Effectiveness of Study Program Task Force Training Using Management Functions

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Abstract. Implementing the Independent Campus Policy is supported by funding transformation, one of which is through the Vocational Higher Education Strengthening Program (SVHEP). The Training Needs Analysis carried out on the private university vocational study program task force in preparing SVHEP proposals resulted in the conclusion that the task force team was still not competent in preparing SVHEP proposals, causing the submitted proposals to be of a quality that did not meet the criteria for obtaining funding. Training needs to be carried out using the ADDIE training management model to improve the competency of the task force. Evaluation of the activity, designed using management functions, resulted in dominant training participant responses on the criteria of "Good" and "Very Good." It was concluded that the ADDIE model of training management was declared effective in achieving training objectives.

Keywords: Independent Campus, ADDIE Model

1 Introduction

The Ministry of Education, Culture, Research, and Technology established an Independent Campus policy in 2020 to increase the quality and relevance of undergraduate program graduates. The targets to be achieved include: (a) Improving the quality of higher education graduates; (b) Improving the quality of higher education lecturers; (c) Improving the quality of curriculum and learning. The Directorate General of Vocational Education has set targets for the development of vocational higher education, namely: (a) Increasing the number of vocational education graduates who get jobs or entrepreneurship within one year after graduation; (b) Increasing the percentage of lecturers in vocational higher education who have work experience in industry or competency certification recognized by the industry; (c) Realizing quality vocational higher education according to industry standards. Universities are expected to realize these three goals by increasing the capacity and quality of the process and management of education they are responsible for. The Directorate General of Vocational Education pays special attention to developing (applied) vocational education programs in

Indonesia. One of the directions of industrial cooperation-based vocational higher education policy is to increase the role and cooperation of industry in vocational higher education, including adjusting curriculum and learning patterns according to industry needs. This policy is in line with the Merdeka Campus policy.

In supporting efforts to improve the quality of vocational higher education and the implementation of the Independent Campus program, the Directorate of Vocational Higher Education Institutions and Resources, the Directorate General of Vocational Education, the Ministry of Education, Culture, Research, and Technology carried out various initiatives and programs, including the Vocational Higher Education Strengthening Program (VHESP) for colleges private height. This program aims to improve the performance of private universities and encourage increased innovation in learning by implementing the Independent Campus policy. Thus, it is expected that the quality and effectiveness of learning can increase directly. Improving the quality of understanding also includes updating the curriculum following national standards of higher education and is developed jointly with the World of Industry.

The Vocational Higher Education Strengthening Program for Private Higher Education aims to improve the quality of learning by implementing the Freedom to Learn Campus Merdeka policy by supporting learning facilities/infrastructure. Efforts to improve the quality of learning also include adjusting the curriculum following national higher education standards, in line with the Freedom to Learn Campus Merdeka policy, and designed with partners from the World of Industry/World of Work. The target of SVHEP is private tertiary institutions that organize vocational education under the auspices of the Ministry of Education, Culture, Research, and Technology and meet the requirements set by the Directorate General of Vocational Education. Private tertiary institutions that meet the needs and have a maximum B or Very Good accreditation can receive this assistance.

Since 2021, SVHEP for Private Higher Education has aimed to improve the quality of learning through efficient and responsible use of resources. Some of the improvements expected are the implementation of a curriculum that meets national high education standards with the principle of Freedom to Learn on an Independent Campus, optimization of resource utilization, both concerning human resources, the ratio of student lecturers, physical resources (level of room and equipment utilization), a conducive academic atmosphere, especially interaction lecturers and students in learning, financial resources (emphasis on unit costs), and so on, so that study programs meet or exceed national standards for higher education.

