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ANALYSIS OF THE GAP IN SCRIPTWRITING AND VIDEO PRODUCTION SKILLS: A CASE STUDY OF THE VIDEO AND TV MEDIA DEVELOPMENT COURSE

F. MAIZIANI[1], MUSTAJI[2], A. MARIONO[3]

[1]INDONESIA, SURABAYA, DOCTOR CANDIDATE, DEPARTMENT OF EDUCATIONAL TECHNOLGY, UNIVERSITAS NEGERI SURABAYA, EMAIL: fitri.22020@mhs.unesa.ac.id, ID ORCID: 0009-0006-2325-4806
[2]INDONESIA, SURABAYA, PROFESSOR, DOCTOR OF EDUCATION, DEPARTMENT OF EDUCATIONAL TECHNOLGY, UNIVERSITAS NEGERI SURABAYA, E-MAIL: mustaji@unesa.ac.id, ORCID ID: 0000-0003-1748-2707
[3]INDONESIA, SURABAYA, DOCTOR, ASSOCIATE PROFESSOR, DEPARTMENT OF EDUCATIONAL TECHNOLGY, UNIVERSITAS NEGERI SURABAYA, E-MAIL: andimariono@unesa.ac.id, ORCID ID: 0000-0002-7746-1038

Abstract

Introduction. A significant disparity exists between students' scriptwriting and video production competencies in the Video and TV Media Development course. This study seeks to ascertain the fundamental variables leading to this disparity by assessing lecturer qualifications, available learning resources, and instructional execution.

Study participant and methods. The participants in this study were fifth-semester students of the Educational Technology program who were enrolled in the Media Video and Television Development course, totaling 125 individuals. The students were involved in providing assessments of lecturer performance by completing a structured questionnaire. In addition, the study also included three lecturers responsible for teaching the course, whose performance was evaluated by the program's monitoring and evaluation (Monev) team and whose teaching activities were observed in each class. A mixed-methods approach was employed to collect data, incorporating document analysis from the Monev reports, student questionnaires, interviews, and classroom observations of the learning activities.

Results. The findings reveal that while lecturers received excellent ratings for pedagogical preparation (average >85%) and students reported satisfaction with teaching quality (average >90%), the existing instructional tactics are inadequate for effectively engaging students in practice-based learning. Furthermore, although the institution offers vital resources—including a Learning Management System (LMS) and laboratory apparatus—their incorporation into the educational process is inadequate.

Conclusion. These findings indicate the necessity for a restructured educational framework customized to the cognitive and technical requirements of media production education. The study advocates for additional research on the development of instructional models tailored to media-based courses to address the reported skill gap.

Keywords: Learning Gap, Script Writing, Video Production, Educator, Learning Resources, Learning Implementation

INTRODUCTION

Technology has become an essential component in the evolution of contemporary education, especially in facilitating online and blended learning methods [1]. A significant advancement in this regard is the Learning Management System (LMS) [2]. The widespread adoption of LMS has intensified, particularly during the COVID-19 epidemic, as nearly all educational institutions embraced online and blended learning to maintain the continuity of education [3]. At the university level, the mandate to enhance the utilization of LMS has become standard across numerous academic programs, including the Video and TV Media Development course, which has incorporated LMS into a blended learning framework.

The LMS enables the dissemination of course materials in several formats (e.g., papers, presentations, PDFs) and permits instructors to incorporate visual and audio-visual components, such as photographs and videos, via direct uploads or link embedding. This visual material functions as a significant supplementary educational resource for students. The adaptability of learning via the LMS, both synchronous and asynchronous [4], affords students the liberty to access resources at any time and from any location, hence enhancing activity, engagement, and the quality of learning [5]. In the Video and TV Media Development course, students will have enhanced access to scriptwriting and video production resources through unrestricted availability of materials supplied by instructors and instructional videos on the LMS. This method is expected to enhance the quality of learning and academic performance.

Nonetheless, the actual situation presents considerable obstacles. Despite its integration with the Learning Management System (LMS) to enhance flexibility and accessibility, course assessments throughout three academic terms (2019–2021) continuously revealed a significant disparity between students' competencies in scriptwriting and video production. This phenomena is manifested by students who excel in scriptwriting yet encounter difficulties in video production, or conversely. This difference is significant as both abilities are fundamental learning outcomes of this course; students are anticipated to compose educational video scripts and execute them through educational video production.

