



Mapping Media Literacy Competence Needs of Future Educators: A Basis For Mooc Design

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ABSTRACT	ARTICLE INFO
<p>This study examines the media literacy competencies required by preservice teachers and their implications for designing effective Massive Open Online Course (MOOC) curricula. A quantitative survey was conducted with 105 preservice teachers from various education programs to map their current competencies and identify training needs. The research utilized a structured questionnaire with 40 items covering five core areas: current media literacy levels, knowledge-based competencies, skill-based competencies, attitudinal competencies, and curriculum design preferences. Results revealed a significant gap between current competencies (66.12%) and expected competencies (above 89% across all dimensions). While participants demonstrated strong capabilities in digital device usage, message evaluation, and content creation, formal media literacy training was notably lacking across programs. The highest expectations were found in affective competencies (91.57%), followed by skill competencies (91.19%) and curriculum design (90.12%). Participants preferred flexible, online training with video materials, discussion-based methods, and project-based assessments delivered within two hours per week. These findings provide empirical insights for developing targeted MOOC curricula that address the specific media literacy needs of future educators in the digital age.</p> <p>© 2025 Educational Technology UPI</p>	<p>Article History: <i>Submitted/Received 12 April 2025</i> <i>First Revised 26 Mei 2026</i> <i>Accepted 15 June 2026</i> <i>First Available online 29 June 2026</i> <i>Publication Date 29 June 2026</i></p> <p>Keyword: <i>Media Literacy, MOOC, Curriculum Design, Competency, Teacher Education</i></p>

1. INTRODUCTION

The contemporary digital landscape has fundamentally changed the educational paradigm, positioning media literacy as an essential competency for 21st-century educators (Kim et al., 2019; Maba et al., 2023; Singh et al., 2020). As digital technology continues to change in the way information is created, disseminated, and consumed, educators' need to have comprehensive media literacy skills is becoming increasingly evident (Gretter & Yadav, 2018; Wallis & Buckingham, 2019). This transformation demands a systematic understanding of the specific competency requirements that future educators need to navigate and teach effectively in a media-rich environment. The integration of technology-based learning environments with media literacy education presents unique challenges that require pedagogical approaches and specialized competency frameworks (Koehler et al., 2013).

Research in media literacy education has come a long way over the past decade, with academics increasingly aware of the complex competency frameworks needed for effective media literacy teaching (Mesquita-Romero et al., 2022; Pereira & Moura, 2018; Verniers & Tilleul, 2014). Media literacy education goes beyond basic literacy technical skills and includes critical thinking, ethical reasoning, and creative production skills (Potter, 2022). His comprehensive analysis reveals that contemporary educators face unprecedented challenges in dealing with advanced manipulation techniques and algorithmic mediation that exist in the digital media environment.

Media literacy as a multidimensional construct that requires systematic development in all cognitive, affective and psychomotor domains (Fadlillah, 2024). This framework provides a fundamental understanding of the competencies required for effective media consumption and production, particularly emphasizing the critical analysis skills required in the contemporary information environment. The technological pedagogical implications of these competencies suggest that educators must develop a deep understanding of how digital devices mediate learning processes and patterns of information access (Erdem & Erişti, 2022).

Teacher education institutions reveal alarming gaps in the media literacy competence of prospective educators (Guntarto, 2016; Utama & Irwansyah, 2021). Their multi-institutional analysis showed that education students are aware of the importance of media literacy, but their competence in media literacy is still lacking due to the lack of media literacy education for prospective teachers (Chen et al., 2025; Villacrez-Cuadros et al., 2024). From the point of view of educational technology, the integration of media literacy competencies with technological pedagogical knowledge presents its own challenges (Simons & Meeus, 2017). Traditional technology integration models often fail in addressing the critical thinking and evaluation skills necessary for effective media literacy teaching (McDougall, 2019). The online learning environment shows that MOOC-based approaches to professional development show the potential to address this competency gap, especially when designed with pedagogical frameworks specific to adult learners (Deng et al., 2020; Jha & Naaz, 2020).