Participation in vocational study programs at private tertiary institutions in Medan in competing to obtain SVHEP still needs to be increased in quantity and quality [1]. The quality of the proposals proposed by the vocational study program still has weaknesses, especially related to data and self-evaluation information carried out by the study program. The second problem is related to the description of the Strategic Plan, which is less comprehensive because it does not fulfill the components of the Strategic Plan. An alternative to increasing the competence of study program managers in preparing Vocational Higher Education Strengthening Program proposals for Private Universities is training using the ADDIE model (Analyze, Design, Development, Implementation, Evaluation [2]. The ADDIE model is an approach used in developing training and learning programs. The ADDIE model is adequate for training to improve writing skill [3]. This ability is very much needed in compiling a SVHEP proposal, which consists of 4 parts, namely: (a) A Strategic Plan for the Development

of Higher Education and Study Programs; (b) A Track Record of Higher Education and Study Programs; (c) Education Quality Improvement Development Program; (d) Proposals for Goods Expenditures and Budget Plans.

The ADDIE model has several advantages, including a systematic and structured approach to designing, developing, and delivering training and preparing teaching materials, even for distance education. This approach ensures that each step in the training process is identified and executed sequentially, thereby reducing errors and increasing efficiency in training to increase competency in the implementation of competency-based education even at the postdoctoral level [4], and in the development of e-courses [5]. In addition, the ADDIE model is flexible so that it can be adapted to different types of training and other environments, enabling training designers to adapt learning methods and strategies to the needs and characteristics of training participants, such as by implementing collaborative learning [6].

The ADDIE model also focuses on results by clearly setting training objectives in the analysis and design phase and measuring training results through repeated feedback evaluations, which means that the evaluation results will assess success in achieving goals and make improvements if there is a discrepancy between targets and realization [7]. Evaluation can also be done by combining several types of assessment, such as process and impact evaluation [8].

If the ADDIE model is related to the management functions, namely planning, organizing, leading, and controlling [9], then the ADDIE phase of Analyze and Design is associated with the planning function. The Design and Development phase is related to the organizing process. In contrast, the directive function is related to the Development and Implementation phases. And finally, the Evaluation phase is associated with the management function: controlling. The planning function includes setting organizational goals and formulating the steps needed to achieve these goals. The organizing function includes distributing work, grouping similar tasks, and establishing a structured hierarchical structure. The leadership function focuses on directing, motivating, and inspiring members of the organization to achieve the set goals. The control function is related to overseeing the organization's performance to ensure the achievement of the goals that have been set. This process involves comparing actual performance to predetermined standards, identifying possible deviations, and taking corrective steps if the situation requires it. The mapping of these relationships will facilitate the effectiveness of evaluating the success of the ADDIE model training. The application of ADDIE can also be related to more complete management elements, namely orientation and direction, coordination and control, authority and responsibility, planning and design, and administration and implementation [10].

2 Method

Training to improve the competency of the vocational higher education task force team was attended by 30 participants from managers and task forces of private higher education vocational study programs in Medan City. The training is in collaboration with the Higher Education Service Institute Region I North Sumatra. The training was carried out with two strategies, namely the delivery of training material for two days and continued with the mentoring phase, which aims to facilitate training participants who will discuss the draft

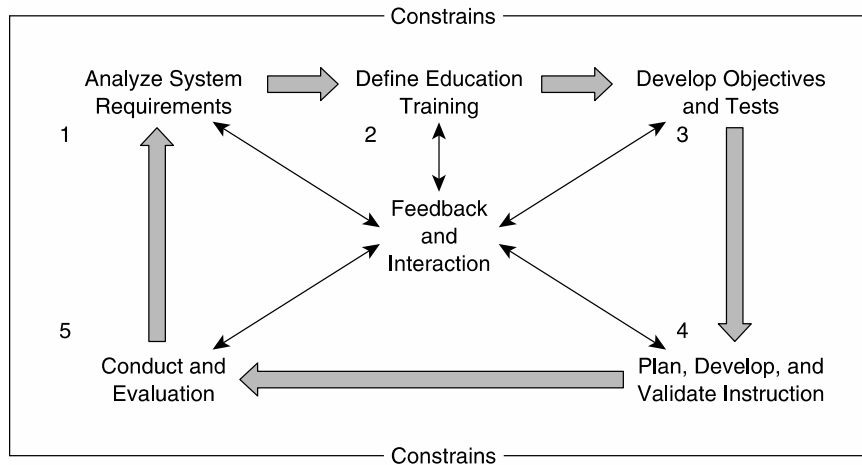SVHEP proposal. The ADDIE model developed in this training consists of 5 stages [2] as presented in Figure 1.