The skills gap is a pressing concern that necessitates comprehensive examination. If neglected, it jeopardizes pupils' ability to get a comprehensive understanding, resulting in an incomplete learning experience. Consequently, essential inquiries emerge:

1) Does the core reason of this issue originate from the efficacy of the instructional methods, despite the lecturers being typically proficient?
2) Are there concerns regarding sufficient facility support and educational resources?
3) Are there more elements that impede the transfer of information and abilities from theory to practice?

The current literature frequently analyzes media growth from a disjointed viewpoint. Numerous studies concentrate solely on scriptwriting pedagogy in higher education [6; 7], whereas other research teams emphasize the technical facets and obstacles associated with student video production [8; 9]. Conversely, research on the deployment of Learning Management Systems (LMS) in blended learning typically assesses effectiveness in generic terms, such as student engagement or satisfaction [10; 11], without examining their contribution to bridging specific practical skill deficiencies. While certain studies have addressed integrated media projects [12], a comprehensive examination of the fundamental causes of the mismatch between script conceptualization and production execution has to be undertaken. This research centers on the existing gap in the literature. This research seeks to address this gap through a thorough multifactorial analysis, encompassing the assessment of lecturer competency, facilities, and the learning process, to precisely pinpoint the origins of skill gap issues in the Video and TV Media Development course. In light of the aforementioned issues, the researcher concentrates this study on addressing the subsequent research questions:

1) To what degree is the proficiency of the lecturers instructing the Video and TV Media Development course?
2) What is the availability of learning resources in the Video and TV Media Development course?
3) What is the methodology employed in the Video and TV Media Development course for the learning process?

THEORETICAL BACKGROUND

1. The Role of Technology and LMS in the Transformation of Higher Education

Digital transformation in education has emerged as a significant driver for the adoption of learning technology, especially in online and hybrid learning formats [13] . In this context, Learning Management Systems (LMS) have grown as a crucial infrastructure that enables the cohesive dissemination of instructional materials, communication, and assessment [14]. The utilization of Learning Management Systems (LMS) surged significantly during and following the COVID-19 pandemic due to the demand for adaptable learning solutions [15].

LMS facilitates the dissemination of knowledge in several formats (text, presentations, audio-visual) and accommodates both synchronous and asynchronous learning [4] . This platform's flexible access, free from temporal and spatial limitations, can significantly enhance student engagement and enrich their educational experience [5]. Nonetheless, the efficacy of LMS in facilitating the acquisition of practical skills remains an unresolved issue in the research. Numerous studies analyze Learning Management Systems (LMS) in terms of user happiness or system efficiency [10; 11], without specifically assessing their role in developing intricate media abilities, such as scriptwriting and concurrent video creation.

2. Scriptwriting and Video Production Skills in Higher Education

Expertise in scriptwriting and video production is becoming increasingly important in higher education as digital learning advances. Students must not only understand the material but also be able to create a screenplay that is both effective and aligned with educational objectives [16]. The scriptwriting process fosters critical thinking skills and methodical preparation. Numerous students demonstrate proficiency in scriptwriting but encounter difficulties in translating their work into visual media via filming and video editing. This discrepancy often stems from inadequate manufacturing practices in the curriculum [17]. However, proficiency in video production, encompassing filming, editing, and integrating multimodal content, is crucial for enhancing students' digital literacy [18]. Project-based learning techniques and the TPACK framework have proven effective in integrating conceptual and technical aspects in video production [19]. Thus, the curriculum design must attain a balance between scriptwriting and production skills to effectively prepare students for the challenges of 21st-century visual communication [20].

