JPEB
Jurnal Pendidikan Ekonomi dan Bisnis
https://journal.psg.ac.id/index.php/jpeb

Vol. 1, No. 1, 2026
e-ISSN: XXXX-XXX
pp. 1-11

AI-Enhanced Vocational Training for Future Office Professionals: Integrating Digital Competence, Administrative Skills, and Workplace Readiness

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Article History:
Received: September 5, 2026
Revised: October 16, 2026
Accepted: November 25, 2026

Keywords:
AI-Enhanced Vocational Training; Digital Competence; Workplace Readiness

Abstract: *Artificial intelligence is rapidly transforming office work, creating new competency requirements for vocational graduates who must combine digital fluency with reliable administrative performance and adaptive workplace behavior. This study develops an integrative framework for AI-enhanced vocational training for future office professionals by connecting digital competence, administrative skills, and workplace readiness. An integrative literature review was conducted using peer-reviewed studies published between 2022 and 2025, prioritizing Scopus-indexed education and training research together with relevant Indonesian vocational education studies. The synthesis identifies five instructional priorities: foundational AI literacy, digital office competence, authentic administrative practice, human-AI collaboration, and work-integrated readiness development. Findings indicate that AI can support personalized learning, document drafting, information retrieval, simulation, feedback, and administrative problem solving, but its educational value depends on students' ability to evaluate outputs critically and use technology responsibly. Digital competence strengthens students' capacity to operate contemporary office systems, while administrative skills preserve accuracy, communication, records management, scheduling, service quality, and procedural discipline. Workplace readiness emerges when these competencies are practiced through authentic tasks, internships, collaboration, self-efficacy development, and career guidance. The framework positions AI as an augmentation technology rather than a substitute for professional judgment. Effective vocational preparation therefore requires balanced development of technical, cognitive, interpersonal, ethical, and occupational competencies. The study contributes a practical model for redesigning office-administration vocational curricula so graduates can work productively, responsibly, and adaptively in increasingly AI-mediated workplaces while maintaining ethical judgment, administrative accuracy, professional communication, and accountable human oversight consistently.*

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How to cite:

INTRODUCTION

Artificial intelligence is reshaping administrative work by automating routine document processing, accelerating information retrieval, supporting communication, and enabling new forms of human-machine collaboration. For vocational education, this transformation changes the meaning of occupational readiness because future office

professionals must understand not only conventional administrative procedures but also the capabilities and limitations of AI-enabled tools. Anshori et al. (2022) show that digital competence is already necessary for vocational students competing in a global labor market. As office environments become increasingly data-driven and platform-based, digital competence must expand toward AI literacy, critical evaluation, and responsible technology use. Vocational programs therefore need to redesign learning so that technological fluency develops together with administrative accuracy, communication, service orientation, and professional responsibility.

Digital competence provides the foundation for effective participation in contemporary office environments. Barboutidis and Stiakakis (2023) identify multiple factors shaping digital competence among students in vocational training institutes, emphasizing that digital capability develops through educational, technological, and individual conditions rather than through device access alone. For office professionals, competence includes managing digital documents, collaborating through cloud platforms, using spreadsheets and databases, protecting information, communicating through digital channels, and adapting to new applications. AI introduces an additional layer because students must formulate useful prompts, evaluate generated outputs, identify errors, and understand ethical risks. Consequently, vocational curricula should treat digital competence as a progressive occupational capability linked directly to administrative tasks rather than as a separate generic technology subject.

The emergence of generative AI intensifies the need to rethink vocational ability. Xu et al. (2023) argue that ChatGPT and related generative systems influence occupations, vocational competencies, training processes, and vocational education research. In office administration, AI can draft correspondence, summarize meetings, structure reports, generate templates, assist scheduling, and support customer communication. These functions can increase productivity, yet they also create risks involving confidentiality, hallucination, bias, and overreliance. Students therefore need learning experiences that require verification, editing, source checking, and professional judgment. AI-enhanced vocational training should not simply teach students how to obtain fast outputs; it should teach them how to transform AI assistance into accurate, context-sensitive, and accountable administrative work.

AI literacy is becoming a measurable educational competency. Hornberger et al. (2023) developed and validated an AI literacy assessment and found substantial variation in students' knowledge, with prior technical experience associated with stronger literacy. This finding has important implications for vocational classrooms, where learners enter with unequal digital backgrounds. A uniform AI assignment may therefore widen rather than reduce competency gaps. Office-administration programs need structured progression from foundational concepts toward occupational applications, beginning with what AI can and cannot do before moving to prompt design, output evaluation, workflow integration, and ethical use. Diagnostic assessment can help instructors identify students who require additional scaffolding so that AI becomes an inclusive learning resource rather than a source of new inequality.

