

ENHANCING VOCATIONAL EDUCATION: INTEGRATING LEVEL 6 OF THE SKKNI TO DEVELOP A SCREENCAST-BASED LEARNING KIT FOR THE AUDITING SUBJECT

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ABSTRAK

Perkembangan kebutuhan kompetensi profesional di bidang akuntansi menuntut pembelajaran Audit yang mengintegrasikan teori dengan kompetensi dunia kerja. Penelitian ini bertujuan mengembangkan dan memvalidasi perangkat pembelajaran berbasis *screencast* yang terintegrasi dengan SKKNI Level 6 Teknisi Akuntansi Ahli pada unit kompetensi M.692000.024.02. Penelitian menggunakan metode *Research and Development* (R&D) dengan model ADDIE yang meliputi tahap analisis, desain, pengembangan, implementasi, dan evaluasi. Subjek penelitian terdiri atas 63 mahasiswa Pendidikan Akuntansi semester tujuh Universitas Negeri Medan. Data dikumpulkan melalui angket validasi ahli, penilaian dosen, dan respons mahasiswa, kemudian dianalisis secara deskriptif kuantitatif. Penelitian ini difokuskan pada pengembangan dan validasi produk, sehingga uji kepraktisan dan efektivitas secara komprehensif belum dilakukan. Penilaian dosen dan respons mahasiswa digunakan sebagai informasi awal mengenai keterpakaian produk, sedangkan uji efektivitas memerlukan implementasi lebih luas dengan desain kuasi eksperimen untuk mengukur peningkatan kompetensi mahasiswa. Hasil penelitian menunjukkan bahwa perangkat pembelajaran memperoleh skor validasi sebesar 4,51 dari 5,00 dengan kategori sangat valid dan memiliki kesesuaian yang tinggi terhadap unit kompetensi SKKNI yang ditargetkan. Hasil validasi juga menunjukkan kelayakan teknis dan relevansi kontekstual media dalam menghubungkan konsep akademik dengan praktik audit. Dengan demikian, perangkat pembelajaran berbasis *screencast* terintegrasi SKKNI dinyatakan valid dan layak digunakan sebagai pendukung pembelajaran Audit berbasis kompetensi. Penelitian selanjutnya perlu melakukan uji kepraktisan dan efektivitas melalui implementasi yang lebih luas dan desain kuasi eksperimen serta mengintegrasikannya dengan *Learning Management System* (LMS).

Kata Kunci: Audit, Media Pembelajaran, Pembelajaran Berbasis Kompetensi, Pendidikan Vokasi, *Screencast*, SKKNI

ABSTRACT

The increasing demand for professional competencies in accounting requires Audit learning to integrate theoretical knowledge with workplace competencies. This study aimed to develop and validate *screencast*-based learning materials integrated with Level 6 Indonesian National Work Competency Standards (SKKNI) for Accounting Technicians, specifically competency unit M.692000.024.02. The study employed a Research and Development (R&D) method using the



ADDIE model, consisting of analysis, design, development, implementation, and evaluation. The participants were 63 seventh-semester Accounting Education students at Universitas Negeri Medan. Data were collected through expert validation questionnaires, lecturer assessments, and student responses and analyzed using descriptive quantitative analysis. This study focused on product development and validation; therefore, comprehensive practicality and effectiveness testing was not conducted. Lecturer assessments and student responses were used as initial information regarding product usability, while effectiveness testing requires broader implementation using a quasi-experimental design to measure improvements in students' competencies. The results showed that the learning materials obtained a validation score of 4.51 out of 5.00, categorized as highly valid, with a high level of alignment with the targeted SKKNI competency unit. The validation results also indicated the technical feasibility and contextual relevance of the media in connecting academic concepts with auditing practices. Thus, the SKKNI-integrated *screencast*-based learning materials are considered valid and suitable as supporting materials for competency-based Audit learning. Future research should conduct comprehensive practicality and effectiveness testing through broader implementation and a quasi-experimental design, as well as integrate the materials into a Learning Management System (LMS).