The European Commission's Digital Education Action Plan identifies media literacy as a priority competency area that requires immediate intervention in teacher preparation programmes (Caena & Redecker, 2019; Ranieri & Bruni, 2016). Similarly, the Media and Information Literacy Curriculum for Teachers developed by UNESCO emphasizes the urgent need for the systematic development of competencies among educators to address contemporary challenges, including the spread of misinformation and the sophistication of digital manipulation (UNESCO, 2019).

This research statement is what specific media literacy competencies prospective educators need and how these competency needs can affect the design of an effective MOOC curriculum. This theoretical framework integrates two complementary theoretical perspectives, namely media literacy competencies and MOOC curriculum design. Media literacy is the ability to access, analyze, evaluate, create, and act effectively using any form of communication (NAMLE, 2020). Media refers to all types of media, whether digital or traditional, that are used to convey messages. Media literacy is also defined as the ability to critically analyze and evaluate written, visual, audio, digital, etc. text messages edited by media producers; at the same time, the ability to create such texts and have skills that are considered important (Potter, 2022).

Media literacy education refers to the practices necessary to develop media literacy skills. The goal of media literacy education is to help individuals of all ages develop the questioning habits and expressive skills they need to become critical thinkers, effective communicators, and active citizens in today's world. Competency refers to the knowledge, skills, abilities, and behaviors that individuals possess and demonstrate to perform tasks or fulfill certain roles effectively. In this study, what is meant by media literacy competence in research is a person's ability to access, analyze, create, and act on media literacy (Fadlillah, 2024).



Figure 1. Media Literacy Competency

Media literacy encompasses four main dimensions that are interrelated in shaping individual competencies in dealing with the digital media landscape. Media access is the basic foundation that allows individuals to use various digital media platforms. Media analysis involves a critical process of deconstructing and interpreting media messages to understand their meaning, bias, and impact on society that allows individuals to become informed and informed media consumers. Media creation empowers individuals to become active participants in the production and sharing of digital media content using various forms such as writing, photography, video, and digital platforms. Finally, media action is a practical application of all media literacy skills to influence positive change by integrating media literacy into daily life.

Contemporary teacher preparation programs show considerable variation in the integration of media literacy, thus creating inconsistent levels of preparation among graduate educators (Breakstone et al., 2021). Although some institutions have integrated media literacy courses separately, many still consider these competencies to be unimportant in the core curriculum of teacher preparation (Ergün & Serpil, 2016; Flores-Koulis, 2019). This fragmented approach results in inadequate preparation for the systematic implementation of media literacy education in the K-12 environment, especially regarding the integration of educational technology tools and digital pedagogical approaches.

The emergence of Massive Open Online Courses (MOOCs) as a viable professional development vehicle presents an unprecedented opportunity to address this preparation gap. However, MOOCs in media literacy often adopt a generic approach that fails to meet the specific pedagogical needs of educators. Well-designed MOOCs show learning outcomes comparable to traditional learning, especially in developing digital competencies among adult learners (Koukis & Jimoyiannis, 2019; Rodrigues-Silva & Alsina, 2024). These findings show significant potential for technology-based professional development in media literacy education.

The urgency of developing systematic media literacy competencies is emphasized by contemporary challenges, including the spread of misinformation, the increasing sophistication of digital manipulation techniques, and the increasing influence of social media platforms on student behavior and cognition (Marín et al., 2020; Putri et al., 2018; Trültzsch-Wijnen, 2020). These factors collectively demand future educators to possess strong media literacy competencies in order to effectively guide students in navigating a complex media environment while developing critical thinking skills and digital citizenship. This research seeks to bridge the gap between identified competency needs and effective educational interventions by providing empirically based insights that can inform targeted and effective MOOC design strategies.

2. METHODS

This study employs a quantitative research design with a survey method to systematically collect and analyze data on the media literacy competencies of preservice teachers. The quantitative approach was selected to obtain measurable and generalizable findings that accurately represent the competencies required for future curriculum development. The primary aim of the research is to map the specific knowledge, skills, and attitudes that constitute media literacy among preservice teachers, providing a foundation for designing targeted training curricula. The participants consisted of 105 preservice teachers selected through purposive sampling. The primary inclusion criterion was enrollment in a teacher education program, as the study targets individuals who will eventually assume professional roles as educators. This sampling technique ensured that respondents represented the intended population, enabling an exploration of media literacy competencies most relevant to future educators.

