which are then analyzed according to the characteristics and content. From the results of these studies, there are recommendations that should be followed up, namely the need for alternative policies and efforts by higher education institutions to integrate the development of an entrepreneurial culture into the tridarma forum by incorporating value learning that is relevant to strengthening character as an entrepreneur (Boldureanu, et. al. 2020). To facilitate a continuous learning process from theory to application in the fields of service, trade, manufacturing, and multi-product businesses.

The implication of the problem above is that efforts are needed to reconstruct the education and professional training system that is more oriented to the development of an entrepreneurial culture according to the demands of the times. The final competence of the program is having the ability to act to be able to help oneself and others as part of the dedication of university graduates to the nation and society. The question is, what is the implementation strategy so that the business can be effective in the field? To answer this, it is necessary to ensure that a combination of learning activities can produce optimal results. In this study, the question is whether giving empirical direct experience in the field has a significant impact on increasing students' basic entrepreneurial skills? In accordance with the formula of the results of Suharsono's research above, operationally the research problem is formulated in the work stages of achieving the target group of prospective users, and connecting networks from theory to application to achieve high level competency standards. The focus of the research is on the achievement of learning outcomes oriented to the independent entrepreneur profession, by focusing on low-level and high-level competency tests, from theory to application in the field.

2.3 Entrepreneurship Development in Higher Education

As stated in the higher education curriculum content standards (2018, 2021), the entrepreneurial culture development program is included in the higher education investment program group (Tripalupi et.al.2020). Therefore, every type of program related to entrepreneurship development should be more oriented towards empirical reality in the field. This research was conducted as part of a cross-departmental activity and is related to the pioneering of alternative skills development programs for students in the field of entrepreneurship. The purpose of Entrepreneurship Education is to provide students with theoretical and practical experience in order to apply the principles and values of entrepreneurial culture in the context of performance in their professional field. The resulting product is predicted to be used by other universities in Indonesia that open entrepreneurship development programs and collaborations with business institutions on the micro, small and medium scale enterprises (MSMEs) to synergistically build organizational cultural values and foster the birth of new entrepreneurial groups.

Project-based learning is one of the models referred to in the Independent Learning Curriculum in Higher Education (MBKM, 2021). The core activity is, learning that begins with 'how to do' learning, which is to strengthen the character and spirit of entrepreneurship through debriefing students on how to work in the business world to identify what entrepreneurial culture is, how activities are carried out, and what activities are carried out in

the business world. the process of becoming an entrepreneur (Takahashi and Kiyosume, 2022). In the context of this activity, culture includes conceptual basic ideas, their implementation in daily activities, and the product of the creative work of the perpetrators of entrepreneurship education activities. These two aspects can be studied separately through in-depth and gradual studies, but can also be mastered almost simultaneously through continuous and integrated series of activities. The integration of the pattern of face-to-face training activities and learning in on-line channels into an integrated activity is the new thing that characterizes the activities proposed in this research.

3. Research Methods

This research uses a development design (R&D) to produce Entrepreneurship Education technology products. There are five stages that are passed in the first year, starting from (1) initial analysis of the need for business management personnel, followed by (2) designing the main components and supporting components. The next stage is (3) making product prototypes and supporting product devices, with specifications for target users, and (4) initial testing to student representatives and experts to determine the level of validity and reliability. The next stage is (5) implementation activities, to explore field data segments and facilitate business development.

The field in question is the research subject's place of business. The subjects of this study consisted of 30 students and alumni of the State University of Malang who already had a business. The students come from study programs across departments registered through the SIPEJAR or MBKM program. The data sought are five segments, namely: the results of individual student training, mastery of the five sub-domains of entrepreneurial competence, the response of business actors to the entrepreneurship learning mentoring services provided, managerial competence tools, and operational competencies in the field that are interconnected with the Integrated Management website. at the Faculty of Economics and Business, State University of Malang.

The main instrument used to collect data is the prototype of the Project-Based Learning Model itself, while the supporting instruments consist of three sets of response questionnaires, and student assessments of their listed businesses. Two other supporting instruments are questionnaires for accompanying lecturers, and students' feedback on additional entrepreneurship service facilities that they receive either through providing inventory assistance from research funds or independent funds. The data obtained were analyzed using descriptive analysis techniques, laboratory-related sample t-test, and SWOT analysis as needed. To explore data on entrepreneurship training practice services in universities and assistance in the field. Likewise, product assessment in terms of increasing added value with the inclusion of integrated training concepts and digital marketing. To measure the level of student performance achievement in participating in the integrated Entrepreneurship program for students and alumni, the ANOVA technique is used by utilizing business progress score data at the beginning and end of the learning semester in the field. Overall there are two main products that must be achieved, namely: the production of project-based learning tool product samples, and increasing the ability to manage businesses, from pioneering, to start-ups, growing-ups supported by digital marketing software that can access local, national, and local marketing. and the global market. The implementation test of variations in business management patterns is carried out from the beginning to the end of the semester, while the digital marketing software prototype at the end of the year.

