



Development of a Learning and Professional Roadmap to Support Independent Learning at State University of Surabaya

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Abstract. Learning and Professional Development Institute (LPDI) State University of Surabaya is one of the State University of Surabaya environmental organizations that has duties and functions in fostering and improving learning and the profession, especially State University of Surabaya environmental educators and also as a reference for learning and professional activities at related educational institutions. This research uses a quantitative descriptive approach to translate and implement in support of the independent learning program. It is necessary to map and develop a clear roadmap to guide the institution (field of assignment) effectively and efficiently to achieve the goals and targets set. In particular, the Center for Education and Training Development Center (ETD) will be directed to dig up data and find a profile of roadmap needs in preparing the selection and training of school principals to support the independent learning program. At the same time, the TLSC center focuses on strengthening the learning function, which includes curriculum, learning, and evaluation to support independent learning.

Keywords: Road Map · LPDI · LPD · CIPDC

1 Introduction

The principal's leadership and managerial leadership in leading and managing schools is demanded and requires art in conducting and driving schools to support independent learning. The number of private schools that went out of business and did not get students was inseparable from the leadership and managerial role of the principal as an education leader and school manager [1, 2]. Educational leaders, to improve the quality of education, need four practice domains, namely: setting the direction of the organization, building relationships and developing people, redesigning the organization to support the desired practice, and improving learning programs [3]. The results of Aja's research (2020) show that education provides individuals with the knowledge and skills needed for self-fulfillment and prepares a person to bring about the desired changes in society [4–8]. It should also be noted that schools, through teacher instruments guided adequately by school administrators, can encourage a good education system process [9–12]. This is because schools provide structured education that promotes a child's overall

growth and acquaintance in the child's essential life skills for responsible citizens [13–16]. Therefore, as key players in managing education, educational leaders must be well prepared to carry out their main tasks and functions to realize social change in society. Also, education leaders have a vital role in social change, especially those related to improving the quality of education.

Based on the description above, it can be understood that the need for competent principals to support independent learning following the demands of competency standards is very much needed in leading and managing schools [17–21]. Therefore, to develop the competence of professional principals, the Education and Training Center for the Learning and Professional Development Institute (LPDI), State University of Surabaya is the answer.

The Learning Strengthening Center (TLSC) LPDI State University of Surabaya has the task of ensuring that learning around the State University of Surabaya can take place well based on applicable regulations and following conditions and needs that are widely applicable in the community. Specifically, the learning center is responsible for the curriculum, implementation of learning, and evaluation of learning processes and outcomes [22, 23] [24–26]. In its implementation, the TLSC center is supported by two ad hoc teams: the curriculum team and the e-learning team. The curriculum team has so far produced guidelines for curriculum development and implementation in 2020 following the circumstances, conditions and rules prevailing at that time. Concerning the policy of the ministry of education and culture known as Merdeka Learning, the curriculum team needs to carry out a deeper interpretation and scrutiny of the policy, especially with implementation according to the conditions of institutions and learning that are currently in effect amid the COVID-19 pandemic, so that a careful look at baseline data and the necessary development becomes indispensable to be carried out through research [28–29].

The Core and Institutional Personality Development Course Center (CIPDC) is responsible for the management and development of four core university courses, namely 1) Religious Education, 2) Pancasila Education, 3) Citizenship Education, 4) Indonesian Language Education, and institutional courses namely 1) Literacy Digital and 2) Physical Education and Fitness. As an CIPDC management and development institution, it is necessary to complete all learning tools in these courses, which include 1) a Learning plan, 2) teaching materials, and 3) evaluation tools. Based on the existing baseline data, this research focuses on all CIPDC learning tools, especially in the Digital Literacy course. The background is that the Digital Literacy course is a new Constitutional Court that was developed in 2020 so further development is needed on the completeness of this Constitutional Court.

In addition, the CIPDC Center also has responsibility for the implementation of learning at the University level including the implementation of mid-semester exams and final-of-semester exams which need to be directed and developed by adjusting learning needs and technological developments by creating online/digital midterms or final-semester exams so that they can accommodate a large number of students in the study groups that have been prepared, including minimizing problems related to the procurement and multiplication of questions that have been done manually and also

rationally by examining lecturers, supervisors during the mid-semester exams/final-semester exams at the same time.

Thus, this study aims to determine 1) the roadmap for the LPDI training center development; 2) the Roadmap for LPDI learning strengthening centers; 3) the State University of Surabaya's core and institutional CIPDC center roadmap in supporting independent learning. The results of this study are expected to provide input to LPDI to determine the baseline at the Center for the Education and Training Development Institute (ETDI), the TLSC center, and the Core and Institutional CIPDC center in designing activities and developing activities in order to support the Merdeka Learning program - Merdeka Campus at the State University of Surabaya.