Keywords: *Auditing, Competency-Based Learning, Instructional Media, SKKNI, Vocational Education Screencast*

INTRODUCTION

Work competence is an important outcome of higher education because graduates are expected to possess not only theoretical knowledge but also the ability to apply knowledge in authentic professional contexts. In accounting education, this requirement has become increasingly important because developments in accounting practices and digital technologies require graduates to demonstrate technical, professional, and technology-related competencies that are relevant to workplace demands (Romadhoni & Pratama, 2024; Ramdani et al., 2026). Consequently, higher education needs to strengthen the alignment between learning outcomes and occupational competency requirements so that the competencies developed through academic learning are relevant to professional practice. In Indonesia, efforts to strengthen this alignment have also been implemented through accounting education activities based on the Indonesian National Work Competency Standards (SKKNI), including mentoring for Musyawarah Guru Mata Pelajaran (MGMP) groups to strengthen the relevance of learning to national competency standards (Sugihyanty et al., 2026).

SKKNI has an important role in connecting education with the world of work because it provides standardized competency requirements for specific occupational tasks. Integrating these standards into learning can shift the orientation of education from knowledge acquisition alone toward the development of competencies that can be demonstrated and applied in professional contexts. Evidence from SKKNI-based competency training in the cooperative sector shows that competency-oriented training can strengthen participants' technical skills and knowledge through practical application in occupational settings (Setyanto et al., 2024). This principle is consistent with the competency-based education approach, which emphasizes the achievement of clearly defined competencies through aligned learning experiences and assessment mechanisms (Jarrett et al., 2024). Thus, the integration of SKKNI into higher education learning provides a basis for strengthening the connection between academic learning outcomes and competencies required in professional practice.



However, competency standards cannot strengthen workplace alignment merely by being included in curriculum documents. Competency-based learning requires the translation of competency standards into learning objectives, learning activities, instructional resources, and assessment processes that enable students to demonstrate the targeted competencies. Studies of competency-based education emphasize that effective implementation requires clear competency definitions and alignment among curriculum, learning design, implementation, and evaluation (Chen et al., 2024; Jarrett et al., 2024). The development of appropriate learning tools is therefore essential because competency standards need to be transformed into concrete learning experiences that students can understand, practice, and demonstrate. This condition indicates that instructional innovation should not only focus on the delivery of academic content but also on how professional competencies can be represented and practiced within the learning process.

The need for such learning innovation is particularly relevant to Audit courses because audit competencies involve systematic and sequential procedures that students need to understand and apply. Students are required to understand not only audit concepts but also how audit activities are performed through specific stages and procedures. Conventional text-based explanations may not provide sufficient opportunities for students to observe the sequence of professional procedures in a concrete manner. Screencast offers an alternative because it combines computer-screen recording with verbal explanations, allowing students to observe a procedure while simultaneously receiving explanations of the activities being performed (Selirowangi, 2024). Previous research has demonstrated the potential of screencast as a medium for presenting procedural learning materials more concretely and supporting students' understanding of technical processes (Salim, 2025). Therefore, screencast has potential as an instructional medium for Audit learning, particularly for competencies involving sequential, technical, and application-oriented procedures.

The relevance of screencast is also strengthened by the increasing use of digital technology in education. Screencast allows visual displays, on-screen activities, and verbal explanations to be integrated into a single learning resource, thereby providing flexibility for students to observe and review procedures according to their learning needs. Research on the use of screencast in educational contexts indicates that this medium can support procedural learning and flexible access to learning materials, although its effectiveness depends on the quality of instructional design, the selection of relevant information, and the organization of the presentation (Ananta et al., 2025). Consequently, screencast should not be treated merely as a technological recording tool but should be designed according to the competencies and learning objectives that students are expected to achieve. This consideration is important because inappropriate presentation of multimedia information may increase learners' cognitive demands rather than facilitate understanding.