3. The Gap in Knowledge and Skill Transfer in Media Learning

A primary issue in skill-based instruction is reconciling theory with practice [21]. The mismatch in skills between scriptwriting and video production evident in the Video and TV Media Development course indicates a deficiency in the holistic transfer of knowledge [22]. Prior work often examines this topic within distinct domains; the majority emphasize instructional design elements in scriptwriting [23], whereas some underscore technological limitations in the production process [24]. To far, few studies have thoroughly assessed the effective integration of these two domains within a single course, especially in the context of Learning Management System (LMS)-based education [25]. This circumstance signifies a substantial deficiency in the literature [26; 27]. The scant study investigating the origins of this disparity through a multifactorial lens—encompassing instructor proficiency, the efficacy of LMS utilization, and the architecture of learning syntax—suggests a necessity for more comprehensive scientific intervention [28]. Consequently, empirical research investigating the interplay among these components is essential for developing learning strategies that harmonize theory and practice [29]. This comprehensive integration is anticipated to improve the efficacy of digital media skills development in higher education [30].

4. The Importance of Comprehensive Evaluation in Instructional Development

According to a number of studies, creating an effective media learning program necessitates a synthesis of the instructional methods, supporting resources, and teaching quality [31]. The success of skill mastery is greatly influenced by the availability of learning materials, the pedagogical and technological proficiency of lecturers, and the structure of learning syntax. However, there hasn't been much empirical research done on structured assessments of how these components interact within a learning ecosystem. A more thorough understanding of the elements that either facilitate or impede the acquisition of comprehensive media skills is thought to be possible through an approach that combines quantitative data (questionnaires, documentation) and qualitative data (interviews, observations).

5. Identification of Gaps and Research Justification

The literature study identifies two primary gaps: the absence of studies examining the correlation between lecturer competence, learning materials, and instructional implementation in mitigating deficiencies in writing and media production skills. The absence of studies specifically investigating the role of LMS in cohesively bridging practical skills, rather than only serving as a medium for content distribution. This study is essential to address the gap by presenting a thorough multifactorial analytical approach to discover the underlying causes of skill integration failure in media learning, specifically in the Video and TV Media Development course.

RESEARCH METHODS

In accordance with the aforementioned problem description, the researcher delineates the study approach to address and resolve the identified concerns as follows:

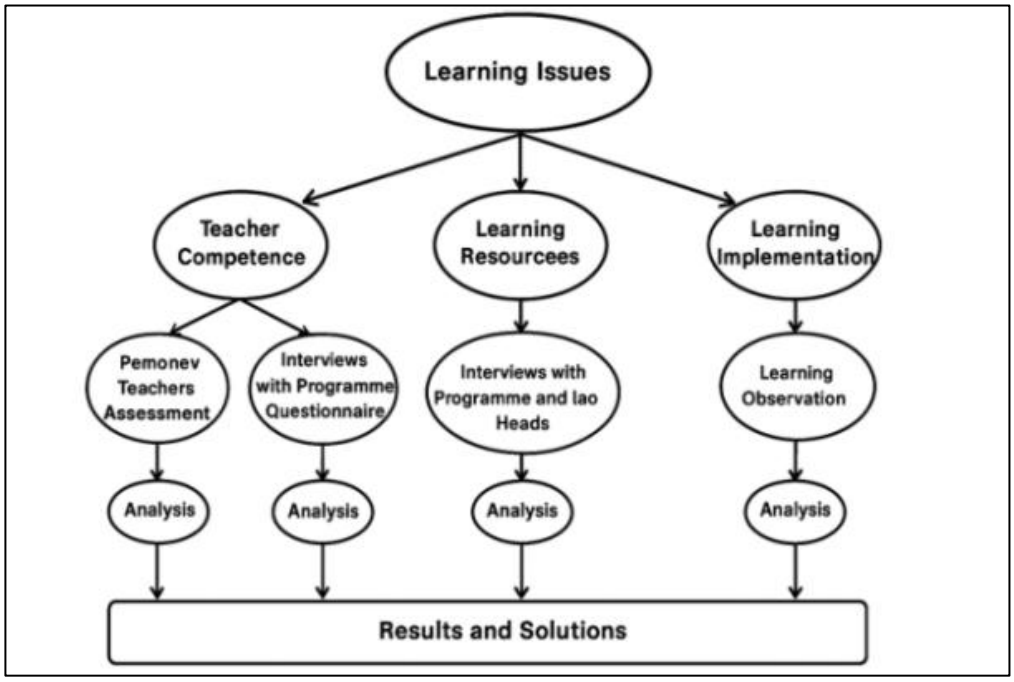

Figure 1. The research method flow

This study used a mixed-methods approach, integrating qualitative and quantitative techniques. The study seeks to address three research topics, with the data collecting and analytic methods for each question outlined as follows:

1) What is the proficiency level of lecturers in the Video and TV Media Development course?

