

Mapping of Learning Guidance Competencies in Dealing with Digital Learning

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Article Info	ABSTRACT
Keywords:	Industrial Revolution 4.0 is a major phenomenon that has changed the global
Professional Competence,	landscape in various aspects of life, including education. These changes have a
Learning Guide, Industrial	significant impact on the competencies of learning teachers, who must adapt quickly
Revolution 4.0, Digital	to meet the demands of this digital era. In the Industrial Revolution 4.0, the role of
Learning, Effort.	tutors has changed to become more than just a teacher. They must be the main
	drivers of project-based and collaborative learning, where learning citizens can work
	in teams to develop projects that are relevant to the real world. Learning tutors must
	encourage creativity, courage to think, and the ability to solve students' problems.
	This change requires learning teachers to explore the spirit of exploration and
	innovation within themselves, so that they can inspire students to do the same.
	To face revolution 4.0, the author intends to design the competencies that learning
	teachers must have, for example the professionalism competencies of learning
	teachers. The research method that researchers use is a qualitative approach and the
	research data collection that will be used is a questionnaire. It is hoped that the
	professional competencies possessed by the learning tutors can improve the teaching
	abilities of the learning tutors and with the professional competencies they have, it is
	hoped that the learning tutors can face the industrial revolution 4.0.
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INTRODUCTION

The Industrial Revolution 4.0 has brought major changes in various aspects of life, including in the field of education. These changes encourage universities and non-formal educational institutions to adapt to technological developments through curriculum resistance, education policy updates, and educator competency development. The profession of learning facilitators, as one of the important elements in non-formal education, is required to be able to respond to this challenge by improving



professional competency and utilizing information and communication technology (ICT) in the learning process. The role of learning facilitators is very significant in creating a responsive, innovative, and adaptive learning environment in accordance with the demands of the digital era.

As a profession engaged in non-formal education, learning facilitators are faced with the challenge of improving competency standards, which include pedagogical, personality, social, and professional abilities. However, various obstacles still hinder, such as the mismatch in the quality of education personnel, the lack of appropriate competency measurement tools, coaching that is not based on needs, and low educator welfare. Therefore, mapping the professional competency of learning facilitators is an important first step in understanding the needs for developing their abilities. With a systematic approach, non-formal education can be supported by quality educators to achieve high academic standards.

In the era of the Industrial Revolution 4.0, digital literacy has become an essential competency for tutors. Digital literacy not only includes technical skills to use technological devices, but also critical thinking skills in accessing, understanding, and disseminating information effectively. This concept covers various aspects of information technology, from computing, multimedia, to internet-based communication. In the context of learning, ICT-based media such as online learning platforms, interactive simulations, and digital evaluation tools are innovative solutions that can create more interesting, effective, and relevant learning experiences. The use of information and communication technology in education has shown a significant positive impact.

Technology-based learning media, such as online tutoring (online tutoring), support changes in more adaptive ways of learning and teaching. In addition to facilitating access to learning, this media also increases the interest and learning outcomes of students through interactive learning experiences. Along with the rapid development of information technology, it is important for tutors to continue to develop digital literacy and utilize various technological innovations in order to face the challenges and opportunities in the era of the Industrial Revolution 4.0. Thus, the profession of tutors is not only an actor, but also an agent of change that plays an active role in supporting the quality of education in Indonesia.

METHOD

This study uses a qualitative method. The research on mapping the competency of learning facilitators in facing digital learning is an in-depth and comprehensive study to identify, measure, and analyze the skills, knowledge, and attitudes needed by learning facilitators to be effective in supporting the learning process using digital technology. In order to obtain this information, the researchers



conducted observations at PKBM Laskar Pelangi and provided a questionnaire containing statements related to mapping the competency of learning facilitators in facing digital learning and after getting the results of the questionnaire, the next step was to calculate the results.

RESULTS AND DISCUSSION

Definition of Professional Competence of Learning Facilitators

Tutors are educators who play an important role in implementing teaching and learning activities, program assessments, and developing non-formal and informal education models in Technical Implementation Units (UPT) or Regional Technical Implementation Units (UPTD), as well as other PAUDNI units. This role requires tutors to have good competency standards, which include pedagogical, personality, social, and professional competencies. These standards are not only guidelines for carrying out tasks but also as benchmarks for the quality of non-formal and informal education implementation amidst changing times. The competencies possessed by tutors are expected to support the creation of meaningful, effective, and relevant learning to the needs of the community. Training for tutors as mentors or program organizers is an important effort to ensure the existence and quality of their roles.