2 Research Method

This research was conducted using a quantitative descriptive approach. Furthermore, the development of the insert domain website is used as a medium of information and communication for internal and external parties and stakeholders of LPDI State University of Surabaya in carrying out the mandate according to the main tasks and functions. In particular, to insert a domain on the LPDI website, it uses a research and development model with the ADDIE model [31–35]. The research subjects were LPDI Management in general, including leaders and staff; LPDI Education and Training Center Development Center; LPDI Learning Strengthening Center; LPDI Core and Institutional CIPDC Center. In this study, for the first and second problems, data were collected using documents, interviews, and focus group discussions (FGD) [36–39]. Meanwhile, the third problem, it is carried out through the development of information and communication systems that are integrated with the Information Technology Development Center (ITDC) of the State University of Surabaya.

Based on Fig. 1, the analysis phase (1) was carried out to obtain data regarding the need for a Management.

Information System (MIS) to facilitate the information system surrounding LPDI. In the second stage of design (2), MIS is designed by combining offline and online systems adapted to academic facilities at the State University of Surabaya that utilize a web-based information system. The third is the development stage (3) which develops MIS by utilizing and integrating it with the database system on the State University of Surabaya web server, linked to *SIKADU* and Single Sign On (SSO). The fourth stage is implementation (4) which tests the use of MIS by stakeholders around the State University of Surabaya and external to the State University of Surabaya.

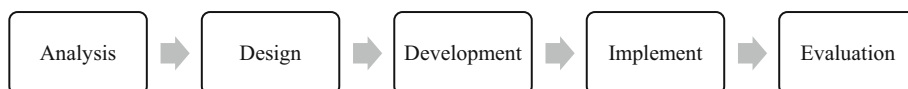


Fig. 1. Research flowchart.

3 Results and Discussion

3.1 Roadmap of the LPDI Education and Training Center to Support Independent Study at the State University of Surabaya

The Roadmap for the LPDI Education and Training Center is a planning and stage that ensures the successful achievement of the ultimate goal of the LPDI Training Development Center to support independent study at the State University of Surabaya. The roadmap for the LPDI State University of Surabaya training and development center is in Table 1.

Table 1 shows that the roadmap for the LPDI training development center to support independent learning at the State University of Surabaya in 2021 is focused on three programs, namely: (a) implementing the vision and mission of the training development center; (b) products that are needed by the market/stakeholders in the implementation of education and training; (c) the technology needed in the implementation of education and training. The success of the education and training development center to support independent learning is determined by excellent communication, coordination, collaboration and cooperation and being able to provide excellent service to stakeholders. The success of the training development center to support independent learning is determined by improving team performance and excellent relationships with both internal and external networking.

Based on the Roadmap for the LPDI Training Development Center to support Independent Learning at the State University of Surabaya in 2021. The planned programs are 1) Implementation of the vision and mission of the LPDI training development center; 2) Products that are needed by the market/stakeholders in the implementation of education and training; 3) The technology needed in the implementation of education and training.

Table 1. Roadmap of the LPDI education and training center to support independent study at the State University of Surabaya.

The development direction	2021	2022	2023	2024	2025
Vision and Mission of the Education and Training Development Center	v				v
Products that are needed by the market/stakeholders in the implementation of education and training	v				v
Technology Required in the implementation of education and training	v	v			v
Research and development that must be carried out to produce technology in the implementation of education and training		v	v	v	v
Human resources, budget, and raw materials needed in the implementation of education and training		v	v	v	v
Outputs as an academies, journals, seminars, competence in the implementation of education and training				v	v

3.2 LPDI Learning Strengthening Center Roadmap to Support Independent Study at the State University of Surabaya

The LPDI Learning Strengthening Center Roadmap is a planning and stage that ensures the successful achievement of the LPDI Learning Strengthening Center's ultimate goal to support independent learning at the State University of Surabaya. The roadmap for the LPDI State University of Surabaya training and development center is in Table 2.

Based on Table 2 the programs planned by the LPDI State University of Surabaya Learning Strengthening Center have a Vision and Mission as well as the main tasks and functions of the head of the center and the secretary of the LPDI Learning Strengthening Center. The Vision: Excellent and Creative in Learning Development, Strong in Developing Quality and Innovative Graduate Achievements. Mission: Center for Strengthening Learning of LPDI State University of Surabaya held a mission.

Table 2. LPDI learning strengthening center roadmap to support independent learning at the State University of Surabaya.

The development direction	2021	2022	2023	2024	2025
Vision and Mission of Learning Strengthening Center	v				v
Curriculum development oriented towards the Indonesian National Qualifications Framework, Outcome Based Education, and Independent Learning on an Independent Campus	v				v
Development of Learning based on Hybrid learning and based on Digital Literacy to maximize learning processes and products	v	v			v
Preparation of various guidelines for strengthening learning: (a) curriculum development guidelines, (b) learning guidelines, (c) assessment guidelines	v	v	v	v	v
Organizing various trainings to improve lecturer competence in the fields of (a) hybrid learning and digital literacy, (b) development of hybrid learning and digital literacy teaching materials, (c) development of assessment techniques and instruments, and (d) development of project and problem-based learning.	v	v	v	v	v
Organizing "flexible" curriculum workshops	v	v	v	v	v
Implementation of curriculum implementation model research Indonesian National Qualifications Framework, Outcome Based Education, and Independent Learning on an Independent Campus State University of Surabaya		v			v

3.3 LPDI National and Institutional CIPDC Center Roadmap to Support Independent Study at the State University of Surabaya

Taking into account the condition that the integration of employability skills in all fields is a special concern, especially in the era of SOCIETY 5.0 which led all graduates to have an information technology-based portfolio. The 21st century learning, which is followed by the application of the Key Performance Indicators, requires both problem-based learning and project-based learning courses, so courses that can accommodate this desire are needed.