Data were gathered through an online structured questionnaire consisting of 40 items, carefully designed to address the essential components of media literacy. The instrument explored five core areas: (1) the current media literacy levels of preservice teachers; (2) the knowledge-based competencies they need to master; (3) the skill-based competencies required; (4) the attitudinal competencies necessary for adequate media literacy; and (5) the expected design of a media literacy training curriculum. Of the 40 items, 32 were assessed using a four-point Likert scale, ranging from 1 (strongly disagree) to 4 (strongly agree), allowing respondents to indicate the degree to which each statement reflected their perceptions and experiences. The remaining eight items employed multiple-choice and open-ended response formats to capture curriculum design preferences and contextual information that could not be adequately represented through a rating scale. The survey was administered via Google Forms to facilitate accessibility across different teacher education programs and academic semesters.

Prior to distribution, the instrument underwent content validation through expert judgment. Two lecturers with expertise in educational technology reviewed all 40 items

and provided written feedback on content relevance, language clarity, and alignment with the five competency domains. Revisions were made accordingly to refine item wording and strengthen construct coverage before the instrument was administered to participants.

Following data collection, the internal consistency reliability of the 32 Likert-scale items was assessed using Cronbach's Alpha. Per-subscale reliability coefficients are presented in Table 1.

Table 1 Cronbach's Alpha Reliability Coefficients by Subscale

Subscale	Items (n)	Cronbach's α	Interpretation	α if Item Dropped (Range)
Current Media Literacy Competence	8	0.808	Good	.763 – .865
Knowledge-Based Competencies	6	0.934	Excellent	.912 – .933
Skill-Based Competencies	9	0.945	Excellent	.933 – .945
Attitudinal Competencies	5	0.933	Excellent	.908 – .927
Curriculum Design Preferences	4	0.827	Good	.730 – .838
Overall Instrument	32	0.966	Excellent	—

As shown in Table 1, all five subscales demonstrated good to excellent internal consistency. The skill-based competencies subscale yielded the highest reliability ($\alpha = .945$), followed by knowledge-based competencies ($\alpha = .934$) and attitudinal competencies ($\alpha = .933$). The current media literacy competence subscale ($\alpha = .808$) and curriculum design preferences subscale ($\alpha = .827$) both met the threshold for good reliability.

The collected data were analyzed using descriptive statistical methods to generate meaningful insights into the distribution and trends of responses. Findings were presented in the form of frequency distributions and percentages, with visualizations such as tables, bar charts, and line graphs used to enhance clarity and support comprehensive interpretation. The findings were intended not only to describe the current state of media literacy among preservice teachers but also to identify areas requiring targeted support. Ultimately, the insights gained from this mapping are expected to serve as a foundation for designing an interactive, MOOC-based media literacy training curriculum.

3. RESULTS AND DISCUSSION

Table 2. Students' Demographics

Characteristics	N
Age	
o < 20	18
o 20–24	57
o 25–29	4
o 30–39	18
o ≥ 40	8
Study Program	
o Sundanese Language Education	10

o Indonesian Language Education	15
o Educational Technology	19
o Special Education	32
o Sports Coaching Education	24
o Primary School PE Teacher	3
o Social Studies Education	1
o Primary School Teacher Education	1
Semester	
o 1	31
o 2	3
o 4	54
o 6	10
o 8	7

This study involves 105 candidate teacher students from the educational study program. The student demographic described in **Table 2** consists of three characteristics: students' age segmentation, study program, and semester. The highest number of students aged 20-24 years old topped 54.29%. Followed by young adult students and working-age adults, 17.14% for each. Moreover, students are also drawn from various educational study programs, with most respondents (30.48%) being from the Special Education Program and 22.86% from the Sports Coaching Education program. Meanwhile, the highest number of participants comes from mid-level semesters, with 51.43%.