The theoretical foundation for using screencast can be explained through the Cognitive Theory of Multimedia Learning, which emphasizes that learners process information through visual and verbal channels. Appropriate integration of these representations can facilitate learners' construction of meaningful knowledge when the information is organized according to principles of human cognitive processing (Mayer, 2024). Recent analysis of multimedia learning theory further confirms its relevance to the development of digital learning media that combine visual and verbal information to support students' understanding (Zunidar et al., 2026). Accordingly, the development of screencast for Audit learning needs to consider not only the presence of visual and verbal elements but also their relevance, sequence, and relationship to the competencies being developed. The theoretical perspective therefore provides a basis for



positioning screencast as an instructional tool that can support competency development rather than merely as a medium for delivering information.

The urgency of strengthening competency-oriented Audit learning is further supported by the continuing gap between competencies acquired through academic learning and those required in the accounting workplace. Research on accounting students has identified discrepancies between students' existing competencies and the competencies required to respond to the development of Industry 4.0, indicating the need for accounting education to strengthen competencies that are relevant to contemporary professional practice (Romadhoni & Pratama, 2024). Similar concerns have been identified in relation to perceptions of the gap between students' academic competencies and workplace requirements, which reinforce the importance of aligning learning with professional demands and changes in the work environment (Ramdani et al., 2026). These conditions suggest that accounting education needs learning experiences that provide students with opportunities to connect theoretical concepts with the actual procedures and competencies required in professional settings.

In addition to competency gaps, curriculum alignment provides another important basis for integrating occupational standards into higher education learning. The implementation of competency-oriented curriculum frameworks, including curricula based on the Indonesian Qualifications Framework (KKNI), demonstrates the importance of connecting educational structures with competencies relevant to targeted occupational fields (Hermanto et al., 2024). In accounting education, this principle can be operationalized by mapping specific SKKNI competency units into learning objectives, learning materials, learning activities, and instructional media. Such mapping allows professional competency requirements to become more visible within the learning process and provides a clearer basis for designing learning experiences that are relevant to students' future occupational roles.

Within the Audit course, the integration of SKKNI can be specifically directed toward SKKNI Level 6 for Expert Accounting Technicians, particularly competency unit M.692000.024.02 concerning the implementation of the financial information audit process. This competency unit provides an occupational reference that can be translated into learning activities related to the implementation of financial information audit procedures. Mapping this competency unit into Audit learning enables students to encounter a clearer relationship among theoretical audit concepts, professional audit procedures, and occupational competency requirements. The integration of screencast into this framework further enables those procedures to be visualized through demonstrations, allowing students to observe the sequence of activities rather than relying solely on textual descriptions. Therefore, the combination of SKKNI and screencast provides a potential mechanism for transforming occupational competency requirements into concrete and accessible learning experiences.

Nevertheless, previous studies have predominantly examined competency-based learning, SKKNI-based training, and screencast as separate areas of inquiry. Studies concerning SKKNI have demonstrated the relevance of competency-based training to occupational skill development (Setyanto et al., 2024), while studies concerning competency-based education have emphasized the importance of aligning competencies, learning design, implementation, and assessment (Jarrett et al., 2024; Chen et al., 2024). Meanwhile, research on screencast has mainly emphasized its usefulness for presenting procedural and technical learning materials (Selirowangi, 2024; Salim, 2025; Ananta et al., 2025). Although these studies provide important foundations, limited attention has been given to the systematic integration of a specific national occupational competency unit into screencast-based learning for university-level Audit courses.



Consequently, the connection between SKKNI competency requirements, screencast-based procedural visualization, and Audit learning remains insufficiently developed.

