Developing Management and Leadership Training Innovation Program for Higher Education at Muhammadiyah Universities

Muh Samsudin¹, Sadam Fajar Shodiq², Nanan Abdul Manan³, Widia Nur Jannah⁴, Wachidi⁵, Rusdarti⁶, Mustofa Dasuki⁷

¹-²Faculty of Islamic Studies, Universitas Muhammadiyah Yogyakarta, Indonesia
³Department of English Education, STKIP Muhammadiyah Kuningan, Indonesia
⁴Faculty of Teacher Training and Education, Universitas Muhammadiyah Cirebon, Indonesia
⁵Faculty of Teacher Training and Education, Universitas Bengkulu, Indonesia
⁶Faculty of Economic Education, Universitas Negeri Semarang, Indonesia
⁷Faculty of Islamic Studies, Al Azhar University, Egypt

Abstract

The management and leadership training innovation model used by Muhammadiyah universities according to the principles of good instructional development is not yet available. The aims of this research are (1) to describe the appropriate management and leadership training for university leaders at Muhammadiyah universities today; (2) to identify current approaches to management and leadership training; (3) to develop suitable management and leadership training packages for leaders; and (4) to formulate the effectiveness of the innovation management and leadership training package. Research and Development Borg and Gall were used and combined with Dick & Carey's steps Instructional Design Modern. The study resulted in the package management and leadership training for Muhammadiyah, including training design, A Handbook for Facilitators, Handbook for Participants, and Module 3 Training Materials. Product Training Package has been validated by and trials on aspects of effectiveness and feasibility. The study also produced some implications and recommendations relating to the training in the PTM (Muhammadiyah Higher Education).

Keywords: instructional design, leadership training, management innovation

1. Introduction

The critical thought behind this research is that university leaders have an essential role in improving the quality of their institutions in facing various changes and challenges. Today's global changes affect the economic field, social strength, interests and commitments, and values, assisted by open communication (Marquardt, 1995). Managing universities is not enough with good intentions but must be supported by management and leadership (Todowede, 2013).

In general, two kinds of higher education providers in Indonesia include the government (state universities) and organized by the community (private universities). Currently, there are 4,013 private universities in Indonesia, consisting of 466 universities, 98 institutes, 14 polytechnics, 2,345 colleges,
Developing Management and Leadership Training Innovation Program for Higher Education at Muhammadiyah Universities

and 1,021 academies (https://pddikti.kemdikbud.go.id/).

Muhammadiyah manages some private universities. Until 2014, Muhammadiyah had 166 universities consisting of 20 academies, 4 polytechnics, 99 colleges, 2 institutes, and 41 universities (Muhammadiyah, 2015). The 166 universities collaborate with the Higher Education Council as the supporting body for the Muhammadiyah Central Executive. Although so, its existence has diversity in the quality and dynamics of management and leadership.

Based on these facts, the problems faced boil down to management and leadership. The process of managing and leading higher education institutions is still running on a routine basis to avoid visible dynamics. Several universities within the Muhammadiyah environment, especially in the higher environment (STKIP, STIE STIT, STT) established for more than 15 years, are still consistent with one study program, without any additional study programs and have not been able to meet the required number of lecturer qualifications. The university has also not prepared a Budget and Expenditure Plan, which will serve as an annual operational guideline. The essential functions of management in planning (planning), managing (organizing), implementing (actuating), and controlling (controlling) have not been implemented optimally (Anastasiou & Garametsi, 2020). The demands for change have not been systematically addressed by universities and have been slow in making decisions.

Some management issues are sometimes not understood by the leadership, such as preparing strategic plans, operational plans, and budget and financing plans by managing independent funds, such as seeking funds, managing, reporting, and evaluating themselves (Balcita & Palaoag, 2020). In the leadership aspect, several problems exist, including a lack of understanding of organizational cultural values. Cultural values are believed to be the spirit of the organization in carrying out its mission in education. Leadership values based on Al Islam and Kemuhmaddiyan (Sadari, Adawiyyah, Nurhidayat, & Karimah, 2019) are substantive things that higher education leaders must understand.

