

Management Blends Training as a Model of Learning at Rumah Pintar Nurul Falah Bandung

Nunu Heryanto*, Oong Komar, Cucu Sukmana

Community Education Department

Indonesia University of Education

Bandung, Indonesia

*nunuheryanto@upi.edu, prof.oongkomar@upi.edu, cucusukmana@upi.edu

Abstract—Nowadays, changes are repeatedly occurring in society due to the revolution of communication technology, which has turned various areas of life into more competitive environments. Today, motivation for learning is required to be adjusted by considering the different types of approach for learning in order to produce quality human resources. Therefore, especially during the Covid 19 pandemic, in such situations where we are required to carry out learning activities virtually, it is necessary to improve the competence of managers and students by applying technology-based learning models, such as the blended learning model. This study aims to describe the management of the blended learning training program at Nurul Falah Smart House, Bandung. To reveal data and information, the researchers used a descriptive study with a qualitative approach through revealing the depth of data and information on the implementation of the blended learning training program at the Nurul Falah Smart House, Bandung. The blended learning training system is divided into 3 stages, including planning, implementation, and evaluation. The implementation begins with needs analysis to design the training program, then develop blended learning training materials before proceeding to carry out the designed program, and finally, it ends with the evaluation. The results of this training evaluation indicate that there are differences in the knowledge aspects of the training participants before and after the training.

Keywords—training, blended learning, communication technology

I. INTRODUCTION

The rapid changes that have occurred in society as a result of the influence of the technological revolution have turned every field more competitive [1,2]. Only people with high level qualities can survive these rapid changes. As a result, highly skilled human resources becomes an urgent need, while at the same time forming a new paradigm of education as a concrete step in order to develop the society [3-5].

To determine learning motivations, several adjustments need to be made based on the balance of learning approaches such as intellectual or imaginative strength on understanding and making, communication skills, work ethics, innovation in problem solving skills, in order to expand the field's expertise

as well as for inquiry, analytical and latest approaches in the pursuit of a creative innovation [6].

Considerations made by providing an overview of the high demand in this communication technology era have taught us how it is necessary to nurture human resources to become high intellectuals who are both initiative and creative. There is this proverb, "do not give the man a fish, but give him fishing rods." This statement implies that innovations in education can be realized through diverse methods such as concept mapping that is focused on problem solving, problem-based learning, as well as case studies, in order to solve social issues, while being accommodated through workshops, teaching assistance, library-based learning facilities, and computer-based learning [6]. Today, a learning innovation is still very difficult to be realized considering the lack of preparation of students in adopting these learning innovations. According to Ayi Olim as quoted on <http://: ayiolim.wordpress.com>, the difficulty of creating a learning innovation is usually caused by several reasons, such as: first, the difficulty in changing the practitioner's mindset that are mainly related to daily habits, especially in transmission learning where students are forced to be innovative in carrying out a transmission learning. Second, resistance from groups of learners who are accustomed to conventional learning, hence any type of modern learning system is considered burdensome. In addition, for participants to learn, it requires a more complex thinking skills not only to memorize, but also to implement what they are learning into reality. From this statement, it is possible for computer-based learning using various advances in communication technology to be an example of educational innovation [7-9]. Its use in media technology is an objective step of education in order to serve the needs of the community without boundaries of space or time, regardless where or who can access it [1,2].

Technology advances can be applied in the education sector which has changed conventional ways of learning where there is reliance on the presence of teachers and students in the same place no longer a necessity. All learning activities can be carried out by the help of information technology as well [10-12]. Therefore, several reasons for the need to increase the competence of students through an online-based distance

learning at the Nurul Falah Smart House institution with the blended learning model are as follows:

First, there is a gap in accessibility of students in obtaining information related to competencies and the lack of socialization of Non-Formal Education itself in particular. To overcome these problems, a new, more accessible ways is needed to guide these students for a knowledge transformation process without space and time boundaries to happen.