Data collecting methods encompass documentation analysis and surveys. The documentation study employs monitoring and assessment data gathered by the Educational Technology study program for the Video and TV Media Development course. The data utilized originates from the odd semester of 2022 and will be examined through a descriptive qualitative methodology. Furthermore, to evaluate lecturer competence, the researcher gathered data via questionnaires administered to students. Students, as recipients of instructional services, are positioned to assess their instructors' effectiveness. A purposive sampling approach was employed to pick participants—students from three classes of the Video and TV Media Development course during the odd semester of the 2022/2023 academic year, with each class corresponding to one of the three course lecturers, comprising 25 students per class. The questionnaire employed a five-point Likert scale, and the acquired data were analyzed through a descriptive quantitative methodology.

2) What educational resources are accessible in the Video and TV Media Development course?

To address this study inquiry, the investigator conducted interviews with the Head of the Educational Technology Study Program and the Head of the Laboratory. The interview results were examined through a descriptive qualitative methodology.

3) How is the implementation of the learning process in the Video and TV Media Development course?

The methodology employed to tackle this inquiry involved an observation sheet to assess the learning process throughout four class sessions: sessions 9, 10, 13, and 14. The researcher also performed a documentation study of learning activities documented in the LMS. The gathered data were examined employing a descriptive qualitative methodology.

STUDY RESULTS

1. Lecturer Competence

The assessment of lecturer competence was obtained from two sources: internal peer evaluation (Monitoring and Evaluation/Monev) conducted by the study program, and student questionnaires.

Table 1. Monitoring and evaluation data on the assessment of lecturers in the video and TV media development course

No	Assessment Aspect	Lecturer 1	Lecturer 2	Lecturer 3	Average Percentage
1	Learning Preparation	89%	93%	95%	92.5%
2	Relevance of Material Delivery to Lesson Plan	87%	82%	85%	84.6%
3	Provision of Learning Resources and Media	95%	87%	92%	91.3%
4	Classroom Management	90%	92%	82%	88%
5	Implementation of Learning Evaluation	90%	90%	90%	90%
Average Lecturer Evaluation Percentage		**90.2%**	**88.8%**	**88.8%**	
Evaluation Criteria		Meets Criteria	Meets Criteria	Meets Criteria	

Source: Data for monitoring and evaluation (Monev) of the Video and TV Media Development course, odd semester of the 2022/2023 academic year.

The Monev data (Table 1) showed that all three lecturers met the performance criteria, with average scores above 88%. Lecturer 1 achieved 90.2%, while Lecturers 2 and 3 both scored 88.8%. The assessed components included lesson preparation, material relevance, provision of resources, classroom management, and evaluation implementation.

Table2. Student Evaluation Data on Lecturer Performance in the Video and TV Media Development Course (Odd Semester, Academic Year 2022/2023)

No	Evaluation Aspect	Lecturer 1	Lecturer 2	Lecturer 3	Average Percentage
1	Teaching Method	98%	97%	97%	97.3%
2	Clarity of Material	95%	98%	97%	96.6%
3	Use of Media	90%	90%	90%	90%

No	Evaluation Aspect	Lecturer 1	Lecturer 2	Lecturer 3	Average Percentage
4	Interaction with Students	88%	85%	89%	87.3%
5	Discipline	93%	95%	90%	92.66%

The student evaluation data (Table 2) further confirmed these results. Across three classes (n=75), students rated teaching methods (97.3%), clarity of material (96.6%), use of media (90%), interaction (87.3%), and discipline (92.7%) at high levels. These findings indicate that lecturer performance in the Video and TV Media Development course was consistently strong from both institutional and student perspectives.

2. Availability of Learning Resources and Media

Interviews with the Head of the Laboratory and the Head of Study Program revealed that the course was supported by adequate learning facilities. The laboratory was equipped with 30 PCs, cameras, lighting kits, and audio-visual equipment. Although only 30% of class meetings (sessions 6, 7, 13, and 14) took place in the laboratory, students could borrow equipment for three days to support group-based projects.