Based on the background, the researchers formulated these formulations: (1) what is the proper management and leadership training for university leaders in the current Muhammadiyah higher education; (2) how is the current approach to management and leadership training; (3) how to develop a management and leadership training package suitable for leaders; and (4) how effective is the management and leadership training package.

Model Development Concept

A training program design model aims to get a productive and effective learning experience. Good learning embraces a seamless learning experience about how ideas and emotions interact with the classroom atmosphere, and both can change according to the changing atmosphere (Chongwony, Gardner, & Tope, 2020). Shambaugh & Mogliamnon (2006) defined instructional design as “An intellectual process to help teacher systematically analyze learner needs and construct structured possibilities to address those needs responsively”. The meaning of learning design is an intellectual process to help educators systematically analyze learners’ needs and try to help meet these needs. This opinion is an essential step in instructional development activities. Hence, the right learner needs analysis can produce the required development design.
Instructional development is a systematic, effective, and efficient process in creating an instructional system to solve learning problems or improve student performance through a series of problem identification, development, and evaluation activities (Suparman, 2012). In contrast, the meaning of learning design is a process in developing systematic teaching that explicitly uses learning theories to ensure the quality of learning. The statement implies that learning design is the whole process, including analysis of learning needs, objectives, development of learning planning systems, learning strategies to meet learning needs. Therefore, the procedure referred to in this sense includes developing learning activities (teaching materials), including methods, field tests, and evaluation of all learning components and student activities (Gerholz, Liszt, & Klingsieck, 2018).

According to Gustafson and Branch (Gustafson & Branch, 2002), learning development includes five main activities: (1) Analyzing the conditions and needs of learners; (2) Designing a series of specifications that are effective, efficient, and relevant to the learning environment; (3) Developing materials and material management; (4) Implementation of learning design; and (5) Formative and summative evaluation of the results of the development.

Based on some of the definitions above, development activities generally have four stages. The first is needs analysis. Second, identification and preliminary research consist of analyzing the learner's condition and needs. The third stage of development consists of developing learning materials and materials, and the fourth is the evaluation stage.

Training

Human resource development has three ways: training, education, and development. Each of these activities has its characteristics. It becomes a force to develop human resources, both in activity inputs, process management, activity strategy development, and the goals set. Everyone who wants to strengthen his knowledge must undergo management and leadership training (Kumikaite, 2008; Fadhil & Rayess, 2021).

According to Gomez-Mejia, Balkin, and Cardy (2012) training is employee training is commonly used as a means to increase performance. A gap between employee performance levels and standards for that performance is frequently addressed with training. Training is usually carried out when workers lack skills or when an organization changes a system and needs to learn new skills. Noe, Hollenbeck, Gerhart & Wright (2020) stated that training facilitates learning job-related knowledge, skills, and behavior. Training also facilitates employees' learning about work-related knowledge, skills, and behavior.

Another opinion regarding the definition of training is, according to Mathis and Jackson (2019), that training is the process whereby people acquire capabilities to perform jobs. Training provides employees with specific, identifiable knowledge and skills in their present positions. Training is the acquisition process of developing the ability to do work and equipping employees with specialized knowledge and skills to perform their current jobs.

The various quotes above explain that training is various introduction efforts to develop employee performance in their work or something related to their work. It makes specific changes in behavior, attitudes, skills, and knowledge. The training must include learning and sharing experiences between
Developing Management and Leadership Training Innovation Program for Higher Education at Muhammadiyah Universities

participants for the training to be practical. Training should be an activity that is planned and designed in response to identified needs.

Training can also be translated as a structured learning experience to develop specific skills, knowledge, or attitudes. In addition, training is the acquisition of knowledge, skills, and competencies resulting from learning related to certain valuable competencies. Training has the specific purpose of improving a person's abilities, capacities, and performance.