This gap establishes the novelty of the present study. Rather than positioning screencast merely as a digital medium for presenting Audit materials, this study integrates screencast with SKKNI Level 6 competency requirements and uses the medium to visualize the professional procedures that students are expected to master. The learning tools are specifically developed by mapping competency unit M.692000.024.02, *Implementing the Financial Information Audit Process*, into Audit learning content, activities, and procedural demonstrations. This approach extends previous research by connecting occupational competency standards with a multimedia learning strategy within a higher education accounting context. The resulting learning design is therefore expected to provide a more explicit relationship between what students learn academically, what they observe procedurally, and what they are expected to demonstrate professionally.

Based on this research gap, the present study focuses on the development of screencast-based learning tools integrated with SKKNI Level 6 for Expert Accounting Technicians in the Audit course. The development is intended to produce learning tools that connect academic audit concepts, professional audit procedures, and occupational competency requirements through structured visual and verbal learning experiences. Specifically, this study aims to develop, validate, and assess the feasibility of screencast-based learning tools integrated with SKKNI Level 6 competency unit M.692000.024.02 in the Audit course. Through this integration, the study is expected to contribute to the development of Audit learning that is more contextual, competency-oriented, procedurally explicit, and responsive to the competencies required in the accounting workplace.

RESEARCH METHODOLOGY

This study employed a Research and Development (R&D) approach using the ADDIE model, consisting of Analysis, Design, Development, Implementation, and Evaluation stages, to develop, validate, and assess the feasibility of a screencast-based learning kit integrated with SKKNI Level 6 for Expert Accounting Technicians. The study was conducted in the Accounting Education Study Program, Faculty of Economics, Universitas Negeri Medan, during the 2025/2026 academic year. The participants were 63 seventh-semester students enrolled in the Auditing course and selected through total sampling based on their enrollment in the target course and absence from previous auditing practicum sessions. The development focused on competency unit M.692000.024.02, *Implementing the Financial Information Audit Process*. The Analysis stage identified learning needs and curriculum–industry gaps; the Design stage mapped SKKNI competencies to Audit learning objectives, materials, activities, and screencast content; the Development stage produced the learning kit and involved expert validation; the Implementation stage involved the revised product and practicality assessment; and the Evaluation stage involved analysis and final product refinement. Expert validation involved two validators, consisting of one material expert and one media expert. The material expert assessed content accuracy, Audit relevance, and SKKNI Level 6 alignment, while the media expert assessed screencast presentation, instructional design, and usability.

Three instruments were used: a preliminary needs-analysis questionnaire, an expert validation questionnaire, and a practicality questionnaire for the lecturer and students. The expert validation instrument consisted of 26 indicators and used a five-point Likert scale ranging from 1 (Very Inappropriate) to 5 (Very Appropriate), covering content accuracy and SKKNI alignment, media and instructional design, and practicality and classroom usability.

The practicality questionnaire assessed ease of use, clarity, accessibility, relevance to the Auditing course, SKKNI competency alignment, and usefulness for learning activities. Data were collected sequentially from needs analysis, product development, expert validation, revision, and practicality assessment. Quantitative data were analyzed descriptively using mean scores (M) and standard deviations (SD), with scores of 4.21–5.00 categorized as Very Valid/Appropriate, 3.41–4.20 as Valid/Appropriate, 2.61–3.40 as Moderately Valid, 1.81–2.60 as Invalid, and 1.00–1.80 as Very Invalid. Qualitative feedback from the validators was analyzed thematically and used to guide product revisions. All data collection procedures followed institutional research ethics requirements, and informed consent was obtained from participants before data collection.

RESULT AND DISCUSSION

Result

The development of the screencast-based learning kit integrated with SKKNI Level 6 was completed through the ADDIE development stages and focused on producing a learning resource for the Auditing course. Expert validation was conducted to evaluate the accuracy of the learning content, alignment with SKKNI Level 6, media and instructional design, and classroom usability. Two experts assessed the developed product using 26 indicators representing the main characteristics and requirements of the learning kit. The results indicated that the developed learning kit met the predetermined validity criteria and was considered suitable for further implementation after targeted revisions based on expert recommendations. To provide a clearer overview of the validation findings, Table 1 presents the assessment results for each evaluation aspect, including the scores provided by the two validators, the resulting mean scores, the corresponding categories, and the main recommendations for product revision.