The university's Learning Management System (LMS) was actively used to distribute course materials (PowerPoint slides, examples of scripts, YouTube videos) and manage assignments. However, no instructional videos specifically designed by lecturers for this course were available; instead, students accessed general resources from external platforms.

3. Implementation of the Learning Process

Observations were conducted in three classes (A, B, and C) across four sessions.

Scriptwriting (Sessions 9–10): In Classes A and B, students worked in small groups, but only two to three members actively participated in writing scripts. Other members focused on future production roles, leading to unequal engagement. In Class C, all students wrote scripts individually; the lecturer then selected the best scripts for group production.

Video Editing (Session 13): Editing was performed by a limited number of students (two to three per group in Classes A and B; four students in Class C). **Video Production Presentation (Session 14):** In Classes A and B, groups divided responsibilities (camera, lighting, sound, directing). However, spontaneous skill tests showed that only designated camera operators could perform techniques, while others lacked competence. In Class C, one collaborative video was produced, but many students had no clearly defined roles.

LMS activity data showed that in Classes A and B, only group representatives submitted assignments, while in Class C, each student submitted individually. This indicates low individual engagement in blended learning activities.

DISCUSSION

The results demonstrate that the skill gap between scriptwriting and video production cannot be attributed to lecturer competence or the lack of learning resources. Both institutional evaluations and student feedback confirmed high teaching quality, and the availability of laboratory facilities and LMS support was adequate. These findings align with previous studies emphasizing that professional development and infrastructure alone are insufficient to guarantee effective learning outcomes in practice-based courses .

Instead, the observed gap arises primarily from the implementation of instructional methods. The reliance on small-group cooperative learning in Classes A and B resulted in fragmented participation, where students mastered only their assigned tasks without gaining holistic competence. This corroborates prior findings that cooperative learning, while beneficial in many contexts, may not ensure comprehensive skill development in courses requiring both creative and technical mastery [32; 33; 34]. Similarly, the large-group approach used in Class C limited students' active involvement. Although it reduced resource constraints, it often led to unclear roles and passive participation, consistent with critiques of large-group collaborative formats in higher education [33].

Blended learning practices also showed weaknesses. While the LMS provided access to course materials, student engagement remained low, as indicated by minimal assignment submissions. This suggests that blended learning was implemented more as a content delivery system rather than an interactive learning environment, echoing earlier studies highlighting the limited role of LMS in fostering practical skill acquisition [35; 36; 37].

Taken together, these findings highlight that the root cause of the scriptwriting–production skill gap lies in instructional design. Both cooperative and large-group models failed to engage all students across the full cycle of learning activities. Without integrated participation, students only acquire partial competencies—scriptwriters lack production skills, and editors lack scriptwriting competence.

To address this, future course design should incorporate **collaborative learning models** that ensure joint participation in all stages—scriptwriting, shooting, editing, and final production. Collaborative approaches have been shown to enhance knowledge sharing, digital literacy, and critical thinking in media-based learning [38; 39].

Furthermore, the development of **instructional videos specifically designed for this course** could provide consistent references for students, bridging theoretical instruction with practical demonstration [40; 41; 42].
In summary, the key challenge in the Video and TV Media Development course is not lecturer quality or resource limitations but the **ineffectiveness of current learning methods**. A redesigned instructional model that integrates collaborative learning with tailored instructional media is required to bridge the gap between scriptwriting and video production competencies.