Table 3. Current media literacy segmentation by study program

Indicators	Primary PE Teacher	Sundanese Lang. Ed.	Indonesian Lang. Ed.	Primary Ed.	Social Studies Ed.	Sports Coaching Ed.	Special Ed.	Ed. Tech
Relevant courses	100	100	93.3	100	100	87.5	100	89.5
Media literacy concept	100	100	93.3	100	0.0	87.5	100	94.7
Media literacy training	66.7	30	40	0.0	100	25.0	75	42.1
Use of digital devices	100	90	100	100	100	95.8	96.9	100
Message evaluation	100	100	100	100	100	83.3	96.9	100
Content creation	100	100	100	100	100	83.3	90.6	100
Learning integration	100	90	100	100	100	79.2	93.8	100
21st-century skills	100	90	100	100	100	91.7	96.9	100
Professional motivation	100	90	100	100	100	91.7	100	94.7

* In percentage (%)

Table 3 reveals variation in media literacy achievement across study programs. Most programs scored above 90% on digital device use, message evaluation, content creation,

and 21st-century skills, with content creation and message evaluation reaching 100% in nearly all programs. The most significant gap appeared in media literacy training, where Primary School Teacher Education (0%), Sports Coaching Education (25%), and Sundanese Language Education (30%) recorded notably low scores. The Educational Technology program excelled in applicative indicators but similarly showed lower scores in conceptual understanding and training access. These findings suggest that while operational media competencies are broadly strong, formal training exposure remains uneven pointing to a structural gap that curriculum intervention needs to address.

Table 4. Expected media literacy competencies (closed-ended)

Dimension	Item Total	Score	Ideal Score	Percentage
Current competence	9	2777	4200	66.12%
Expected cognitive competence	4	2261	2520	89.72%
Expected skill competence	9	3447	3780	91.19%
Expected affective competence	5	1923	2100	91.57%
Expected curriculum design	4	1514	1680	90.12%

Table 4 shows a substantial gap between current competence (66.12%) and expected competencies across all dimensions (above 89%). The highest expectation was recorded for affective competence (91.57%), followed by skill competence (91.19%), curriculum design (90.12%), and cognitive competence (89.72%). The consistent 25-percentage-point gap across all dimensions signals that preservice teachers not only recognize the inadequacy of their current level but also hold uniformly high aspirations underscoring the need for structured training intervention.

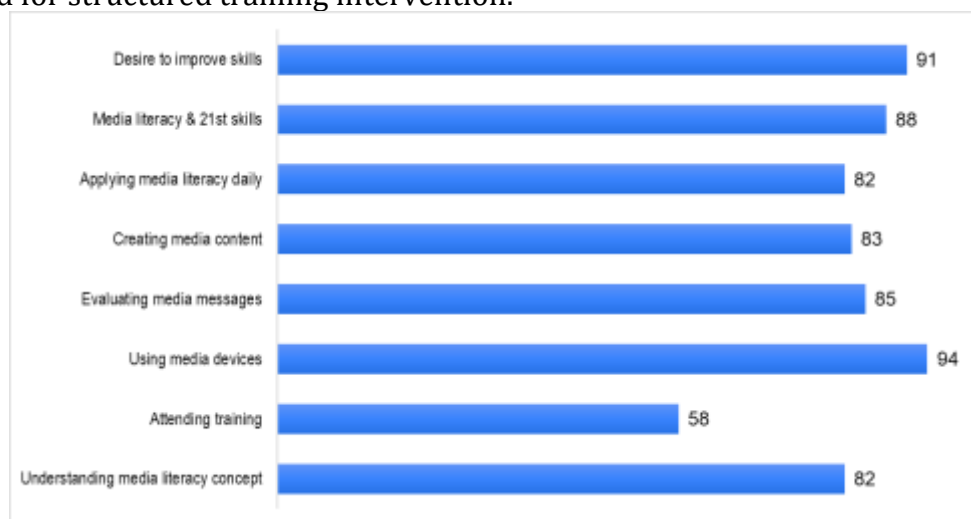


Figure 2. Current media literacy competence

The percentage is calculated from the proportion of the actual score to the maximum ideal score (100%). Figure 2 illustrates that although students possess sufficient capability in understanding, applying, evaluating, creating, and utilizing relevant media content, they exhibit a high interest in improving this connected mastery. Moreover, not every student has attended training or similar sessions on enhancing media literacy, as reflected in a 58% achievement score for this item. This continued in the open-ended question, where students provided dynamic answers regarding their current level of media literacy. Fifty students responded that the current media literacy among teacher-candidate students is good enough and leads to the development of phases. Students still need improvement in media literacy, as indicated by approximately 25 students, and 27 answers suggest that they need to improve their critical thinking in media literacy.