Fig. 1. Model ADDIE

3 Result and Discussion

In this section, the activities of each stage of the ADDIE model training management that have been carried out are described. In the discussion section, training evaluation is described, which is carried out by applying management functions: planning, organizing, actuating, and controlling to analyze training effectiveness.

3.1 Analyze System Requirements Stage

The first activity at the management stage of the ADDIE model training is identifying participants through interviews with managers of vocational higher education study programs at private universities in Medan City and reviewing journals. The results show that the competency of study program managers still needs to be improved in preparing SVHEP proposals specifically for private universities. Analysis of the characteristics of participants who will take part in the training is determined in this phase, namely the head of the study program and the task force team. This selection is because they already have experience compiling self-evaluation reports in the context of study program accreditation.

The ability to prepare self-evaluations is beneficial in preparing SVHEP proposals, which are activity-based, by designing programs and activities based on the results of problem analysis from self-evaluation reports. The final action of this stage is reviewing the SVHEP Proposal Preparation Guidelines as a basis for determining training materials. The training organizers are a team of lecturers from Medan State University from the Doctoral Education Management study program who have expertise in education management and strategic planning and experience in preparing proposals for various institutional competition grants funded by the Ministry of Education and Culture from 2002 to 2022.

3.2 Define Education Training Stage

Formulation of Learning Outcomes The Training, which is the first activity in this stage, is formulated as follows: after attending the Training, participants are expected to be competent in preparing SVHEP proposals following the guidelines for preparing SVHEP proposals. Training learning methods and strategies are aligned with Training Learning Achievements, namely using Focus Group Discussions with problem-solving methods from cases regarding obstacles experienced by participants when preparing proposals both before participating in the Training and while participating in this Training. The problem-solving strategy was chosen because it effectively increases training participants' competency [11].

3.3 Developing Objectives and Questionnaires Stage

The training material learning outcomes set out in this training are that after attending the training, participants can : (1) prepare an SVHEP proposal in the strategic plan summary section, a description of study program performance based on self-evaluation data, and (2) prepare activities that require laboratory equipment support to improve the quality of graduates, with equipment specifications set out in the SVHEP proposal preparation guide.

The development of a questionnaire to evaluate the effectiveness of training through participants' responses to the exercise was carried out at this stage using indicators of four management functions: planning, organizing, actuating, and controlling. The Likert scale was used in developing the questionnaire with intervals 1 = Poor, 2 = Fair, 3 = Good, and 4 = Very Good. The questionnaire indicators are as follows: (1) In the planning management function aspect, the indicators include identifying the needs of training participants, preparing training goals and targets, providing training materials, providing training media, selecting training strategies, determining training resources, preparing training equipment, preparing training places and rooms, and the competency of the training committee; (2) In the organizing management function, indicators include determining the criteria for training participants, prioritizing training goals and targets, coordinating the order of providing material from resource persons, training implementation strategies, choosing training models, preparing training schedules; (3) In the aspect of the actuating management function, the indicators include depth and sequence of training material, delivery and mastery of the material by the instructor, and instructor communication skills; (4) In the controlling aspect, the indicators developed include the quality of the committee, training consumption and information, the comfort of the training room, the instructor's service to the needs of the trainees during training and after the movement, and increasing the knowledge, attitudes, and skills of the trainees.