CONCLUSION

Based on the results and discussion above, the researcher attempts to answer the research questions with the following conclusions:
1) The evaluation results from both internal reviewers and students concerning the teaching competencies of lecturers in the "Video and TV Media Development" course were highly favorable. The internal reviewers assigned the following average scores for the three lecturers: lesson preparation 92.5%, alignment of material delivery with the course syllabus (RPS) 84.6%, provision of learning resources and media 91.3%, classroom management 88%, and implementation of learning assessments 90%. The reviewers assessed the results and determined that all three lecturers fulfilled the criteria for effective teaching implementation. Additionally, the findings from student questionnaires revealed elevated average ratings for the three lecturers across several dimensions: teaching method at 97.3%, clarity of material at 96.6%, use of media at 90%, interaction with students at 87.3%, and discipline at 92.66%;
2) The implementation of learning in the "Video and TV Media Development" course has been effectively supported with sufficient learning resources. The university offers a range of learning resources, including the LMS for blended learning and laboratory equipment, which are vital tools for student education;
3) The instructional approaches implemented in the "Video and TV Media Development" course have proven insufficient in enhancing student learning engagement.
Based on the answers to the research questions above, it can be concluded that the main issue in the learning process of the Media Video and TV Development course lies in the ineffectiveness of the current learning methods. Therefore, the researcher recommends redesigning the learning syntax to better align with the specific learning needs of this course. In order to prevent students from learning only in fragments, it is necessary to implement learning syntax that engages all students in every learning activity. The researcher recommends integrating collaborative learning into the course's learning syntax. This aims to ensure that students learn together at every step of the learning process. Through collaborative activities, students are able to exchange information, share knowledge and experiences, and generate ideas together in formulating a video script and collaborating in the shooting process. To design learning syntax that aligns with the needs of this course, the development of a learning model can be undertaken. In addition, through the development of a learning model, it is also possible to develop instructional media that suit the learning needs.

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REFERENCES

1. B. D. Rodney. (2020). Understanding the paradigm shift in education in the twenty-first century: The role of technology and the Internet of Things. Worldwide Hospitality and Tourism Themes, 12(1), 35–47. DOI: 10.1108/WHATT-10-2019-0068
2. A. Kumar, R. Krishnamurthi, S. Bhatia, K. Kaushik, N. Jyothi Ahuja, A. Nayyar. (2022). Blended Learning Tools and Practices: A Comprehensive Analysis. IEEE Access, 9, 85151–85197. DOI: 10.1109/ACCESS.2021.3085844
3. Y. Cui, Z. Ma, L. Wang, A. Yang, Q. Liu, S. Kong, H. Wang. (2023). A survey on big data-enabled innovative online education systems during the COVID-19 pandemic. Journal of Innovation & Knowledge, 8(1), 1-18. DOI: 10.1016/j.jik.2022.100295
4. C. Müller, T. Mildenberger, and D. Steingruber. (2023). Learning effectiveness of a flexible learning study programme in a blended learning design: why are some courses more effective than others? International Journal of Educational Technology in Higher Education, 20(1), 1-25. DOI: 10.1186/s41239-022-00379-x
5. L. D. S. Lapitan Jr, A. L. A. Chan, N. S. Sabarillo, D. A. G. Sumalinog, and J. M. S. Diaz. (2023). Design, implementation, and evaluation of an online flipped classroom with collaborative learning model in an undergraduate chemical engineering course. Education for Chemical Engineers, 43, 58–72. DOI: 10.1016/j.ece.2023.01.007
6. A. S. Parihar. (2020). Script writing for ‘short video’ with New Media skills. Global Media Journal-Indian Edition, 12(2), 2249–5835. Retrieved from https://gmj.manipal.edu/issues/december2020/Anita%20Parihar.pdf