Second, lack of skills in utilizing diverse areas of technology, hence a special guidance is needed to increase students' abilities in independent learning. To overcome this problem, a short training is needed that specifically educates students to utilize technology to their maximum capacity.

Third, there is no specific software to increase students' competencies, only e-learning resources are available for public.

Fourth, there is no set of tools to measure of students' competencies. In fact, there is no guidance on what to measure and is needed to be obtained specifically. To develop this model, an online educational program was created, which is interactive, educational, fun and interesting. Therefore, this research was conducted to find out how the implementation of the Blended Learning training program for managers at Nurul Falah Smart House works.

II. RESEARCH METHODS

This research used the qualitative study approach by prioritizing the overall view, which emphasizes the views of the subjects without coercion from the researchers. Data collection was carried out by interview and observation [13]. The subjects of this study were 1 representative from the program management, 1 instructor, and 10 representatives from the blended learning training participants. The key informant in this study was the manager of the Rumah Pintar Nurul Falah institution. By using random sampling, data analysis is carried out in stages, namely in order: obtaining relevant data, classifying the obtained data, eliminating irrelevant data, and providing data interpretation.

III. FINDINGS AND DISCUSSION

How is the management of the blended learning training program at Nurul Falah Smart House?

In an organization, management is needed because humans as individuals have limited abilities. Management is a set of skills to carry out training programs, with other people or through other people in order to achieve goals. Management is also performed through a series of activities carried out with groups to achieve the set goals within an organization [14]. Management includes several functions, which are: planning, formulating organizational system, mobilizing and monitoring training programs, and conducting assessments. Likewise, a good training program requires a good management so that the training is carried out beneficially for the participants, the

organization, and the community [15]. Researchers reveal the steps of managing the implementation of blended learning training which are based on planning, implementation and evaluation including:

A. Planning

- Recruitment process. Recruiting the right target participants is the key that can determine the success of the training. During this stage, the program organizers can determine the requirements for training participants and prioritize those who met the criteria of the participants who can participate in the training by determining them at the time of recruitment. The quality of the training participants is seen both internally and externally. Furthermore, the internal characteristics are needs, interests, experience, assignments, work and education while the external characteristics are family environment, social status, association and economic status.
 - Next is the identification of learning resources and possible obstacles. Earlier it is stated that needs analysis is an activity which is looking for data related to learning needs which are aimed to be accommodated and are expected to be a positive outcome by participants. In order to find learning needs, there are three things to be taken into consideration: the background of individuals who receive blended learning training services, the organizations and or program sponsors and the society they are in.
 - Next, is to determine and formulate. The purpose of this training itself is what has been formulated to help the implementation from the beginning to the end of the program by designing both learning methods and evaluations. Thus, learning goals must be designed clearly. The training objectives make it easier for the program to determine goals concretely and clearly regarding to what must be achieved throughout the training program according to targets.
 - Next is to design instruments for pre-evaluation and post-evaluation. Based on the initial evaluation, the intention of evaluations is to find out the "entry behavioral level" of participants. In addition to determine the material and learning methods correctly, the pre-evaluation is intended to classify training participants proportionally. Then, the final evaluation is intended to measure the level of understanding of the material received by the blended learning training participants to determine whether or not the materials given can be understood.
- ### B. Implementation
- Next, arranging a sequence of blended learning training activities. For this stage, blended learning training providers can choose related teaching materials, then determine the methods for learning. In arranging the

activities, the factors that are need to be considered as suggested in this study are:

- Training participants
- Learning resources
- Time
- Facilities
- Training activities
- Training materials
- Training for trainers: The implementation process of training can be understood based on the series of programs, scope of learning, training materials, and methods used. This is because facilitators or trainers are also required to understand the characteristics of the participants and their needs, hence the need of training for trainers.