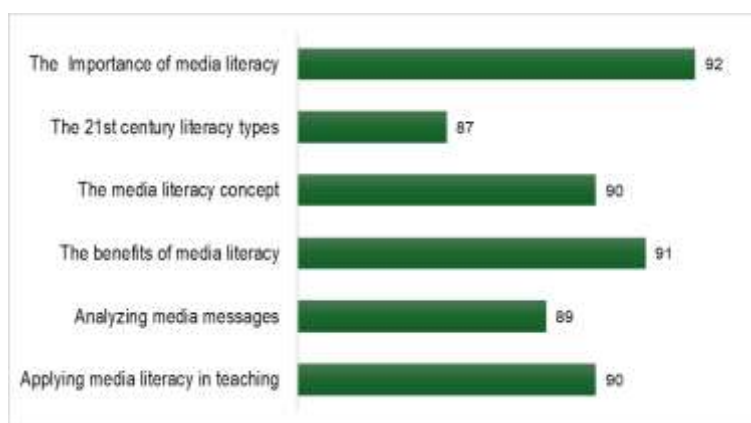


Figure 3. Knowledge Domain of Media Literacy

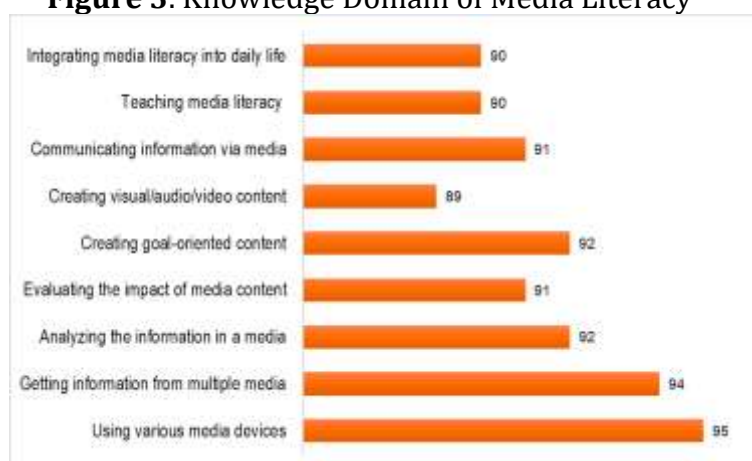


Figure 4. Skills Domain of Media Literacy

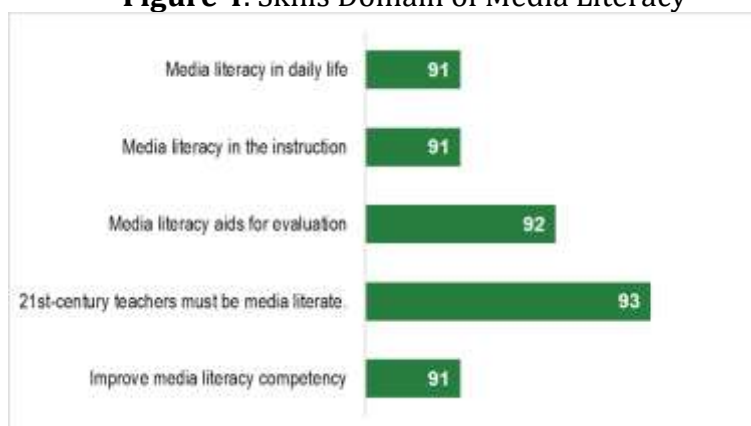


Figure 5. Affective Domain of Media Literacy

Figures 3, 4, and 5 present expected competencies across knowledge, skills, and attitudinal domains. In the knowledge domain, understanding the importance of media literacy ranked highest (92%), followed by understanding its benefits (91%), and both conceptual understanding and its application in teaching reached 90%. The narrow score range across items suggests preservice teachers view conceptual and applied knowledge as equally essential. In the skills domain, using various media devices ranked highest (95%), followed by accessing information from multiple sources (94%). Communicating through media and evaluating the impact of media content both reached 92%, while creating visual, audio, and video content received the lowest score in this domain (89%). Regarding attitudinal competencies, all items exceeded 91%. The belief that 21st-century teachers must be media literate scored highest (93%), followed by using media literacy

as an evaluation tool (92%). The desire to improve media literacy competence and integrate media into daily professional life each reached 91%. Open-ended responses further revealed that 47 students emphasized competence in creating technology-based learning media, 41 highlighted the need for analytical and evaluative skills toward media information, and 28 pointed to media ethics as a critical competency for teacher candidates.