7. K. Heinonen, N. De Grez, R. Hämäläinen, B. De Wever, and S. van der Meijs. (2020). Scripting as a pedagogical method to guide collaborative writing: university students' reflections. Research and Practice in Technology Enhanced Learning, 15(1), 1-20. DOI: 10.1186/s41039-020-00131-x
8. P. Hakkarainen. (2009). Designing and implementing a PBL course on educational digital video production: lessons learned from a design-based research," Educational Technology Research and Development, 57(2), 211–228. DOI: 10.1007/s11423-007-9039-4
9. L. Shafirova and D. Cassany. (2024). Challenges of introducing video production tasks into the classroom. Technology, Pedagogy and Education, 33(1), 73–86. DOI: 10.1080/1475939X.2023.2271931
10. H. Balalle. (2024). Exploring student engagement in technology-based education in relation to gamification, online/distance learning, and other factors: A systematic literature review," Social Sciences & Humanities Open, 9, 100870. DOI: 10.1016/j.ssaho.2024.100870
11. T. T. Goh and B. Yang. (2021). The role of e-engagement and flow on the continuance with a learning management system in a blended learning environment," International Journal of Educational Technology in Higher Education, 18(49), 1-23. DOI: 10.1186/s41239-021-00285-8
12. S. Castillo, K. Calvitti, J. Shoup, M. Rice, H. Lubbock, and K. H. Oliver. (2021). Production Processes for Creating Educational Videos. CBE—Life Sciences Education, 20(2), p. es7,1-es7,12. DOI: 10.1187/cbe.20-06-0120
13. Shard, D. Kumar, and S. Koul. (2024). Digital transformation in higher education: A comprehensive review of e-learning adoption. Human Systems Management, 43(4), 433–454. DOI: 10.3233/HSM-230190
14. Y. Liu, A. Thurston, and X. Ye. (2024). Technology-enhanced cooperative language learning: A systematic review. International Journal of Educational Research, 124, 102314. DOI: 10.1016/j.ijer.2024.102314
15. H. Zheng, F. Han, Y. Huang, Y. Wu, and X. Wu. (2025). Factors influencing behavioral intention to use e-learning in higher education during the COVID-19 pandemic: A meta-analytic review based on the UTAUT2 model," Education and Information Technologies, 30(9), 12015–12053. DOI: 10.1007/s10639-024-13299-2
16. V. Shure and P. Liljedahl. (2024). The use of a scriptwriting task as a window into how prospective teachers envision teacher moves for supporting student reasoning. Journal of Mathematics Teacher Education, 27(3), 411–440. DOI: 10.1007/s10857-023-09570-x
17. N. E. Beaumont. (2021). Creative Videomaking in Diverse Primary Classrooms: Using Drama and Technology to Enhance Oral and Digital Literacy. Education Sciences, 15(4), 1-26. DOI: 10.3390/educsci15040428
18. S. Kaperonis. (2021). Media literacy in video production. An experiment with university students. Homo Virtualis, 4(1), 17–25. DOI: 10.12681/homvir.27345
19. K. Papanikolaou, K. Makri, and P. Roussos. (2017). Learning design as a vehicle for developing TPACK in blended teacher training on technology enhanced learning. International Journal of Educational Technology in Higher Education, 14(34), 1-14. DOI: 10.1186/s41239-017-0072-z
20. B. R. Robin. (2008). Digital Storytelling: A Powerful Technology Tool for the 21st Century Classroom. Theory Into Practice, 47(3), 220–228. DOI: 10.1080/00405840802153916
21. F. Baier, C. Maurer, C. Dignath, and M. Kunter. (2021). Fostering pre-service teachers' theoretical knowledge application: studying with and without text-based cases. Instructional Science, 49(6), 855–876. DOI: 10.1007/s11251-021-09560-7
22. L. Berkeley. (2009). Media education and new technology: A case study of major curriculum change within a university media degree. Journal of Media Practice, 10, 185–197. DOI: 10.1386/jmpr.10.2-3.185_1
23. D. Hughes. (2023). The case for team-based learning in higher education scriptwriting programmes: A narrative literature review. Journal of Screenwriting, 14(1), 59–73. DOI: 10.1386/josc_00115_1
24. P. Hakkarainen. (2009). Designing and implementing a PBL course on educational digital video production: lessons learned from a design-based research. Educational Technology Research and Development, 57(2), 211–228. DOI: 10.1007/s11423-007-9039-4
25. Y. K. Chan, J.-E. Oh, and H. Ma. (2023). Using open educational resources in studio-based flipped classrooms: action research in video production learning. Smart Learning Environments, 10(54), 1-19. DOI: 10.1186/s40561-023-00275-5
26. C. Snelson. (2018). Video production in content-area pedagogy: a scoping study of the research literature. Learning, Media and Technology, 43, 1–13. DOI: 10.1080/17439884.2018.1504788
27. E. Navarrete, A. Nehring, S. Schanze, R. Ewerth, and A. Hoppe. (2025). A Closer Look into Recent Video-based Learning Research: A Comprehensive Review of Video Characteristics, Tools, Technologies, and Learning Effectiveness. International Journal of Artificial Intelligence in Education, 1–64. DOI: 10.1007/s40593-025-00481-x
28. J. Mella-Norambuena, A. Chiappe, and M. G. Badilla-Quintana. (2024). Theoretical and empirical models underlying the teaching use of LMS platforms in higher education: a systematic review. Journal of Computers in Education, 12, 997-1023. DOI: 10.1007/s40692-024-00336-9
29. S. Bennett et al. (2007). Learning designs: Bridging the gap between theory and practice. Faculty of Education - Papers. Retrieved from https://www.researchgate.net/publication/30388307