Based on some of the concepts discussed above, a good training construct (design) can be seen or assessed for its success with several indicators: improving performance, providing new knowledge and experience, and improving participants' skills. Therefore, training must be carefully prepared and planned with professional management, practical strategies, and methods. These will later define success if a well-designed training program design model is developed with instructional design principles and valid.

Management and Leadership

Both management and leadership can be separated or explained, but in reality, they can overlap. Management by experts is defined as a process or framework that involves the guidance or direction of a group of people towards organizational goals or actual purposes.

Barney & Griffin (1992) defined management as a series of activities including planning, organizing, coordinating, and controlling organizational resources (human, financial, physical, and information) to achieve goals effectively and efficiently. Effective is making the right decisions and implementing them successfully. Efficient means using resources wisely and cost-effectively. Leadership is defined as influencing others to understand and agree on what is needed to carry out the task and how to perform the task and facilitating individual and collective efforts to achieve common goals (Yulk, 2015). Furthermore, Griffin (1995) provided an understanding of leadership:

Leadership as a process uses non-coercive influence to shape the group's or organization's goals, motivate behavior toward the achievement of those goals, and help define group or organizational culture; as a property, the set of characteristics attributed to individuals who are perceived to be leaders.

<table>
<thead>
<tr>
<th>Table 1. Differences in Management and Leadership Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Planning and Budget</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Organization and Staffing</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Controlling and Troubleshooting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Griffin's opinion explained that leadership is both a process and an attribute. As a process, leadership is a non-coercive influence to shape the goals of a group or organization, motivate behavior toward goal attainment and help define the culture of the group or organization. As an attribute, leadership is a group of characteristics possessed by individuals seen as leaders. Management and leadership are both related but not the same. There is a difference between the function of management and leadership.

Management and leadership are in one organization and dynamically carry out their respective functions. The person who carries out the management function is called the manager, and the person who runs the top leadership is called the leader.

As one of the organizational institutions in its structure, higher education also separates tasks for managers and leaders. The title rector, director, chairperson means the leader and manager because they carry out management and leadership functions in their duties and functions. The main task of university leaders, in general, is to promote the Tri Dharma of higher education, which includes education, research, and community service. At Muhammadiyah universities, the fourth dharma is Al Islam and Kemumhammadiyahan (Wasono & Sutarto, 2015). So, in general, higher education leaders are responsible for improving quality in teaching, research, and service. Higher education success indicators are based on the National Higher Education Standards: Permendikbud No.49 of 2014, consisting of Graduate Competency Standards, Learning Content Standards, Learning Process Standards, Learning Assessment Standards, Lecturers and Education Personnel Standards, Learning Facilities and Infrastructure Standards, Learning Management Standards, and Learning Financing Standards. Although not the only measure of the success of higher education leaders, obtaining the title of Institutional Accreditation and accreditation of study programs is still one way to assess the quality of management and leadership.

2. Method

The research objectives of developing a management and leadership training program design are (1) Developing a management and leadership training program design consisting of conceptual, procedural, and physical models. The conceptual model is the embodiment of the conceptualization of theories and principles related to the training design model. The procedural model is the stage of developing a training program design model. The physical model consists of management and leadership training program modules consisting of facilitator guidelines, participant guidelines, and training material modules (2) Obtaining empirical data on the implementation of training conducted by Muhammadiyah universities. (3) Producing management and leadership training program design (4) Obtaining empirical data on management and effectiveness of leadership training program design.

This research used Research and Development from Borg and Gall (2006) and adopted the Dick and Carey design model (Ed Forest, 2015) and Modern Instructional Design (Khalil & Elkhider, 2016). Borg and Gall's model covers all complete development stages, especially in repeatedly testing and revision sections. Thus, it is possible to obtain a final learning product that fits the needs. The purpose of research and development is “to develop and validate educational products”. The product is a training program design model.