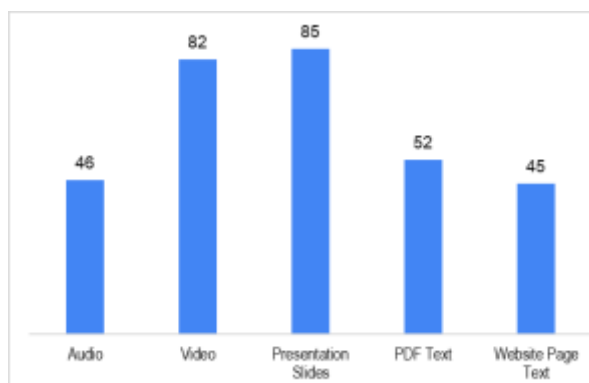


Figure 6. Training Materials

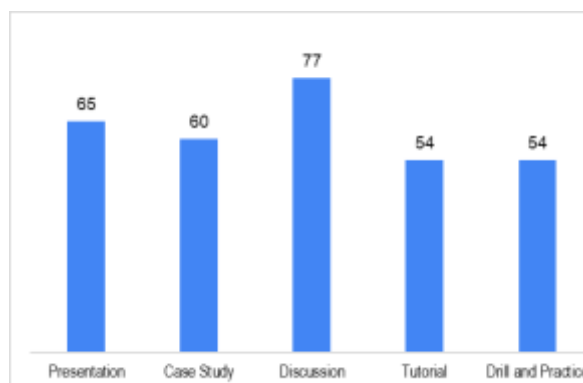


Figure 7. Training Methods

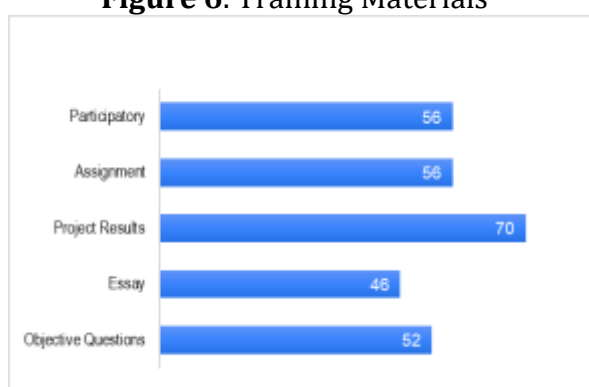


Figure 8. Assessment



Figure 9. Hours/Week

In terms of curriculum design, students prefer literacy media training that can be accessed online with user-friendly features, which alleviates the training process and achieves a 91% score fulfillment based on their responses. Students also indicate a strong need for training that can be accessed flexibly with the support of digital-based training modules. Regarding the training materials, delivery is tailored to two modes, with 82 preferences choosing the video and 85 preferences choosing the slide presentation, which experienced the highest demand. Regarding the training methods, 77 preferred a discussion-based approach, and the evaluation format was also favored for presenting project results at the end of the training, with 70 students responding. Moreover, more than half of the respondents expected to attend training sessions within 2 hours per week. We also delivered open-ended questions about what curriculum design is needed, and most of respondents voiced a desire for interactive and applicable materials with engaging delivery and easy-to-understand content in the online media literacy training.