Table 1. Expert Validation Results of the Screencast-Based Learning Kit

Evaluation Aspect	Validator 1	Validator 2	Mean Score (M)	Category	Key Recommendations for Revision
Content Accuracy and SKKNI Level 6 Alignment	4.60	4.55	4.58	Very Valid	Integrate local MSME/BUMD cases and update references to the latest PSAK standards
Media and Instructional Design	4.45	4.50	4.48	Very Valid	Apply Mayer's signaling principle and add chapter markers for segmented review
Practicality and Classroom Usability	4.50	4.55	4.53	Very Valid	Embed role-play simulation prompts and link activities to LMS quiz modules
Overall Feasibility	4.52	4.53	4.51	Very Valid	Proceed to further effectiveness testing

As shown in Table 1, all assessed dimensions were classified within the highest validity category established in the study. Content accuracy and SKKNI Level 6 alignment obtained the highest mean score of 4.58, indicating that the learning kit was considered highly appropriate

in representing the targeted competency requirements. Media and instructional design obtained a mean score of 4.48, while practicality and classroom usability obtained a mean score of 4.53. The overall feasibility score was 4.51 and was categorized as Very Valid. These findings demonstrate that the developed learning kit fulfilled the established validity criteria and was suitable for continued development following the recommended revisions.

The qualitative validation findings provided further information regarding aspects that required improvement. The auditing expert recommended strengthening the contextual relevance of audit procedures by incorporating financial cases that reflect the characteristics of local organizations and businesses. The expert also emphasized the importance of representing professional ethics so that students could relate technical audit procedures to professional responsibilities. These recommendations were considered important because the learning kit was intended to connect academic learning with occupational competencies specified in SKKNI Level 6.

The media expert's recommendations focused primarily on the technical and instructional characteristics of the screencast format. The expert suggested improving visual signaling, segmenting the learning content more clearly, and adding features that would facilitate independent and asynchronous learning. Additional recommendations included incorporating IT audit materials, project-based assessment activities, and connections with the learning management system. These suggestions were intended to improve navigation, accessibility, and the instructional value of the screencast-based learning materials.

Product Revision

Based on the quantitative and qualitative validation findings, targeted revisions were conducted before the final learning kit was established. The revisions included the addition of North Sumatra MSME and BUMD audit cases to strengthen contextual learning and the expansion of the IT audit component to reflect the increasingly digital nature of contemporary auditing practices. Role-play simulations were incorporated to provide opportunities for students to practice auditor–client interactions, while standardized audit working-paper templates were added to support procedural practice.

The revised learning kit also incorporated connections with professional institutions and industry contexts, updated references to relevant accounting and auditing standards, project-based learning activities, and targeted soft-skills development. These revisions transformed the experts' recommendations into concrete improvements in content, instructional design, practical activities, and professional orientation. The revision process also strengthened the connection between the screencast demonstrations and the competency requirements specified in SKKNI Level 6.

Practicality and Student Response

Following expert validation and product revision, the learning kit was prepared for implementation in the Auditing course. Practicality was intended to be assessed through lecturer responses and student responses to determine the usability, accessibility, clarity, relevance, and suitability of the learning kit in the actual learning context. The practicality assessment was designed to complement the expert validation by providing user-oriented evidence regarding the feasibility of the product. While expert validation primarily examined the quality and appropriateness of the learning kit, lecturer and student responses were intended to provide information regarding its use in the learning process. In particular, the practicality assessment focused on whether the screencast-based learning kit could facilitate students' access to audit



procedures, support understanding of the presented materials, and provide learning experiences consistent with the targeted SKKNI competencies.