This training has major consequences, both in terms of improving the personal quality and professionalism of tutors. In this context, they are not only required to carry out administrative tasks but also to innovate in learning and be able to adapt educational models that are in accordance with the development of community needs. This is crucial because tutors often deal with students from diverse backgrounds, so comprehensive competencies are needed to provide inclusive and effective educational services.

Along with the changing times, demands for the quality of public services in the field of equal education are increasing. Tutors, as officials who are directly related to the community, must be able to meet the needs and expectations of students by providing satisfactory services. This quality of service can be achieved by strengthening the internal strengths of the organization, such as the ability to adapt to change, collaboration, and professionalism. According to Law Number 14 of 2005 concerning Teachers and Lecturers, teachers—including tutors—are expected to have the competence to manage good learning and have personalities that can be role models for students. Thus, the services provided by tutors not only cover academic aspects but also contribute to the formation of students' characters in accordance with the demands of the times.



Supporting factors and inhibiting factors in the professional competence of learning facilitators

The increasing professional competence of tutors is expected to have a positive impact on their performance, especially in carrying out their tutoring duties. This competence includes the ability to manage, develop, and evaluate non-formal education programs effectively. One of the main supporting factors in the implementation of the competency development program is the presence of competent and committed human resources at every stage of technical orientation, from needs identification to assessment. This commitment creates a conducive working atmosphere, where each individual understands their role in ensuring the success of the training. In addition, government policy support, such as regulations and standards for tutor competencies, is an important foundation in motivating them to continue to improve their professionalism. This is in line with the regulations set by the Ministry of Education and Culture, which stipulate that competency training must be carried out in a structured and sustainable manner.

Despite strong support from competent human resources, various inhibiting factors still hinder the improvement of the professional competence of tutors. One of the main obstacles is budget constraints that have a direct impact on the implementation of the technical orientation program. For example, the needs identification stage is often not carried out optimally due to the lack of funds allocated for field surveys or comprehensive data collection. In addition, evaluation of the impact of training, which should be an important stage in assessing the success of the program, is often neglected. As a result, the effectiveness of training cannot be measured properly, making it difficult to determine future improvement steps.

Another significant obstacle is the gap between the training material provided and its application in the field. Many tutors have difficulty applying the results of training in their work environment due to the lack of mentoring and supporting facilities. For example, training related to the assessment and development of non-formal education models often stops at theory, without real implementation. This shows that even though training has been carried out, without supervision and follow-up, the professional competence of tutors will not increase significantly. The lack of resources such as technological devices and access to the latest information is also a challenge for them in carrying out their tutoring duties.

To overcome these obstacles, an integrated strategy is needed, such as increasing the allocation of a special budget for training and providing supporting facilities. In addition, a needs-based



approach in compiling training programs can ensure that the material provided is relevant to the needs of tutors in the field. Regular mentoring is also needed to monitor the implementation of training results. The government and educational institutions can work together with various parties, including the private sector, to provide access to the latest technology and information. Thus, the professional competence of learning facilitators can be improved sustainably, so that they are able to contribute optimally to advancing education.

Utilization of technology in daily life in mapping technology learning competencies

The use of technology in everyday life has become an unavoidable necessity, especially in the era of globalization marked by the rapid development of Information and Communication Technology (ICT). In the context of education, the integration of ICT has brought significant changes to the way teachers carry out their roles. Teachers no longer function only as teachers who deliver material in one direction, but also as facilitators, mentors, collaborators, trainers, and study buddies for students.

This role allows students to be more active and independent in exploring learning materials through various digital devices and sources. According to Warsita (2008), the use of ICT-based media in learning not only facilitates the teaching process but also enriches students' learning experiences by involving the senses of sight and hearing more optimally. Thus, students can enjoy a learning process that is more interactive, interesting, and relevant to the needs of the times. However, the integration of ICT in education is not without challenges.

Teachers are not only required to master technology, but must also be able to develop appropriate learning materials and utilize technology effectively. In addition, it is important for teachers to create an active and interactive classroom atmosphere so that students can participate optimally in the learning process. Collaboration in the development of ICT-based materials and information is the main key in facing this challenge. Continuous training programs, collaboration between educators, and support from the government and educational institutions are needed to ensure that teachers are competent in utilizing ICT. As part of digital literacy, this ability not only improves the quality of teaching but also equips students with 21st-century skills, such as critical thinking, creativity, and the ability to work in a team.