C. Evaluation

- Evaluating the training participants. The first evaluation can be done using the pre-test method which is used both verbally or in writing.
- Implementing training programs. This stage is a crucial process in the training program, which includes an interactive process with learning resources and the learning community in order to achieve predetermined goals. For this process to occur, of course, everything must be directed to be effective during training. All abilities and components are put together so that the training process can produce the best output.
- Final evaluation. For this stage, it can be done to determine how well the materials are received by participants. Therefore, it is expected for the programs to be received well by the participants through manners that are understandable hence we can determine the steps afterwards.
- The evaluation of the blended learning training program is one of the methods that will help us to assess the program thoroughly from the beginning to the end, as well as for the results of the evaluation to become reliable input materials for further training development. Hence, we can maintain all the good progress while also judging every component, step, and every activity not only from the results, but also throughout the whole process.
- The evaluation is an activity that is used to be able to assess the overall activity from the beginning to the end of the training. The results will become a reference or input to further develop more training programs. Apart from the positive factors that need to be maintained, it can also be expected that the weak points of these components can be identified for improvement points.

TABLE I. RESULTS OF THE PRE-TEST AND POST TEST DESIGNED FOR PARTICIPANTS

No	Name	Pretest	Posttest
1	Yayat Rustandi	55	65
2	Nenah	60	65
3	Rohaeni	50	65
4	Nita Hasanah	45	60
5	Lismawati	35	50
6	Sri Rahmawati	60	65
7	Lani Rahmawati	15	25
8	Maslia	40	65
9	Kurniasih	55	50
10	Suryani	40	50
Highest score		60	65
Lowest score entry		15	25
Score average		45,5	56
Highest score entry		100	100

Based on the results on table 1 above, it can be concluded that from the aspect of knowledge, the average score of the trainees has increased in comparison with the score obtained before the training and after the training ended. This means that there are changes in the knowledge aspects of the training participants before and after participating in the training program.

Based on the previous explanation, it can be insisted that the blended learning training system is divided into three stages: planning, implementation, and evaluation. Out of the three stages, the implementation stage always begins with a needs analysis, then a blended learning training program is designed which is followed by the development of blended learning training materials, then continue to conduct the training and ending the program with an evaluation. The three stages are known collectively as the main standards for any training provision. The difference between one training and another lies in the learning approach as well as the organization. However, they all have the same goal that is to improve knowledge, skills and attitude of the training participants.

Based on the results of interviews with informants A and B as training organizers and instructors, activities like this are very helpful in the continuity of learning process for institution managers, while informant C as a training participant also revealed that this blended learning training for managers is very important and useful for him given the condition of The Covid-19 pandemic, it will greatly help learning while encouraging students to still learn despite not having the conventional face-to-face interactions. According to informant C, the manager is responsible to carry out the stages in blended learning training programs for institution managers to elevate the knowledge of both managers and teachers.

Based on the implementation of blended learning, it is insisted that in order to be in line with what is described by Davies [16], which stated that the process of management is divided into three activities. Hence, various components can be further developed into activities depending on the approach used. The hierarchical management training procedures include: first, performing the initial stage of identifying and

analyzing the needs of the training program, second, testing and analyzing given tasks, third, classifying and determining training participants, fourth, designing clear and concrete training objectives, fifth, designing training curriculum and syllabus, sixth, planning activities for the training programs, seventh, preparing and developing Terms of Reference (TOR), eighth, implementing training programs, ninth, evaluating training programs, and finally, managing follow-up trainings.

Based on the initial steps, to manage a training program is a description and analysis based on training needs from its institutional nature and the unit within the institution which of course has a distinct character. Training can be classified into two different types: the current needs or the needs of the training program in the future, as a result of changes. On the other hand, these steps are also conducted through identifying resources for problems to be resolved immediately by taking steps according to the priority scale, by being able to test any part or unit and position to determine the priority scale, as well as testing based on what position needs to be prioritized by analyzing tasks or analyzing positions through task analysis, job descriptions and job specifications. Next, it is continued by analyzing relevant knowledge and skills that are necessary to meet the "standards" of the existing job/task description. The next step is to determine the "potential participants" who will participate in the training program. In this step, it is possible to identify the "content" or "material" in the program which is expected to meet the criteria based on the "job description" and "institutional objectives."