The composition of the participants are undergraduate students who at the implementation stage are accompanied by three lecturers/companions plus practitioners at the object location of field activities or virtual markets created together with lecturers and students based on a business plan project that has been prepared. The selection of subjects was carried out by students together with the supervisory lecturer, according to the type of business that students were interested in and the feasibility of the company as a place for students to practice field work.

4. Results And Discussion

Many efforts to improve the ability to manage business and the ability to capture market opportunities are collected and analyzed to make sure that the models of instruction and learning achievements could be shown in the right way. Data analyses by using descriptive view show that operational skills and managerial abilities can be improved by utilizing feedback information from interactions with expert teams, colleagues on campus and alumni groups in the field. The results of the data analysis show that the developed model has been successfully implemented in the field to achieve the proposed competency standard. The results of data analysis show that the ability to manage a business develops in a sustainable manner, with variations in acceleration that vary according to the type of business chosen, as well as internal and external factors that influence the business.

This Research and development targets product outputs in the form of learning tools with five integrated components, namely: (a) study guides, (b) project based-learning contents and Instruction, (c) alternative packages of learning activities, (d) teaching and learning media, and (e) assessment of learning and learning outcomes acting as a business management group.

Efforts to produce a true business management group can only be done in the classroom and in the field in an integrated manner. Theoretical knowledge that is well mastered by students becomes more meaningful based on the teachings of socio-cultural-religious values, basic scientific concepts, and communication strategies for their disclosure. The ability to manage a business in the form of action can be more in line with its functions by including the character of identity in every step of planning, implementation and supervision. More operationally, the conclusions of the results of this study can be presented as follows:

First, the Problem Based Learning Guide, there are five types of competency standards set in the development of business management education. Of the five competencies, the highest proportion is work behavior offered for both academic education programs and the real entrepreneur in the field.

Second, the Business Management and operational program. This Business Management Program is a value system of creative thinking and innovative behaviour that can be learned and taught with certain strategies, from theory to application. Business activities based on problem-based learning models that are proven to lead to the development of a work culture and high fighting spirit, dare to take risks, are accommodative to change, and professionally increase competitive advantage, and strengthen self-image as independent people. The values of the struggle for life are implanted into the memory of the students' brains so that they can be used as a basis, a source of driving force, tactics, and tips in facing the challenges of a more prosperous future.

Third, an alternative package of business activities, in order to grow and develop a work culture, a set of learning materials and media that can be uploaded in the form of content-oriented theoretical knowledge information is needed; principles, rules and theories. Meanwhile, at the same time, you can also get to know the environment more reality, information, and professional objects, as well as learning materials that can stimulate professional action through access to training materials and feedback prepared in various forms of business.

Fourth, value-based learning outcome and assessment. The ability to act in business management is carried out in stages through the points of discussion with the help of designed learning media and a professional environment that is presented by showing the activities of the human economic profession to meet their needs. Media is designed to increase mastery of theoretical knowledge, tends to be downloaded by students more than material about field cases. Efforts to produce a true business management group can only be done in the classroom and in the field in an integrated manner.

Fifth, from start-up to grow-up in action and learning outcomes act as a business management group. In line with the characteristics of the competence to act in the form of actions, then in its implementation it can be optimized by increasing fighting spirit, empathy, honesty and responsibility with learning activities from theory to application, an instrument for assessing the learning process and learning outcomes can be prepared that can make both students and learners mutually learn and teach. There is a sets of idea and project that can be used to run the future business.

5. Conclusion

There are five learning components that are tested for their implementation in the field and their integration in the process of developing business management abilities. The components tested are: The results of quantitative data analysis in general show that there is a significant integrated online learning effect on the learning progress achieved by students. The results of field implementation show that the ability to take business actions can be improved through training assignments that are integrated with previous learning experiences and the success achieved at each stage of the learning scenario. The ability to manage a business can be improved through the mechanism of cooperation in group work, together with supervisors and project partners. Qualitatively, it was found that there were deficiencies in optimizing the accessibility of learning activities. The results of the field implementation test are then used as input for the improvement of integrated field work activities and the practice of managing their own business with their business partners in a sustainable manner

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