In line with the era of the industrial revolution 4.0, the State University of Surabaya, since 2019 has implemented a new curriculum that requires all study programs to take Digital Literacy courses. This course is an institutional course as a marker for graduates of the State University of Surabaya. The Digital Literacy course is a new course, so adequate teaching materials are needed to provide supplies to students. Due to the scarcity of the availability of textbooks for the new courses, LPDI State University of Surabaya deemed it necessary to develop these textbooks, and become the target of the research roadmap for this period.

The availability of these textbooks will be useful for: (1) the smooth process of lecturing students programming the Institutional Personality Development - Digital Literacy Course, (2) becoming a reference and learning resource for both lecturers and students,

Table 3. Expert validation results - digital literacy textbook.

Variable	Sub-Variable	Validation Results	Interpretation
Content Quality and Purpose	Accuracy	96%	Very Worthy
	Interest	92%	Very Worthy
	Completeness	82%	Very Worthy
	Balance	88%	Very Worthy
	Suitability	88%	Very Worthy
Instructional Quality	Provide learning opportunities	92%	Very Worthy
	Provide study assistance	92%	Very Worthy
	Motivating quality	88%	Very Worthy
	Instructional flexibility	92%	Very Worthy
Technical Quality	Legibility	88%	Very Worthy
	Easy to use	88%	Very Worthy
	View/impression quality	84%	Very Worthy
	Quality of teaching material product management	84%	Very Worthy

(3) increasing the assets of learning resources by State University academics of Surabaya. The quality of the content and purpose concerns aspects of importance, completeness, balance, and suitability. Instructional quality concerns aspects, can provide learning opportunities, provide learning assistance, motivational quality, and instructional flexibility. While the technical quality contains aspects of readability, ease of use, display quality and quality of product management of teaching materials.

Data collection in order to obtain accurate results was carried out using a Likert-scale questionnaire, then interpreted [43, 44]. From the experts, a feasibility interpretation will be obtained which includes: quality of content and objectives, instructional feasibility, and technical feasibility. Meanwhile, from the users, it will be seen from the aspect of understanding the contents of the Digital Literacy textbook. The results of expert validation from fellow Digital Literacy lecturers as many as 5 people showed positive or very decent results, as shown in Table 3.

The results of expert validation based on Table 3 from five experts Digital Literacy lecturers show that digital literacy textbooks have positive validation results or are very feasible. So, digital literacy textbooks can be used or can be implemented for learning.

4 Conclusion

LPDI State University of Surabaya is one of the organs of the State University of Surabaya which has duties and functions in fostering and improving learning and the profession, especially educators around State University of Surabaya and also as a reference for learning and professional activities in related educational institutions. To carry out these tasks, a clear and measurable roadmap is needed to determine the direction of policies and development of organizations and institutions to achieve goals according to the main tasks and functions carried out.

Organizationally, LPDI State University of Surabaya consists of several centers as regulated in the Rector's Decree number 196/UN38/HK/KL/2021 dated February 3, 2021, regarding the dismissal and appointment of officials from the State University of Surabaya learning and professional development institutions from time to time. The decree stated that the LPDI State University of Surabaya consists of several centers. LPDI State University of Surabaya is an organ which is a restructuring of the previous organ, namely LPDI which in the previous year had the opportunity to conduct research assignments to map and develop roadmaps in several centers. Based on the baseline that has been successfully obtained, the research on institutional assignments on this occasion focuses on centers that need to carry out mapping and institutional development.

To translate and implement it in support of the independent learning program, it is necessary to map and develop a clear roadmap as a guide in developing institutions, effectively and efficiently so as to achieve the goals and targets set. In particular, the LPD center will be directed to dig up data and find a profile of the need for a roadmap in preparing the selection and training of school principals to support the independent learning program, while the TLSC center will focus on strengthening the learning function which includes curriculum, learning and evaluation to support independent learning. The core and institutional CIPDC will focus on preparing various MKs required by the CIPDC to support independent learning, so this study aims to conduct a mapping that will serve as

a baseline as well as material for setting targets to support the next performance target of the Rector of the State University of Surabaya.

5 Recommendation

2021 is a very appropriate moment to be the initial stage of the LPDI State University of Surabaya research roadmap, considering that these findings can be recommended for further research related to the implementation of Digital Literacy textbooks on a wider scale. In addition to this expectation that the National-Institutional CIPDC Management Center starting in the 2020–2021 academic year (even semesters) and 2021–2022 (odd semesters) has used the CBT-based test model in holding the Semester Final Exams, for all six subjects, then in the future period can also be prepared to conduct studies and research related to the effectiveness of the implementation of the model.

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