For a more detailed and specific steps can be arranged according to several planning stages. When designing the curriculum in planning a program, it can be done in an inclusive manner by involving the community and other related parties, especially with the management involved in order to obtain a commitment to create supportive conditions throughout the implementation process as well as the post-trainings.

In this case, there are things that are need to be taken into consideration while planning for the training program, those are as follows: compiling the program's background, making training objectives, determining training participants, determining costs and sources of funds, determining the time and place of training, compiling a training schedule (time, materials, and resources), building a team of executive committee members, establishing an order and determining the sources. In a training process, it is not possible to be completed within a short period of time as it requires intensity, frequency and predetermined duration, and is expected to be sustainable involving related parties that can be managed properly. A systems approach that requires managers to train systematically should be result oriented. Components that are linked to each other, hence the better each process is carried out, the better the results will be obtained. This is in line with Djuju Sudjana's statement on a successful learning outcome, which is influenced by 3 educational conditions, including consistency, convergence, and continuity. Consistency can be interpreted as an educational environment that is appropriate and harmonious

to develop the potentials of students. As for convergence, it can be interpreted that educators who cultivate from one clear foundation. Lastly, continuity implies that education must be sustainable [17].

Other than the participants' needs, during the implementation process, the program organizers also need to pay attention to communication manners, logistics, infrastructure regarding the program, as well as evaluations of the training and its follow-up activities. However, there are many training programs without any follow-up activity as well. These evaluations and follow-up activities are very important to find out the weaknesses and strengths of the training during the implementation of the training program [18]. Meanwhile, during the assessment process, there are several activities that can determine the assessment's validity of a program. The evaluation can produce results with many dimensions, including creativity, attitude, interests and skills. Through evaluations and follow-ups, we will be able to comprehend the benefits and impacts felt by the community.

In relation to the relationship bonding between the trainer and the participants, the relationship is said to supposedly be interactive, proactive, and reactive. Through an interactive relationship, it will encourage a good and harmonious cooperation. A proactive relationship can help trainers to be more initiative, while a reactive relationship will encourage participants to be more responsive. Based on the successful output indicators of the training determined by the components including the trainer, training participants, materials, strategies, media and training conditions. Therefore, training must incorporate both honest and trustworthy characteristics, a commitment in speaking words and performing actions, fair and egalitarian, with a humble nature, in order to create nuances of intimacy, patience, selflessness, and wisdom in becoming better during the implementation of the training program.

To implement training, various strategies can be used, such as: (1) preparing the participants for training, (2) using audio-visual media, (3) doing practical tasks, (4) preparing proportional materials, (5) communicating through dialogues and rationalization, (6) telling stories, (7) using visual images, sketches and drawings, (8) utilizing enthusiasm, (9) showing gestures (kinesics), (10) providing arguments, (11) monitoring creativity, (12) practicing repetition, (13) mapping, (14) encouraging participants to be creative, (15) giving answers to participants, (16) explain the answers of students, and (17) using a fair method in answering questions given by participants with patience.

The management of a training program is a process of using resources effectively to achieve goals through a series of activities to educate the community. Hence it can be grouped into a 10 steps activity which is commonly referred to as a "systematic training approach". Managing a training program is no different from managing a project. Basically, the Cycle in Training Management which refers to the analysis, design, development, implementation, and evaluation. Based on the

successful indicators of the training, it can be determined by components: trainers or facilitators, training participants, materials, media, strategies and training conditions.

IV. CONCLUSION

The management of blended learning training of the Nurul Falah Smart House Bandung is divided into three stages. The first stage is planning, the second stage is implementation, and the third stage is evaluation. The implementation itself is carried out in a participatory manner involving the community and other parties to be able to provide the data and needs needed for program implementation. The implementation is carried out to determine the program's design or description that will be implemented, and finally, the evaluation is carried out to find out and review the results obtained by the community as participants that will be used as references for future programs.