Because the available results reported in this study are limited to the expert validation data presented in Table 1, numerical results for the lecturer practicality questionnaire and student response questionnaire are not reported separately in this section. No additional numerical values are introduced to avoid presenting results that are not supported by the available research data. The expert validation results nevertheless provide initial evidence that the learning kit was considered feasible for use and could proceed to further implementation and effectiveness testing.

Final Product

Following the validation and revision process, the final screencast-based learning kit represented an integrated learning resource combining academic Audit content, audit procedures, digital demonstrations, and competency requirements specified in SKKNI Level 6. The product was designed to enable students to observe audit procedures through visual demonstrations while connecting those procedures with professional competency requirements. The incorporation of contextual MSME and BUMD cases, IT audit materials, role-play simulations, standardized audit working-paper templates, project-based activities, and digital learning components strengthened the practical and professional orientation of the learning kit. These features also addressed the experts' recommendations concerning contextual relevance, procedural practice, digital auditing, professional interaction, and independent learning. Overall, the expert validation results indicate that the screencast-based learning kit achieved a Very Valid category, with an overall mean score of 4.51. The validation findings and subsequent product revisions indicate that the learning kit fulfilled the established requirements for content, SKKNI alignment, media and instructional design, and classroom usability. The final product was therefore considered ready for subsequent implementation and effectiveness testing to examine its potential contribution to students' audit competencies and readiness for professional practice.

Discussion

The expert validation results indicate that the screencast-based learning kit was considered highly valid because its instructional structure successfully connected audit content, procedural demonstrations, and SKKNI Level 6 competency requirements. The high validation scores should therefore not be interpreted simply as evidence that the product was technically well designed, but also as an indication that the content, media, and learning activities were sufficiently coherent with the intended professional competencies. This is important in Audit learning because competence involves the ability to understand and perform procedures rather than merely recall audit concepts. The use of screencast provides a mechanism for making procedural knowledge visible by showing the sequence of activities while explaining the rationale behind each stage. This interpretation is consistent with Muslichah et al. (2022), who demonstrated the suitability of screencast-based instructional media for presenting procedural learning materials in a structured manner. However, the present study extends this use by embedding procedural demonstrations within an occupational competency framework rather than using screencast only as a means of presenting technical content.

The high score for content accuracy and SKKNI Level 6 alignment can be explained by the explicit mapping of the learning kit to competency unit M.692000.024.02, Implementing the Financial Information Audit Process. The product was not developed by simply adding the



SKKNI document to the learning materials; instead, the competency requirements were translated into learning content and observable activities. The audit planning component was represented through explanations and demonstrations of the stages that students need to understand before performing audit procedures. Internal control evaluation was connected with the analysis of control procedures and the identification of relevant audit considerations. Audit program development and implementation were represented through sequential procedural demonstrations, while standardized working-paper activities provided opportunities for students to understand how audit evidence and procedures are documented. The reporting component was connected with the presentation of audit findings and the preparation of audit-related outputs. This mapping explains why SKKNI alignment received the highest validation score of 4.58: the competency standard was operationalized within the learning experience rather than functioning only as a curriculum reference.

The instructional design can also explain the strong assessment of the media and instructional design dimension. The screencast combines visual demonstrations, narration, signaling, and segmented presentation, allowing students to follow procedural information through complementary visual and verbal channels. Cavanagh and Kiersch (2023) demonstrated that commonly available technologies can be used to develop multimedia lessons based on the Cognitive Theory of Multimedia Learning, while Bechtold (2023) emphasized the role of social cues in directing learners' attention toward relevant information. In the present product, these principles were translated into visual signaling and segmented demonstrations that direct students toward critical stages of audit procedures. The use of these features is particularly important because an audit procedure contains multiple pieces of information that may compete for learners' attention. Thus, the high validation result for media and instructional design can be understood not simply as a consequence of the attractiveness of the screencast, but as a result of organizing information according to the procedural and cognitive demands of the Audit course.