3.4 Plan, Develop, and Validate Instruction Stage

The first activity in this fourth stage is to develop training materials based on the Learning Outcomes of the Training Materials. The scope of the training material is Strategic Planning and Self-Evaluation. Brief description of the material: The Strategic Plan is a document containing the organization's vision, mission, and long-term goals, strategies, and action plans to achieve this vision and mission. It includes environmental analysis, objectives, design, action plans, performance measurement, and risk management. This plan helps organizations manage resources and deal with change. Meanwhile, a brief description of organizational self-

evaluation material is an internal process for assessing performance, identifying strengths and weaknesses, and planning continuous improvement to achieve goals.

The material sequence is arranged based on the relevance of Parts 1 to Part 4 of the SVHEP Guide. Training materials were developed in Module 1: Strategic Plan, Module 2: Self-Evaluation, and Module 3: Review of the SVHEP Proposal Preparation Guide. Another training material is in the form of presentation material developed using PowerPoint, which is designed with infographics dominating it, making it easier for participants to understand the training material so that it can motivate participants to attend each training session well. Construct validation is carried out on training materials.

3.5 Conduct and Evaluation Stage

The training with FocusG Group Discussion was conducted for two days, with training material developed in the fourth phase. The activity continued with a mechanism for assisting participants in preparing a draft SVHEP proposal whose schedule was agreed upon between the instructor team, the training committee, and the participants, either face-to-face or through virtual meetings. After the training, an evaluation was carried out to determine the effectiveness of the movement. The results of other observations confirm the enthusiasm, motivation, and seriousness of the training participants, which can be seen from several indicators, namely the accuracy of attendance, the number of participants who were absent during the training, actively asked questions during the training activities and studied the training materials provided during the training.

This data can be used as the basis for the assumption that the training participants will develop knowledge and insight regarding training materials at their respective tertiary institutions, which will be used for the preparation of SVHEP proposals so that they can be proposed for funding from the Directorate General of Vocational Studies, Ministry of Education and Culture, Research and Technology.

Evaluation related to the impact of the training is also carried out by distributing questionnaires to the training participants to obtain feedback regarding all aspects of the implementation of the exercise using the four management functions as a basis for analysis. The results of the analysis of participants' responses to the implementation of the training obtained from filling in each indicator of the four management functions, and if the average value for each management function is calculated, are presented in Figure 2.
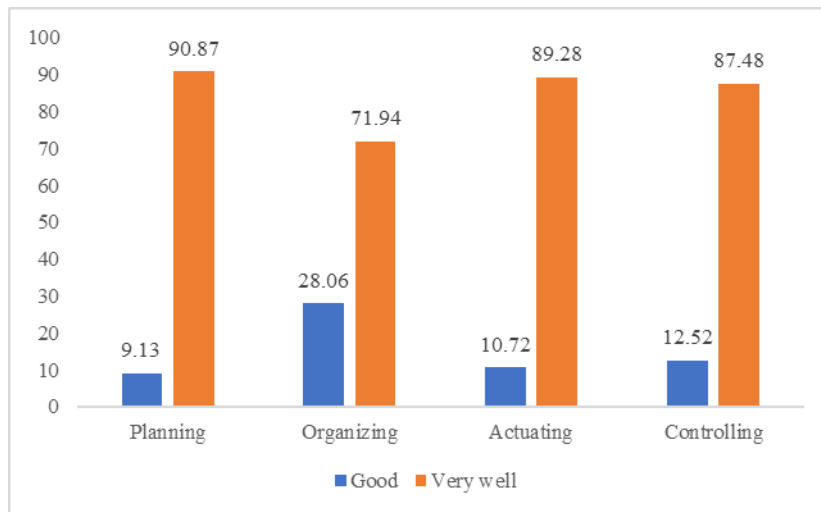
Fig. 2. Training Participants' Responses to Each Management Function (%)

3.6. Discussion

The results of the analysis of training effectiveness from the perspective of the "planning" management function show that the majority of training participants classify all training planning activities as "Good" (9.13%) and "Very Good" (90.87%). This reflects that the majority of participants were satisfied with the planning stage of the training that had been carried out. The focus on the planning aspect of management involves setting goals, developing plans, and strategies to achieve goals. In the context of training, these results show that efforts to organize and map out training have yielded positive results. Participants felt that the training plan had taken development needs into account. Although the majority of participants gave a positive assessment of the plan, it is important to note that it is still relevant to continuously collect in-depth feedback from participants and carry out periodic evaluations of training results. Thus, efforts to maintain training effectiveness can be continuously improved and possible areas of improvement can be better identified and improved.