During the implementation process, there are several things that need to be observed by the organizers of the training program regarding communication, logistics, facilitators, participants and other supporting infrastructures, as well as training evaluations and follow-up activities. Training evaluations and follow-up activities are very important for identifying program's weaknesses and strengths during the implementation process. The results of this training evaluation indicate that there are differences in the knowledge aspect before and after training.

ACKNOWLEDGMENT

We would like to express our sincere gratitude to the Institute of Research and Community Service, of Universitas Pendidikan Indonesia for funding this research.

REFERENCES

- [1] E.U. Anyanwu and O.V. Ossai-Onah, "Utilization of ICT facilities by students in Nigerian universities from ICT staff perspective: A study of two institutions," *The Information Technologist: International Journal of Information and Communication Technology*, vol. 8, no. 2, pp. 139–145, 2011.
- [2] L.A. Ogunsola and W.A. Aboyade, "Information and communication technology in Nigeria: Revolution or evolution," *Journal of Social Sciences*, vol. 11, no. 1, pp. 7–14, 2005.
- [3] V.L. Baker, "People strategy in human resources: Lessons for mentoring in higher education," *Mentoring & Tutoring: Partnership in Learning*, vol. 23, no. 1, pp. 6–18, 2015.
- [4] M. Bastas and Z. Altinay, "Employment for Disability: Human Resources Management in Higher Education for Quality," *International Journal of Disability, Development and Education*, vol. 66, no. 6, pp. 610–615, 2019.
- [5] Y. Geng and N. Zhao, "Measurement of sustainable higher education development: Evidence from China," *Plos One*, vol. 15, no. 6, p. e0233747.
- [6] A. Olim, "The China Paper," [Online]. Available at <http://ayiolim.wordpress.com>
- [7] D. Gannaway, T. Hinton, B. Berry, and K. Moore, "Cultivating change: disseminating innovation in higher education teaching and learning," *Innovations in Education and Teaching International*, vol. 50, no. 4, pp. 410–421, 2013.
- [8] R. Igual, I. Plaza, F. Ibañez, C. Medrano, and F. Arcega, "Quality and innovation. Web-based code of good teaching practice," *Proceedings of the 2014 Workshop on Interaction Design in Educational Environments*, pp. 89–96, 2014.
- [9] M. Peterson, "The virtual learning environment: The design of a website for language learning," *Computer Assisted Language Learning*, vol. 11, no. 4, pp. 349–361, 1998.
- [10] J. Alajääski and J. Suomala, "Another perspective on assessing the significance of information technology in education," *Computers in the Schools*, vol. 18, no. 2–3, pp. 111–125, 2001.
- [11] D.L. Johnson and C.D. Maddux, "Introduction: Effectiveness of information technology in education," *Computers in the Schools*, vol. 24, no. 3–4, pp. 1–6, 2007.
- [12] C.D. Maddux and D.L. Johnson, "Type II applications of information technology in education: The next revolution," *Computers in the Schools*, vol. 23, no. 1–2, pp. 1–5, 2006.
- [13] L.J. Moleong, *Metodologi Penelitian Kualitatif*. PT Remaja Rosdakarya, 2007.
- [14] D. Sudjana, *Pendidikan Luar Sekolah*. Falah Production, 2001.
- [15] M. Kamil, *Model-Model Pelatihan*. Unpublished, 2003.
- [16] Davies, *Objective In Design Curriculum England*. Maiden Head, 1976.
- [17] Sudjana, *Penilaian Hasil Proses Belajar Mengajar*. PT Remaja Rosdakarya, 1983.
- [18] Stufflebeam and Shinkfield, *Systematic Evaluation: A Self-Instructional Guide to Theory and Practice*. Kluwer-Nijhoff Publishing, 1985.