The revision recommendations further demonstrate that validity was achieved through an iterative development process rather than through the initial product alone. The experts identified the need for stronger contextual cases, clearer visual organization, IT audit materials, role-play activities, and greater integration with digital learning environments. These recommendations indicate that a technically correct learning resource does not automatically provide an authentic professional learning experience. For this reason, the revised product incorporated North Sumatra MSME and BUMD audit cases, auditor-client role-play simulations, standardized audit working-paper templates, IT audit materials, project-based activities, and connections with professional and industry contexts. The revisions strengthened the relationship between what students observe in the screencast and what they may be expected to perform in professional practice. The process also demonstrates that the quality of competency-based learning depends on continuous refinement between competency requirements, instructional design, and authentic learning contexts.

The incorporation of role-play and communication activities represents another important distinction of the developed learning kit. Audit competence is not exclusively procedural or technical because auditors must communicate questions, explain findings, obtain information, and interact professionally with clients. Sele and Dewi (2022) found that screencast-based learning activities can support oral communication development, suggesting that screencast environments can be extended beyond passive observation. In the present study, this potential was developed further through role-play simulations that connect procedural audit knowledge with professional communication. The implication is that screencast becomes one



component of a broader learning sequence: students observe the procedure, interpret the professional situation, and then engage in activities that require them to apply the competency. This structure provides a stronger competency orientation than a learning design based exclusively on video consumption.

The integration of SKKNI into the learning kit is also consistent with the principles of competency-based education. Mani (2025) argues that competency-based education requires systematic curriculum review and revision so that learning activities are aligned with the competencies expected from learners. The present study operationalizes this principle at the instructional-resource level by translating a specific occupational competency unit into learning objectives, procedural demonstrations, contextual cases, practice activities, and assessment-oriented tasks. This distinction is important because previous competency-based approaches may operate primarily at the curriculum or program level, whereas the present product demonstrates how an occupational competency standard can be embedded directly into a learning resource used in a specific university course. The contribution is therefore not merely the use of SKKNI in Audit learning, but the development of a concrete instructional mechanism for making the competency standard observable within everyday learning activities.

The digital orientation of the product further strengthens its relevance to contemporary accounting education. Ferdian et al. (2026) emphasized the importance of digital competence among young accountants in responding to technological developments. The present learning kit addresses this need by combining accounting and auditing knowledge with technology-mediated demonstrations. However, the contribution should not be interpreted as evidence that the use of digital media alone produces digital competence. Rather, the value of the screencast lies in providing students with structured exposure to technology-supported audit procedures and digital ways of organizing professional work. The inclusion of IT audit materials is particularly relevant because it broadens the learning experience beyond conventional audit procedures and introduces students to the technological dimension of contemporary auditing.

This technological orientation is also supported by Widhyadanta and Luqyana (2026), who highlighted the importance of audit tools and digital technology in developing students' digital audit competencies. The present learning kit responds to this issue by incorporating IT audit materials and digital learning activities into the revised product. The distinction is that these technological elements are not presented as independent technology skills; they are positioned within the SKKNI-oriented audit competency framework. In this way, technology becomes a means of practicing professional competencies rather than the primary learning objective. This integration is particularly important for accounting education because students need to understand how digital tools support audit processes while maintaining the professional reasoning, documentation, and communication required of auditors.

The findings also have implications for students' broader preparation for employment. Thohiri et al. (2026) highlighted the relationship between digital business literacy and work readiness among accounting students, while Hutabarat et al. (2026) emphasized the relevance of technical competencies, accounting knowledge, and professional certification to employment preparation. These findings suggest that work readiness requires a combination of knowledge, technical competence, digital familiarity, and professional behavior. The present learning kit addresses several of these dimensions by combining conceptual Audit knowledge, procedural demonstrations, SKKNI-based competency requirements, digital learning activities, role-play, working-paper practice, and project-based tasks. Nevertheless, the current study provides evidence primarily regarding product validity and feasibility; it does not yet establish that these features produce measurable improvements in students' actual work readiness.