The findings of the segmentation results showed that almost all study programs achieved above 90% in the indicators of relevant courses, digital device use, message evaluation, content creation, and 21st-century skills, indicating that most study programs have aligned with the current demands of media literacy. This resonates with the study by (Varghese & Kumar Arya, 2024) suggested that they have an average level of digital literacy skills. They even suggest that curriculum planners and policymakers make

regulations regarding digital literacy skills a part of the requirements for teacher recruitment. As we know, teachers are at the forefront of disseminating information to their students, and media literacy skills have become a prominent life skill that students should acquire (Dolanbay, 2022). It is widely acknowledged that today's students, who are generally exposed to digital media and technology, are highly skilled at creating digital content. Still, their future role as teachers requires incorporating this into best teaching practices. In other words, even though these pre-service teachers are from the digital generation, who have been familiar with technology and media since childhood, this does not mean that they are capable of converting this knowledge into effective pedagogical strategies (Mcnelly et al., 2023). This gap underscores the need for structured media literacy development specifically designed for future educators.

The mapping results suggest that preservice teachers already possess a general foundation of media literacy. As digital natives, they are capable of accessing media across various devices (List, 2019). However, they recognize that operational competence alone is insufficient understanding, analyzing, and evaluating information are equally essential skills for future educators tasked with cultivating critical media consumers (Trixa & Kaspar, 2024). The consistently low scores in formal media literacy training across programs reflect a structural gap: the absence of standardized media literacy requirements in teacher education curricula. The high demand for training, as evidenced across all competency dimensions, confirms that preservice teachers themselves recognize this gap and seek structured pathways to address it.

The pre-service teachers also demonstrated a strong need for knowledge-based competence regarding the importance of media literacy. They have a high awareness that having media literacy is essential in this digital age. Correspondingly, teacher education programs are also aware that cultivating future educators' digital and media literacy is crucial for promoting critical thinking, selecting, creating, and sharing information (Hobbs, 2010). The high expectation scores across all knowledge items reflect an understanding that in an information environment prone to misinformation, the ability to analyze and interpret media messages is essential. Some of the valuable experiences include organizing communication, conducting continuous digital professional development, professional collaboration, and engagement, as well as creating, managing, modifying, and protecting digital resources (Reisoğlu & Çebi, 2020).

Pre-service teachers also recognized the importance of both possessing conceptual and practical competencies in media literacy. This implies that they not only need to have a general understanding of media literacy, but also how to apply it in their future classroom. For instance, helping their students analyze information, discussing current issues and trends with peers, conducting case studies, and producing educational content. In this regard, special attention must be given to teacher education programs for future teachers to align their actual competencies with the desired competencies in the educational setting (Tomczyk et al., 2023). This is essential to ensure that future educators possess matching competencies, including both conceptual knowledge and practical skills, regarding media literacy that they can bring to their future classrooms to foster critical and responsible media use among their students.

Regarding the skills domain, the pre-service teachers most need to access information through various devices, gather information from multiple media, and then analyze and create instructional content. Teacher candidates studied by Rofiah et al. (2024) also highlight their expectation to possess relevant competency skills within the digital ecosystem, which will enable them to address real challenges as future educators. The

skills will be beneficial for their future, such as using various devices to search for information, evaluating information, and engaging in critical analysis in an educational setting. Additionally, if exposed to media in any form, they should be able to curate credible information to support their professional work and pedagogical performance (Marais, 2023). These expectations span both hard skills producing videos, presentations, and infographics and soft skills such as critical judgment in evaluating and responsibly communicating information to future students.

The affective dimension captures preservice teachers' attitudes, values, and ethical awareness in engaging with and responding to media. Their high expectation scores reflect not only a desire to use and create media in instructional settings, but also a strong sense of professional identity as 21st-century educators who must be media literate. This aligns with the growing recognition that teachers need to continuously enhance media literacy as part of their professional and pedagogical development (Korona, 2024; Semenova & Sotnikova, 2021). In the context of the Indonesian national curriculum, which positions teachers as activators of critical thinking rather than mere knowledge transmitters, preservice teachers must develop the emotional and ethical capacity to translate media information into meaningful learning experiences for their future students (Kemendikdasmen, 2025).

Pre-service teachers were also invited to express their preferences for future curriculum design in training that can accommodate their required competency in media literacy. As digital natives, they appreciate the flexibility of accessing materials via video and slide presentations online. They prefer materials that are not only rich in substance but also visually engaging, aligning with current trends in learning media in both formats. They also like having discussions with peers to get insight and broader perspectives on the materials they learn together, similar to what has been conducted in modern MOOC (Massive open online courses). The delivery of personalized online learning modules in a "timely" manner could be an effective solution to integrate media literacy training into a "full curriculum (Mcnelly et al., 2023).