30. U. Haryaka and N. Khadijah Razak. (2025). Integrating Digital Literacy, Critical Thinking, and Collaborative Learning: Addressing Contemporary Challenges in 21st Century Education. Journal of Hunan University Natural Sciences, 52(3). DOI: 10.55463/issn.1674-2974.52.3.9
31. H. Akram, A. H. Abdelrady, A. S. Al-Adwan, and M. Ramzan. (2022). Teachers' Perceptions of Technology Integration in Teaching-Learning Practices: A Systematic Review. Frontiers in Psychology, 13, 1-9. DOI: 10.3389/fpsyg.2022.920317
32. K. Adl-Amini, V. A. Völlinger, and A. Eckart. (2024). Implementation quality of cooperative learning and teacher beliefs—a mixed methods study," European Journal of Psychology of Education, 39(3), 2267–228. DOI: 10.1007/s10212-023-00769-3
33. J. Kilpeläinen-Pettersson, P. Koskinen, A. Lehtinen, and T. Mäntylä. (2025). Cooperative Learning in Higher Education Physics – A Systematic Literature Review. Int J Sci Math Educ, 0123456789. DOI: 10.1007/s10763-024-10538-3
34. Y. Liu, A. Thurston, and X. Ye. (2024). Technology-enhanced cooperative language learning: A systematic review. Int J Educ Res, 124, 102314. DOI: 10.1016/J.IJER.2024.102314
35. M. Zhu, S. Berri, and K. Zhang. (2021). Effective instructional strategies and technology use in blended learning: A case study. Educ Inf Technol (Dordr), 26(5), 6143–6161. DOI: 10.1007/s10639-021-10544-w
36. J. Mella-Norambuena, A. Chiappe, and M. G. Badilla-Quintana. (2024). Theoretical and empirical models underlying the teaching use of LMS platforms in higher education: a systematic review. Journal of Computers in Education. 12, 997-1023. DOI: 10.1007/s40692-024-00336-9
37. T. T. Goh and B. Yang. (2021). The role of e-engagement and flow on the continuance with a learning management system in a blended learning environment. International Journal of Educational Technology in Higher Education, 18(49), 1-23. DOI: 10.1186/s41239-021-00285-8
38. L. Zheng. (2017). Facilitating Collaborative Learning Through Peer Assessment APP: A Case Study BT - Knowledge Building and Regulation in Computer-Supported Collaborative Learning. L. Zheng, Ed., Singapore: Springer Singapore, 129–144. DOI: 10.1007/978-981-10-1972-2_9
39. S. Mendo-Lázaro, B. León-del-Barco, E. Felipe-Castaño, M.-I. Polo-del-Río, and D. Iglesias-Gallego. (2018). Cooperative Team Learning and the Development of Social Skills in Higher Education: The Variables Involved. Front Psychol, 9, 1-11. DOI: 10.3389/fpsyg.2018.01536
40. G. Winslett. (2014). What counts as educational video?: Working toward best practice alignment between video production approaches and outcomes. Australasian Journal of Educational Technology, 30, 487–502. DOI: 10.14742/ajet.458
41. S. La Torre and J. C. Désiron. (2024). From Research to Practice: Are Multimedia Principles Present in Instructional Videos Used by Teachers in Science and History? Technology, Knowledge and Learning, 29(4), 1993–2016, 2024, DOI: 10.1007/s10758-024-09753-2
42. U. Rahmi, B. R. Fajri, and A. Azrul. (2024). Effectiveness of Interactive Content with H5P for Moodle-Learning Management System in Blended Learning. Journal of Learning for Development, 11(1), 66–81. DOI: 10.56059/jl4d.v11i1.1135