Efforts to meet the needs in mapping technology learning competencies

To meet the educational needs in the field of Non-Formal Education (PNF), high-quality and



high-quality program services are needed. One important element in realizing this is the existence of competent, professional, and experienced educators. Reliable educators are not only able to identify the learning needs of the community in their area but can also formulate learning methods and techniques that are relevant to local conditions and potential. They are able to utilize existing resources in the environment as part of the learning process, so that non-formal education becomes more contextual and has a direct impact on improving the quality of life of the community. According to Sukmadinata (2013), educators in non-formal education have an important role as facilitators and innovators in developing programs that are not only based on needs but also empower the community to adapt to the dynamics of change.

However, the changing role of tutors in non-formal education creates its own challenges. The function of quality control and impact evaluation which was previously the responsibility of tutors has now shifted to supervisors, making tutors more focused on implementing programs as organizers of out-of-school education. This shift requires tutors to demonstrate the quality of program services through innovation and effective implementation, even though they are no longer serving as supervisors. This emphasizes the importance of collaboration between tutors and supervisors to ensure the sustainability of quality non-formal education programs. According to Warsita (2008), the role of tutors as the main implementers of out-of-school education programs is crucial in determining the success of achieving non-formal education goals, especially in responding to the needs of a diverse and dynamic society.

Analysis Results of the Mapping of Professional Competencies of Learning Supervisors in Facing Digital Learning at PKBM Laskar Pelangi

Testing the mapping of professional competencies of learning facilitators in facing digital learning was carried out by giving a questionnaire to learning facilitators at PKBM Laskar Pelangi. This questionnaire contains a number of statements related to the professional abilities of learning facilitators, especially in the use of technology in learning. Each answer chosen by the facilitator has a predetermined value weight, so that the measurement results can provide a quantitative picture of their level of digital competence. This data is the basis for assessing the extent to which learning facilitators are ready to face the challenges of technology-based learning in the digital era.

The results of the questionnaire analysis showed that around 70% of learning facilitators can



be categorized as digitally literate. They are able to utilize technology effectively in learning, including the use of software, online learning applications, and other digital platforms. This ability shows that most learning facilitators have followed the development of information and communication technology (ICT) in the teaching and learning process, which is in line with Munadi's view (2013) that the use of ICT can increase the effectiveness and efficiency of learning and make learning more interesting for students.

However, there are still around 30% of learning facilitators who do not understand or are not used to using technology in learning. This shows a digital competency gap among tutors. The obstacles faced generally include a lack of intensive training, limited technological facilities, or psychological barriers such as a lack of confidence in using new technology. As expressed by Warsita (2008), ICT mastery by educators requires adequate infrastructure support and ongoing training to build competence and confidence. To bridge this gap, strategic steps are needed such as special training that focuses on the use of technology in learning, the provision of more adequate technological facilities in PKBM, and the formation of learning communities among tutors to share knowledge and experiences. With this approach, it is hoped that all tutors can gradually improve their professional competence so that they are better able to face digital learning. This step also supports the vision of non-formal education to be more responsive to the demands of the industrial revolution 4.0 and the digital era.

CONCLUSION

The Industrial Revolution 4.0 has had a major impact on the education sector, including nonformal education, by demanding adaptation to technological developments. Tutors, as educators in non-formal education, play an important role in creating responsive, innovative, and adaptive learning in the digital era. To meet these demands, they must have professional competencies that include digital literacy, superior pedagogical, social, and personality skills. Although most tutors at PKBM Laskar Pelangi have shown readiness to utilize digital technology, there is a competency gap that needs to be addressed immediately through ongoing training, increased access to technology, and a needsbased approach.

This step not only supports more effective digital learning but also strengthens the existence of non-formal education amidst global change. However, various challenges still hinder efforts to improve the professional competency of tutors, such as budget constraints, minimal supporting



facilities, and lack of mentoring. To overcome this, collaboration is needed between the government, educational institutions, and the private sector in providing infrastructure and training that is relevant to the needs of the digital era. With an integrated and sustainable strategy, tutors can continue to develop as agents of change in supporting quality education in Indonesia. This is in line with the national education goal of creating a society that is intelligent, competitive, and adaptive to global challenges.