Workplace readiness remains broader than technological competence. Indrawati et al. (2023) show that interpersonal skills and knowledge construction contribute to vocational students' work readiness, with motivation playing an important role. Office professionals routinely coordinate with supervisors, colleagues, clients, and external partners, making communication, initiative, reliability, and collaborative problem solving essential. AI can assist communication tasks, but it cannot replace the relational judgment required to

interpret expectations, manage conflict, or maintain service quality. Therefore, AI-enhanced training should integrate technology with collaborative projects, role-play, authentic office scenarios, and reflective learning. Students need opportunities to practice when to use AI, when to rely on human interaction, and how to remain accountable for final administrative outcomes.

Indonesian evidence specifically links digital literacy with job readiness in office-administration education. Winarno et al. (2024) find that digital literacy and self-efficacy positively and significantly influence the job readiness of Office Administration Education students. This relationship indicates that technical ability must be accompanied by confidence in applying competence under real work demands. AI-enhanced learning can support self-efficacy when students repeatedly complete authentic tasks with feedback and gradually assume greater responsibility. However, poorly designed AI use may have the opposite effect if students become dependent on automated assistance. Vocational training should therefore use AI as scaffolding that is progressively calibrated, ensuring that students can perform core administrative functions independently and can justify the decisions behind AI-assisted outputs.

Work readiness also depends on practical exposure to occupational conditions. Darni et al. (2024) emphasize that adapting to technological development and labor-market demands is crucial for vocational students, while Agussalim et al. (2024) highlight the multidimensional character of readiness. Office training should consequently connect classroom AI applications with realistic workflows such as correspondence, records management, meeting administration, spreadsheet analysis, digital filing, customer service, and project coordination. Simulations can reproduce workplace pressure, competing priorities, incomplete information, and quality standards. Internships can then test whether classroom competence transfers into organizational settings. This alignment between learning and authentic administrative practice is necessary if AI competence is to improve employability rather than remain an isolated academic skill.

Although research increasingly addresses AI literacy, digital competence, and vocational work readiness, these domains are often studied separately. Recent work on human-AI learning shows that structured interaction with generative tools can improve learners' understanding and critical assessment of AI (Tzirides et al., 2024), while employability research demonstrates that AI literacy is increasingly relevant to career outcomes (Wut et al., 2025). The present study addresses the integration gap by developing a framework for future office professionals that combines AI-enhanced learning, digital competence, administrative skills, and workplace readiness. The framework emphasizes occupational authenticity, human oversight, ethical responsibility, and work-integrated learning so that technology strengthens rather than displaces the professional capabilities expected from administrative personnel.

THEORETICAL FOUNDATION

The framework combines competency-based vocational education, AI literacy, experiential learning, and employability perspectives. Digital competence refers to the ability to use, evaluate, communicate through, and adapt to digital technologies safely and effectively. AI literacy extends this capability by requiring understanding of AI functions, limitations, data implications, ethical risks, and appropriate human oversight. Administrative skills include correspondence, document and records management, scheduling, data handling, office communication, service procedures, and organizational coordination. Workplace readiness integrates these technical abilities with self-efficacy,

interpersonal competence, adaptability, responsibility, and familiarity with authentic work practices. The model therefore treats employability as a multidimensional outcome rather than as mastery of software alone.

AI-enhanced vocational training is conceptualized as a pedagogical system in which AI supports practice, feedback, simulation, information processing, and task augmentation while educators preserve instructional control and students retain responsibility for outputs. Digital competence enables students to operate the technological environment; administrative skills ensure that technology is applied to valid occupational processes; and workplace-readiness experiences support transfer into professional settings. Human-AI collaboration becomes productive when students can verify outputs, protect confidential information, communicate professionally, and decide when automation is inappropriate. The framework predicts that balanced integration produces stronger readiness than technology-centered training because future office work requires simultaneous technical fluency, procedural accuracy, interpersonal effectiveness, and accountable judgment.

REASERCH METHODS

This study used an integrative literature review and conceptual synthesis to construct a framework for AI-enhanced vocational training in office administration. Peer-reviewed studies published from 2022 to 2025 were prioritized, with emphasis on Scopus-indexed research in vocational education, AI literacy, digital competence, employability, and workplace readiness, supplemented by relevant Indonesian journal evidence. Search concepts included artificial intelligence literacy, generative AI, vocational education and training, digital competence, office administration education, administrative skills, employability, internship, and work readiness. The qualitative synthesis followed the principles of data reduction, categorization, interpretation, and conclusion development described by Sugiyono (2022). Studies were retained when they directly informed the competencies, learning processes, occupational practices, or readiness mechanisms relevant to future office professionals.