This implies that such training programs for future pre-service teachers need to boldly integrate various approaches and formats in delivering materials that cater to the characteristics of today's learners. Moreover, their choice of a project-based task indicates their desire to apply the knowledge they have acquired in authentic and real-world work. As explored by Gretter & Yadav (2018), teacher candidates expect to have explicit needs for better competencies in media and information literacy during their academic journey that will enable them to perform optimally as educators. These preferences become valuable for future training designers and developers to incorporate balanced theoretical and practical competencies in cultivating media literacy for future educators.

Implication for MOOC Design

The findings provide a direct empirical basis for a five-module MOOC framework. Across all competency dimensions, preservice teachers consistently reported high expectations that exceeded their current levels, confirming the need for structured training intervention. The notably low participation in formal media literacy training across most study programs further indicates that this gap is not being adequately addressed through existing curricula. Participants' preferences for video materials, discussion-based methods, project-based assessment, and flexible online access align directly with MOOC platform affordances and inform the pedagogical design of each module. Table X presents the proposed framework derived from these findings.

Table 5 Proposed MOOC Framework for Media Literacy Training of Preservice Teachers

Module Title	Basis from Findings	Learning Focus	Delivery Format
1 Media Literacy Concepts & Importance	Knowledge gap: 21st-century literacy types lowest at 87%	Core concepts, types, and importance of media literacy	Video lectures, slide-based reading
2 Media Analysis & Critical Evaluation	Knowledge gap: analyzing media messages (89%), applying in teaching (90%)	Analyzing and evaluating media messages and information	Discussion forum, case-based tasks
3 Media Content Creation for Teaching	Skills gap: creating visual/audio/video content lowest at 89%	Producing instructional media: video, infographics, presentations	Project-based tasks
4 Media Ethics & Responsible Use	28 open-ended responses on ethical media use	Ethical awareness and responsibility in media use	Discussion forum, case studies
5 Integrating Media Literacy in Teaching	Skills: teaching media literacy (89.5%), classroom integration (90.2%)	Designing media literacy learning activities for students	Capstone project

4. CONCLUSION

This study maps the core competencies of media literacy for pre-service teachers, examining their current competence, cognitive, and affective aspects, as well as the desired future design of the media literacy development program. Even students who highlight their current capability in media literacy still need enhancement in the core competencies that will stand for them in this rapidly changing modern digital society. They are aware that the combination of conceptual knowledge is as important as practical skills, as evidenced by accessing the media, understanding the information, analyzing and evaluating the messages, and applying them in various contexts. These should also be accompanied by their viewpoints and responses to the media as they become future teachers in the 21st century, especially when accessing learning resources and creating learning media for their future pupils. These revealed needs contribute to future programs in pre-service or teacher professional development, incorporating such vital findings into their programs and preparing educators with the necessary media literacy. Additionally, participants in this study express their preference for how the designed curriculum for media literacy is expected to be delivered, with a focus on visually engaging material delivery, training methods that incorporate active discussion and project-based activities, and a preferred short duration of the training. This can contribute to teacher education programs by adapting similar training models to effectively integrate diverse approaches and strategies for conducting media education that are meaningful and relatable to contemporary educational training methods.

Despite these contributions, this study has several limitations. Data were collected from a single university, which restricts the generalizability of findings to broader preservice teacher populations. Additionally, the instrument relied on self-report measures, meaning responses reflect participants' perceptions rather than objectively assessed competence levels. Comparative analyses across study programs and inferential statistical testing were beyond the scope of this study's descriptive mapping objectives. Future research is encouraged to employ larger, multi-institutional samples, incorporate performance-based assessments, and conduct comparative analyses across program types to build on the foundational mapping provided here.

Finally, this research contributes empirical grounding for teacher education programs seeking to integrate media literacy training in a systematic and needs-based manner. By aligning identified competency gaps with evidence-based curriculum design preferences, the findings offer a replicable framework for developing targeted MOOC-based training that prepares future educators to navigate and teach in an increasingly complex digital media landscape.

5. AUTHORS' NOTE

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