Flipped and Collaborative Learning Models to Improve Entrepreneurial Competence in Training School Principal During the Covid-19 Pandemic

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Abstract. The pandemic covid-19 period has a huge impact on the entire order of human life, this also has an impact on the process of Education and Training of Principals that are usually carried out offline. The headmaster's education and training in organized in order to provide competency strengthening for the principal, to improve the insight, knowledge, attitude, and skills in leading the school. Entrepreneurial competence is one of the competencies that must be possessed by the principal who is expected to have the spirit, values and entrepreneurial spirit of integrity to emphasize on characteristics and traits, such as honest, innovative, hardworking, have strong motivation, never give up, always looking for the best solution. Collaborative Learning (CL) is a set of teaching-learning strategies that encourage collaboration of trainees in small groups (two to five students Flipped and Collaborative learning models (FCL) is designed to facilitate learning needs during the pandemic so that participants are trained to actively study learning materials by minimizing time, so that learning becomes more meaningful and deep. The research method used is systematic literature review (SLR) method. This article offers a conceptual model called as an alternative Flipped and Collaborative Learning models in the implementation of training to improve the entrepreneurial competence of principals during the covid-19 pandemic.

Keywords: collaborative learning · flipped learning · entrepreneurship · pandemic covid-19

1 Introduction

The quality of education is strongly influenced by the competence of the principal. Principal education and training is held in order to provide competency strengthening for school principals, to increase insight, knowledge, attitudes, and skills in leading schools. This training is expected to be able to develop attitudes, knowledge, skills, in the dimensions of personality, managerial, entrepreneurial, supervision, and social competencies, this is in accordance with the regulation of the Minister of National Education of the Republic of Indonesia Number 13 of 2007 concerning Standards for Principals/Madrasahs.

Indonesia is the country with the most COVID-19 cases in Southeast Asia. Based on data from the Ministry of Health of the Republic of Indonesia on May 25, 2021, the number of infected cases reached 1,786,187 people. This Pandemic period has had a major impact on the entire structure of human life, this also has an impact on the process of Education and Training of Principals which are usually carried out offline. However, training must still be carried out properly in any situation. Online training is an alternative that can be done during the COVID-19 pandemic by fully utilizing technology and the internet, where at every stage of training participants will study material, discuss, share experiences with other participants.

Data Entrepreneurship Development Index [1]. Indonesia is ranked 94th in the world and 17th in Asia Pacific, with an overall GEDI score of 21%. Education plays a central role in enhancing entrepreneurial competence. Entrepreneurial competence is one of the competencies that must be possessed by school principals who are expected to have the spirit, values and entrepreneurial spirit with integrity to emphasize their characteristics and traits, such as being honest, innovative, hardworking, having strong motivation, never giving up, always working hard. Looking for the best solution. All of these characteristics are useful for school principals in an effort to carry out their main duties and functions as leaders, face obstacles that occur in schools, manage production activities or principal services as learning resources [2]. Entrepreneurship education is very much needed in increasing the need for entrepreneurship, this is increasingly important considering that entrepreneurship education is a mandatory material in the world of education [3].

The purpose of this article is to propose a conceptual model, namely the Flipped and Collaborative Learning (FCL) model which can be used as an alternative model for the implementation of online principal training during the COVID-19 pandemic to improve the entrepreneurial competence of school principals. This model adopts a flipped classroom which can provide time flexibility for both teachers and students who have difficulties such as students with special needs, where students can learn the material by watching as many videos as they need [4].

[5] Proposed a better model by designing and developing a collaborative learning platform to support the inverted classroom model, the platform proved to be effective through experimentation. In addition, collaboration inside and outside the classroom is a key element in implementing a reverse classroom. Participants build their knowledge by interacting and collaborating in online classes [6, 7].

The Flipped and Collaborative Learning (FCL) model is designed to facilitate learning needs during the COVID-19 pandemic so that training participants actively study learning materials by minimizing time, so that learning becomes more meaningful and in-depth. Reverse classroom learning exists to support collaborative learning processes. The research quation of this research is how the flipped and collaborative learning (FCL) model is applied in the entrepreneurship competency training of principals?.

2 Literature Review

2.1 Entrepreneurship Competence

In Indonesia, the competence of school principals is regulated in the Regulation of the Minister of National Education Number 13 of 2007 namely the competence of principals including personality, managerial, supervisory, entrepreneurial and social competencies. In Permendiknas No. 13 of 2007, the dimensions of entrepreneurial competence consist of (a) creating innovations that are useful for school/madrasah development, (b) working hard to achieve school/madrasah success as an effective learning organization, (c) having a strong motivation to success in carrying out tasks, (d) never give up and always look for the best solution in dealing with obstacles faced by schools, and (e) have entrepreneurial instincts in managing school production/service activities as a source of learning for students.

Potential schools that can be developed in entrepreneurship include: (1) education and education personnel can be developed to increase qualifications and increase competence. (2) students can develop their entrepreneurial spirit through coaching and habituation to curricular, cocurricular, intracurricular, and extra-curricular activities, (3) parents/guardians of students and the community/school committee support both morally and materially so that the implementation of school development is stronger (4) school facilities and infrastructure, the more complete school infrastructure facilities, the greater the potential for schools that can be developed, (5) financing, the smoother school financing, the more smoothly the development of school entrepreneurship values can be implemented.