The practical orientation of the product is also consistent with Novianty et al. (2023), who demonstrated the relevance of competency training and certification in computerized accounting. However, the present study differs in that competency development is integrated into a formal university Audit course rather than being positioned primarily as an external training or certification activity. This distinction suggests that occupational competency standards do not necessarily have to be addressed separately from academic learning. Instead, they can be embedded into regular course materials and learning activities. Such integration may help reduce the separation between academic knowledge and professional competency development, particularly when learning resources are designed around authentic occupational procedures.

At the same time, the findings should be interpreted in light of the limitations of the study. First, the development was conducted within one Accounting Education Study Program and involved 63 seventh-semester students, which limits the generalizability of the findings to other institutions, student populations, and accounting education contexts. Second, the validation involved only two experts, so the assessment provides initial evidence of product validity rather than comprehensive evidence across a large panel of specialists. Third, the present findings primarily establish the validity and feasibility of the learning kit; they do not provide sufficient evidence to conclude that the product significantly improves students' audit competencies or work readiness. Finally, the practical impact of the product requires further examination through comparative or quasi-experimental designs involving pretest–posttest measures, control or comparison groups, and broader institutional samples.

These limitations point to several implications for future research and practice. For lecturers, the learning kit provides a model for translating occupational competency standards into concrete learning activities without separating professional competencies from academic course content. For curriculum developers, the explicit mapping between SKKNI competency units and instructional activities can serve as a basis for strengthening the alignment between course outcomes and workplace requirements. For future researchers, effectiveness studies are needed to determine whether the combination of SKKNI mapping, screencast demonstrations, contextual cases, simulations, and project-based activities produces measurable improvements in audit performance, digital audit competence, professional communication, and work readiness. DeBacker et al. (2024) emphasized the need for further research into the implementation and evaluation of competency-based education, which reinforces the importance of moving beyond product validation toward empirical evaluation of learning outcomes.

Overall, the contribution of this study lies in demonstrating how a specific occupational competency standard can be operationalized through a digital learning resource for university-level Audit education. The product differs from conventional screencast-based media because its content and learning activities are explicitly organized around SKKNI Level 6 competency requirements. It also differs from competency-based curriculum approaches that primarily establish competencies at the curriculum level because the present study translates those competencies into observable demonstrations, contextual cases, simulations, working-paper activities, and digital learning experiences. The high expert validation results therefore provide evidence that the integration of occupational standards, procedural visualization, and competency-oriented learning can produce a feasible instructional resource. Nevertheless, its effectiveness in producing actual improvements in students' competencies and work readiness remains an empirical question that should be addressed through subsequent effectiveness testing.



CONCLUSION

This study developed a screencast-based learning kit integrated with SKKNI Level 6 competency unit M.692000.024.02 for the Auditing course. Expert validation resulted in an overall mean score of 4.51, categorized as Very Valid, indicating that the learning kit met the established criteria for content accuracy, SKKNI alignment, media and instructional design, and classroom usability. The product revisions based on expert recommendations further strengthened the contextual relevance, procedural presentation, and professional orientation of the learning materials. The main contribution of the study is the integration of occupational competency requirements into a screencast-based learning resource for Audit instruction. The developed product provides a feasible instructional resource for presenting and visualizing audit procedures in accordance with SKKNI Level 6 requirements. However, the findings establish product validity and feasibility only and do not provide empirical evidence of its effectiveness in improving students' audit competencies or work readiness. Further research should therefore evaluate the learning effectiveness of the product through comparative or quasi-experimental studies involving broader student populations and measurable competency outcomes.

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