The data in this study were through 1) Observation, 2) Questionnaire, 3) Interview 4) Pre-test and Post-test 5) Documents. Data
analysis used the triangulation technique, verifying information obtained from the same event but different people. For example, three experts with diverse expertise could examine aspects of the design module of a training program, then confirm their assessment of one problem.

The research on the development of the training program design model included four essential stages: the preliminary research stage, the identification stage, the development stage, and the evaluation-revision validation stage. Preliminary research stages included: 1) initial identification and determining training objectives 2) instructional analysis 3) identification of initial behavior and characteristics of trainees 4) training needs analysis. For data exploration, the research took place at Muhammadiyah universities involving 35 university leaders covering Sumatra, West Java, Central Java, East Java, South Sulawesi, South Kalimantan, West Nusa Tenggara, and East Nusa Tenggara. Research data was through observation, questionnaires, and interviews.

The identification stage included: 1) identification of training participants and 2) determining the general objectives of the training. Information about the condition of the characteristics of the trainees is needed in designing instructional strategies. The selection, method materials, media, learning resources, and completeness of the training consider the trainees' initial abilities. Instruments to determine the initial capacity of the trainees can be done using a questionnaire.

The development stage includes: 1) determining specific learning objectives, 2) determining benchmark reference tests, 3) selecting strategies, methods, and media, 3) designing training materials, and 4) compiling guidelines and training material modules.

The last stage of development is evaluation validation and revision. The validation, evaluation, and revision stages were as follows: 1) discussion with colleagues, 2) first revision of training materials, and 3) formative evaluation. The formative evaluation of learning materials carried out in this research and development was the validation of several experts and testing of the training material modules. Validation of the training material module included 1) expert validation; 2) second revision of the training material modules; 3) individual trial; 4) the third revision of the training material modules; 5) small group trial; 6) revision of the four training material modules; 7) field trials (empirical validation).

3. Result and Discussion

Leadership and management are different definitions. They have separated the practical program in it. Leadership is a part of management. Someone can lead others to achieve the organization's goals (Răducan & Răducan, 2014). Leadership talks about the changing of the giving motivation and inspiring.

There are many definitions of management that are interpreted by experts. Kaehler and Grundei (2019) explains, almost none of the definitions display a specific view of management. Meanwhile, an expert write the management is the system of all plans and administration to create some direction in leadership implementation (Algahtani, 2014). In this case, the leadership program will lead the number of participants in looking for the best model of this training. The training has a specific program for upscaling and rescaling the numbers of leaders in every Muhammadiyah Higher Education. Finally, the evaluation is needed to know more and follow up on the various essential potential of participants (Nicholas Clarke, 2012).

Based on the data obtained in the preliminary research conducted, an overview of
the need to develop a design model for management and leadership training programs is as follows: 1) Higher education leaders need an explanation and how to apply the management and leadership values Muhammadiyah universities through training. 2) There is no training model designed by the Higher Education Council or by Muhammadiyah universities specifically for the benefit of management and leadership training based on the principles of instructional development. 3) The training held so far is more technical training followed by human resources in low management. Meanwhile, there are no Top Leaders or policymakers. 4) The training method is still dominated by lectures and gives the trainer more space. Space for exchanging experiences (experiential learning), the interaction between participants is minimal. 5). Management and leadership are based on habits and routines, more minor than essential management and leadership knowledge.

Based on the results of the preliminary research above, the development of a design model for management and leadership training programs is necessary for leaders of universities, foundations (Daily Trustees), and the Higher Education Council.

a. Product Development

Based on the development model's steps, this development product is a design model for management and leadership training programs in 3 models: conceptual, procedural, and physical. Product development is the collective activities or system and ideas into a stream of products that meet the needs and the strategic goals through a several stages carried out (Ringen and Welo, 2018).