2.2 Collaborative Learning

Collaborative Learning (CL) is defined as a set of teaching-learning strategies that encourage student collaboration in small groups (two to five students) [8]. Collaborative learning is based on active learning which involves sharing experiences between students in the teaching and learning process, combining individual and group skills to generate knowledge, taking responsibility for oneself and others, and respecting the diversity and heterogeneity of group members [9].

Collaborative learning involves five important components, namely a) positive dependence; groups have goals and complete common tasks, b) individual accountability; each member plays a role in each other's success, c) interaction; used to facilitate teamwork and create trust and improve communication, d) social skills training, e) group formation; Learners need to consider group experiences and learn from each [10, 11]. When properly implemented, each component helps ensure that collaborative learning groups function properly and achieve the set learning objectives [12].

Thus collaborative learning is active learning, helping each student work together on complex tasks by means of intellectual guidance.

2.3 Flipped Classroom

"Flipping the classroom"can be interpreted as "turning the class" which means that learning activities that traditionally occur in the classroom now occur outside the classroom and vice versa [13]. Flipped classroom is an educational technique that consists of two important components, namely the use of computer technology such as video explanations and the involvement of interactive learning processes [14] According to Gonzalez. The advantage of the reverse classroom is that the process of spreading knowledge occurs outside the classroom by providing freedom that allows students to choose the most appropriate way. On the other hand, the process of internalizing knowledge occurs in the classroom. Teachers and students have more time to discuss, so they can produce brilliant ideas [5]. In addition, it can help facilitate students in understanding conceptual and factual material independently. In the classroom, students can complete procedural algorithmic-based material with teacher assistance [15].

3   Research methods

The research method used is the Systematic Literature Review (SLR) which identifies, assesses and interprets the findings on a research topic to answer the researcher's questions, where the researcher tries to develop a Flipped and Collaborative Learning (CFL) model in the education and training of school principals to improve entrepreneurial competence. In the process of developing the Flipped and Collaborative Learning (CFL) model, it is carried out according to the Dick and Carey learning design model. The procedures carried out are 1) assess needs to identify goals, 2) conduct instructional analysis, 3) analyze learners and contexts, 4) write performance objectives, 5) develop criterion referenced test items, 6) develop instructional strategy, 7) develop instructional materials, 8) develop formative evaluation, 9) revise instruction.

4   Results and Discussion

The collaborative learning model is developed through an approach that uses a reverse class that is intentionally designed to achieve the desired learning objectives. After participating in the learning activities, the training participants are expected to be able to explain the concept of entrepreneurship in schools properly, describe the 4 principles of entrepreneurship management correctly, and analyze the potential for entrepreneurship in schools. Thus, the training participants can explain the concept of entrepreneurship, analyze the potential for entrepreneurship in schools, and develop plans for developing entrepreneurship programs. The training participants are followed by school principals, where entrepreneurial competence is one of the competencies that must be possessed by school principals.

Through education and training activities, participants are able to analyze the concepts and characteristics of entrepreneurship as well as adapt and develop entrepreneurial characteristics based on advances in technology and information for school progress. During the activity, the training participants are required to fill out a worksheet to make a summary and present the results. In reverse classes, learning is designed by creating

Fig. 1. Flipped Collaborative Learning (FCL) Model

content containing entrepreneurship training materials through online videos or power points to prepare interactive learning in the classroom.

The Flipped and Collaborative Learning (FCL) model is divided into three main stages, namely before class. in class and after class. Before class, it is used to provide material in the form of modules, videos and power points as material for deepening the training participants and provide assignments in the form of case examples related to entrepreneurship material. In class, participants discuss the material that has been given, provide positive experiences about entrepreneurship in the school environment of each training participant, and confirm with the teacher. After class, participants absorb knowledge, transfer knowledge, and create portfolios as the basis for evaluating participants from the point of view of the instructor or instructor.

During the training, the participants were divided into small groups of 3–5 people, which were applied in three main stages of learning using the Flipped and Collaborative Learning (FCL) model (Fig. 1). Each group analyzes the concept of entrepreneurship based on expert opinion from the material provided and identifies school potential based on case studies with SWOT analysis. After watching the video, they summarized the results of concept analysis and entrepreneurship development based on advances in technology and information for school progress. When in class they present the results of the analysis of each group and conduct questions and answers under teacher monitoring. The teacher here functions as a facilitator, and leads the question and answer discussion of the participants during the learning process.

5   Conclusion

The Flipped and Collaborative Learning (FCL) model is designed to facilitate learning needs during the COVID-19 pandemic so that training participants actively study learning materials by minimizing time, so that learning becomes more meaningful and in-depth. The Flipped and Collaborative Learning (FCL) model is divided into three main stages, namely before class. in class and after class. When online meetings are held, the focus will be on discussing, asking questions and sharing experiences under the guidance of the training instructor.

The Flipped and Collaborative Learning (FCL) model for training to increase the entrepreneurial competence of principals is offered as an alternative solution that can be used so that the training carried out during the COVID-19 pandemic becomes more interactive and effective and can improve the competence of school principals in the field of entrepreneurship.

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