From the perspective of the organizing function in management, which involves organizing and grouping resources to achieve predetermined goals, the data illustrates that most trainees have a favorable view of efforts to organize and manage training. The results of the analysis of the effectiveness of the training from the perspective of the organizing management function showed that the majority of the training participants rated the scale categories as "Good" (28.06%), and "Very Good" (71.94%).

Most participants felt that the elements required for the exercise had been appropriately handled and were appropriate. This indicates that the organization of training activities and materials was efficiently carried out. Suppose you refer to the training effectiveness criteria based on 70% of participants' responses who answered Very Good. In that case, all indicators in the Training Organization still need to improve their performance. These responses confirm that the ADDIE model is effective in developing instructional design[11]–[14].

In the context of management, the implementation phase refers to the process of implementing plans or policies that have been designed previously. In terms of training, the implementation phase involves a series of steps, which include sending training materials, conducting training sessions, and implementing various instructional activities. Most trainees (89.28%) assessed the "Very Good" category.

This data indicates that most participants were satisfied with how the training was conducted. This category means that the training material has been appropriately implemented, according to plan, and has succeeded in achieving the stated objectives. This reflects the satisfactory quality of the implementation and the participants' good understanding of the training material. The evaluation of the training participants in the "Good" category was 10.72%, which indicated that several participants also felt that the implementation of the training had gone well. While this assessment is positive, it is possible that some aspects of implementation may still need improvement. This response also confirms the effectiveness of the ADDIE model in training, which is carried out using a blended learning mechanism that combines face-to-face and virtual meeting.

The evaluation function in management is a critical stage that involves data collection, analysis, and assessment to evaluate the success and impact of an activity or program. In the context of training, the evaluation phase leads to a comprehensive review of the implementation of the movement, its impact on participants, and the objectives that have been set. The effectiveness of the training from the perspective of the management function "evaluating" (evaluation), where the majority of trainees assessed in the evaluation phase with the majority being in the "Good" (12.52%) and "Very Good" (87.48%) categories.

The rating of the majority of participants in the "Very Good" category indicates that most participants are satisfied with how the training evaluation has been carried out. This reflects that the participants feel the training process has gone well and achieved the expected goals. This assessment shows that the participants have experienced increased knowledge, attitudes, and skills related to training materials in preparing SVHEP proposals. Although several participants assessed the "Good" category (12.52%), it should be noted that this indicator also made a positive contribution to the overall view of the evaluation phase. The "Good" rating indicates that the participants still feel that the training evaluation went well, but some aspects may need further improvement.

4 Conclusion

Implementing Task Force Competency Improvement training at private universities in Medan City has resulted in conclusions regarding the effectiveness of using the ADDIE model to achieve goals based on management function indicators: planning, organizing, implementing, and controlling. Indications of this effectiveness can be seen from the responses of participants who were dominant in the "Very Good" and "Good" categories in all statements in the four management functions.

The dominant percentage of participant ratings is in the "Good" criteria, with the lowest score of 9.13% at the implementation function and the highest 28.06% at the organizing function. As for the "Very Good" measure, the lowest percentage score was 71.94% at the organizing

function, and the highest was 90.87% at the planning function. However, for example, referring to the criteria for training effectiveness, namely, the percentage of participant responses in the Very Good category is 70%. In this case, several indicators in each management function still require continuous improvement efforts because the response rate of participants is still below the effectiveness criteria. The training participants' responses to the four management functions were dominated by "Good" and "Very Good." This feedback confirms the effectiveness of the ADDIE model as a priority alternative in developing human resources in an organization through training mechanisms.

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