1) Conceptual Model

The conceptual model is a manifestation of the conceptualization of various theories and principles, which conceptually can be integrated to answer the problems faced and used in solving problems through a training program design model. Behavioristic and constructivist learning and learning theories are used in this model. Conceptually, the development of this model also uses the principles of adult learning and uses an active training approach. One of the constructive principles in this model is experiential learning. The following is a conceptual model for developing a management and leadership training program design.
2) Procedural Model

The procedural model in the management and leadership training package consists of 3 stages: the identification stage, the development stage, and the evaluation stage. The following procedural models are Dick and Carey and Atwi Suparman models adapted to development needs.

The procedural model is carried out with the aim of minimizing the damage that occurs to the products developed, from the identification, development, and evaluation stages.
3) **Physical Model**

The physical models produced in the management and leadership training programs for Muhammadiyah higher education leaders are (1) training modules for three training courses, Module 1 on university management, module 2 on change management, and module 3 on Muhammadiyah leadership. (2) Guidelines consist of 2 guidelines, 1 for facilitator and 1 for training participants.

**b. Product Eligibility**

The product feasibility test from a training material module is carried out through an expert test consisting of educational technology experts, material experts, linguists, and media experts. The expert product assessment gives a value range of 1-5 by providing an opinion or comment column. Interpretation of the range is 5 = Very Good, 4 = Good, 3 = Fair, 2 = Poor, 1 = Poor

According to the instructional design expert, the feasibility of the product is assessed based on the components of learning objectives, learning strategies, preparation of learning materials (materials), and assessment tools.
Developing Management and Leadership Training Innovation Program for Higher Education at Muhammadiyah Universities

Based on the expert's assessment of instructional design, the module product and management and leadership training guidelines are feasible. According to linguists, the feasibility of the product is assessed based on the use of words and sentences in modules and manuals. The assessment covers seven aspects: module titles and guidelines, word choice, sentence structure, use of terms, word count, language style, and illustrations.

Table 3. Linguist Assessment

<table>
<thead>
<tr>
<th>Valued aspects</th>
<th>Mean</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module Title</td>
<td>4.83</td>
<td>Good</td>
</tr>
<tr>
<td>Word Choice</td>
<td>4.75</td>
<td>Good</td>
</tr>
<tr>
<td>Sentence Arrangement</td>
<td>4.38</td>
<td>Good</td>
</tr>
<tr>
<td>Use of Terms</td>
<td>4.13</td>
<td>Good</td>
</tr>
<tr>
<td>Word Count</td>
<td>4.88</td>
<td>Good</td>
</tr>
<tr>
<td>Language style</td>
<td>4.75</td>
<td>Good</td>
</tr>
<tr>
<td>Illustration</td>
<td>3.75</td>
<td>Fair</td>
</tr>
<tr>
<td>Mean</td>
<td>4.49</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows that although the average is good, which is 4.49, the illustrations need expert comments and should be adapted to the material. Based on this assessment, the module in general from the linguistic aspect is reasonable, appropriate, and feasible.

According to media experts, product feasibility is an assessment of the feasibility associated with the physical appearance specifications of the book and the layout or layout of the product. Aspects assessed include book cover, visual or graphic illustrations, and design. The results of the media expert's assessment are as follows:

Table 4. Media Experts Rating

<table>
<thead>
<tr>
<th>Valued Aspects</th>
<th>Mean</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book cover</td>
<td>4.66</td>
<td>Good</td>
</tr>
<tr>
<td>Graphics</td>
<td>4.4</td>
<td>Good</td>
</tr>
<tr>
<td>Setting and Layout</td>
<td>4.54</td>
<td>Good</td>
</tr>
<tr>
<td>Mean</td>
<td>4.53</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 shows that the developed model is good and feasible.

Based on experts' assessments consisting of Instructional Design Experts, Linguists, Material Experts, and Media Experts, the management and leadership training material product's feasibility is on average 4.49 or in the good, feasible and usable category (Table 3).
Developing Management and Leadership Training Innovation Program for Higher Education at Muhammadiyah Universities

Figure 3. Four Experts Assessment

c. Product Effectivity
The effectiveness of the product has three stages guided by the steps of the Dick and Cary development model (Ed Forest, 2015): (1) one-to-one trials, (2) small group trials, and (3) field trials.