REFERENCE

- Andriani, L., & Kusuma, E. (2021). Effectiveness of Online Learning Media During the Pandemic. Journal of Education and Technology, 6(3), 90-98.
- Arifin, Z. (2019). Transformation of Education in the Era of the Industrial Revolution 4.0. Journal of Education and Culture, 4(1), 22-30.
- Astuti, W., & Rahman, F. (2022). Analysis of Digital Competence of Educators in Indonesia. Journal of Educational Sciences, 9(1), 67-75.
- Ayu, PM & Gazali Munawir.2021.(The importance of mastering information and communication technology literacy for elementary Madrasah teachers in preparing students to face the industrial revolution 4.0). SCIENTIFIC JOURNAL OF GLOBAL EDUCATION. (2) 1, 87-95.
- Eliza, Fiviah et al. 2019. (IMPROVING TEACHER COMPETENCY IN MASTERING INFORMATION AND COMMUNICATION TECHNOLOGY THROUGH ANDROID-BASED LEARNING MEDIA DEVELOPMENT TRAINING). Journal

Electronic Engineering and Vocational. (5)2. 102-109.

- Fauzi, I., & Aziz, M. (2021). Digital Literacy for Improving the Quality of Education. Scientific Journal of Education, 5(2), 70-78.
- Handayani, T. (2022). Utilization of Technology by Tutors. Indonesian Journal of Education, 8(3), 130-138.



- Hermanto, D. (2019). Challenges of Education in the Era of the Industrial Revolution 4.0. Indonesian Journal of Education, 11(2), 45-54.
- Isnaini, Astuti.2023.Analysis of Teacher Professional Competence in the Use of Interactive Learning Media (Case Study at SD Muhammadiyah 01 Pencongan). Journal Elementary Education.12 (1), 10-18.
- Lestari, Yunda, Erwanto.2020.Digital Literacy in the Era of the Digital Industrial Revolution 4.0.Journal of the Faculty of Teacher Training and Education.71-78.
- Munadi, H. (2021). Teacher Competence in Facing Digital Era Education. Journal of Information Technology Education, 3(2), 120-129.
- Nugraha, E. (2019). Teacher Readiness to Face the Digital Era. Journal of Education, 5(1), 88-97.
- Prasetyo, T. (2021). The Role of Digital Literacy in Increasing Student Creativity. Journal of Education and Culture, 9(1), 57-66.
- Purnamasari, A. (2020). Developing Teacher Digital Competence through ICT Training. Journal of Educational Technology and Learning, 4(2), 56-65.
- Putra, A. H. (2019). ICT-Based Learning Strategies in the Era of the Industrial Revolution 4.0. Scientific Journal of Educational Technology, 8(1), 37-48.
- Rahayu, S. (2021). The Role of Learning Tutors in Digital Learning. Journal of Non-Formal Education, 10(1), 65-74.
- Ramli, A. (2020). Utilization of Technology in Distance Learning. Journal of Education and Culture, 7(1), 35-43.
- Rosmiati, Zuhri Saputra Hutabarat.2022.EXPERIENCE OF TEACHING PRACTICE PROGRAM, CREATIVITY, AND LOCUS OF CONTROL TO PREPARE TO BECOME A TEACHER IN THE ERA OF INDUSTRIAL REVOLUTION 4.0.JPE (Edutama Education Journal).9(2),149-162.
- Sari, D. K. (2020). The Role of Teachers in the Use of Digital-Based Learning Media. Journal of Education and Information Technology, 5(3), 101-110.



- Suryadi, A. (2022). The Importance of Technology for Equivalency Education. Indonesian Education Journal, 8(4), 115-124.
- Warsita, B. (2020). Digital Literacy: Challenges and Opportunities in Non-formal Education. Indonesian Non-formal Education Journal, 6(2), 150-160.
- Wibowo, A., & Nugroho, D. (2021). Utilization of Digital Media in Distance Learning. Indonesian Journal of Education, 10(1), 45-52.
- Wibisono, R. (2022). Collaboration in Technology-Based Non-Formal Education. Journal of Educational Sciences, 11(2), 35-43.
- Yuliana, R., & Suryadi, M. (2022). Utilization of E-Learning in Non-Formal Education. Journal of Non-School Education, 9(1), 20-28.
- Yunda Lestari, Erwanto.2021.Digital Literacy in the Era of the Industrial Revolution 4.0.Journal of Community Service (Abdimas) Baturaja University. 2 (1), 71-77.
- Yunita, E. (2021). Empowerment of Learning Tutors through Technology. Journal of Educational Technology, 4(1), 78-86.