Figure 4. Results of 3 Tested Products

Figure 4 shows that the tested products have a high average acceptance rate of 88.7%. Then, the product development has been effective, acceptable, and used in the training program.

An important concept in training is increased performance (Silberman, Biech, & Auerbach, 2015). The organization provides education and training to improve performance starting from the manager and the highest to the implementer or operator level. Performance decreases if there is a decrease in achievement, weakened work productivity, and a discrepancy between the planned targets and the results obtained in a work unit or an organizational institution. Therefore, efforts are needed to return the situation to a normal and better state. One way is through training programs.

The model design is to create practical training. It means that the movement participants should have leadership behavior in various situations they will face (Helming et al., 2019). The model conducted is to create the training participants to overcome the monotonous problem. At least, we find three characteristics of instructional explanations in the class. They are about the interaction between explainer and listener, the different knowledge between speaker and recipients, and the clarification of speakers when they have explained something to the audience (Findeisen et al., 2021). All theories the practitioners apply have to relate to the fundamental ideas of Instructional objectives. There are two cross-relationship between the cognitive process dimension (remember, understand, apply, analyze, evaluate, create) and knowledge dimension (factual, conceptual, procedural, metacognitive) (Kilbane & Milman, 2014). So, good training is when participants have many opportunities to explore their competence and skill using a distinguished training model.

Preliminary findings on the training indicated that the impression of the movement was pedagogical, lecture parade, and boring. The trainees were primarily listeners and were not actively involved in the training process. In addition, the preliminary research also found no training material modules prepared for the benefit of the training program.

A good training program is developed according to the principles of instructional design. The design model for the management and leadership training program was developed by adopting the Dick and Carey system approach model and Atwi Superman's modern instructional design. With the initial findings of preliminary research, the training program design model uses an active training approach with an adult learning approach. The method developed in training is andragogical. The andragogical method was chosen due to the characteristics of the train-
Developing Management and Leadership Training Innovation Program for Higher Education at Muhammadiyah Universities

Case studies, independent assignments, discussions, simulation games, and presentations are real andragogie and active training forms. The andragogic training process allows learning and experiential learning to share knowledge between training participants. The gap between training participants from the upper and lower groups can be anticipated with each participant learning from each other. Miarso (2007) revealed that learning or instructional is an attempt to manage the environment intentionally so that a person forms himself positively under certain conditions.

As one of the physical products of research and development, the training material module has been designed according to the experiential learning principle, which gives the trainees more time than the trainer. The trainer's function is to become a facilitator or partner in the training process. Of the 18 hours of training, 6 hours are used by the facilitator, and 12 hours are used by training participants' activities in discussions, case studies, presentations, independent assignments, and simulation games.

4. Conclusion

Based on the results of research and discussion, some conclusions can be drawn. First, management and leadership training that follows the leadership condition is based on an analysis of training needs and uses consistent instructional development steps. Second, the training approach applied so far tends to be trainer-centered or pedagogical. The approach used in the management and leadership training because of the development is Andragogenic, adapted to the characteristics of the trainees. The implementation uses an experiential learning cycle and provides opportunities for trainees to share experiences. Third, developing a management and leadership training package following PTM conditions sets the Dick and Carey system and Modern Instructional Design. Fourth, based on the assessments of Instructional Design Experts, Material Experts, Media Experts, Language Experts, and the results of the one-to-one trial, small group test, and field test, the design model for the management and leadership training program for Muhammadiyah higher education leaders, is feasible, effective, and can be used in training.

5. References

Developing Management and Leadership Training Innovation Program for Higher Education at Muhammadiyah Universities

Education in Indonesia: A Policy Evaluation. Indonesian Journal on Learning and Advanced Education (IJOLAE), 3(1), 57-75. doi:https://doi.org/10.23917/ijolae.v3i1.10376


Developing Management and Leadership Training Innovation Program for Higher Education at Muhammadiyah Universities