The review proceeded through three analytical stages. First, evidence was coded into four domains: AI literacy and human-AI collaboration, general digital competence, office-administration competence, and workplace readiness. Second, the studies were compared to identify learning mechanisms connecting these domains, including authentic task practice, simulation, feedback, self-efficacy development, communication, internship experience, and career guidance. Third, the findings were synthesized into an integrated vocational-training framework that specifies curriculum inputs, learning processes, competency outcomes, and readiness indicators. The framework is conceptual and does not report fabricated survey or experimental data. Published empirical findings are used as evidence for individual mechanisms, while the integrated relationships are proposed for subsequent field testing in vocational schools, polytechnics, or office-administration education programs.

Source quality was assessed through publication recency, peer-review status, relevance to the research variables, journal credibility, and DOI traceability. International evidence was triangulated with Indonesian vocational and office-administration studies to preserve contextual relevance. Because the reviewed studies use heterogeneous populations, instruments, and educational settings, the synthesis does not assign universal effect sizes. Future empirical research may operationalize AI-enhanced training through frequency and quality of guided AI use; digital competence through information, communication, content, safety, and problem-solving skills; administrative competence through authentic

office-performance tasks; and workplace readiness through self-efficacy, adaptability, communication, professionalism, and work-integrated experience. Structural equation modeling, quasi-experiments, competency assessments, and longitudinal internship studies would be suitable for testing the proposed framework.

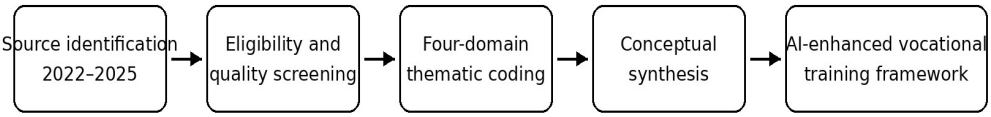

Figure 1. Integrative Review and Conceptual Synthesis Procedure

RESULT AND DISCUSSION

The first finding is that digital competence must be treated as an occupational foundation rather than an optional supplement in vocational education. Barboutidis and Stiakakis (2023) show that students' digital competence is shaped by interacting educational, technological, and personal factors. For future office professionals, this means training should combine technical access with repeated application in authentic administrative contexts. Students need to manage documents, spreadsheets, databases, cloud collaboration, digital communication, and information security before advanced AI tools can be used responsibly. AI applications amplify the value of digital competence because learners must navigate interfaces, manage files, evaluate sources, and protect data while interacting with automated systems. Foundational competence therefore determines whether AI expands professional capability or merely creates superficial technological familiarity.

Second, AI literacy requires explicit assessment because students do not enter vocational programs with equal understanding of artificial intelligence. Hornberger et al. (2023) demonstrate substantial variation in university students' AI knowledge and provide a validated approach to assessing literacy. Vocational programs can apply this principle diagnostically by identifying misconceptions about AI, automation, data, and model reliability before students use generative tools for administrative work. Learners with limited prior exposure may need structured demonstrations and guided practice, while experienced users may require deeper work on verification, ethics, and workflow design. Differentiated instruction is particularly important in office administration because incorrect AI assumptions can affect correspondence, records, scheduling, and confidential information. Assessment should therefore precede AI integration and continue as competence develops.

Third, generative AI changes the structure of vocational competence rather than simply adding another software tool. Xu et al. (2023) argue that ChatGPT and AIGC affect occupations, vocational ability, personnel training, and vocational education research. In administrative work, generative systems can draft messages, summarize documents, structure meeting notes, create templates, and assist information retrieval. These capabilities shift professional value toward task specification, verification, contextual editing, and judgment. Vocational curricula should consequently teach students to decompose administrative problems, formulate clear instructions, evaluate AI outputs against organizational standards, and document human corrections. Core office procedures remain necessary because students cannot verify generated content without

understanding what accurate administrative work looks like. AI literacy and occupational knowledge must therefore develop together in practice.

Fourth, workplace readiness depends on human capabilities that AI cannot replace. Indrawati et al. (2023) find that interpersonal skills and knowledge construction positively influence vocational students' work readiness, with work motivation contributing to the relationship. Office professionals frequently handle coordination, service encounters, sensitive communication, and ambiguous requests. These situations require empathy, initiative, listening, negotiation, and contextual reasoning. AI can support preparation, but students must learn to maintain professional relationships and accept responsibility for outcomes. Training should include collaborative projects, customer-service simulations, meeting facilitation, conflict scenarios, and reflective evaluation of AI-assisted communication in modern office workplaces. The objective is not to minimize human involvement but to use automation selectively while strengthening the interpersonal competence that makes administrative work trustworthy and responsive.

Fifth, structured human-AI interaction can strengthen AI literacy when learning emphasizes both capability and critical evaluation. Tzirides et al. (2024) show that educational experiences combining human and artificial intelligence can improve learners' comfort with generative tools and their ability to assess AI applications critically. This evidence supports guided experimentation in vocational office training. Students can compare AI-generated and human-produced correspondence, evaluate summaries against source documents, revise generated agendas, or detect errors in automated records. Such tasks make limitations visible while preserving the productivity benefits of AI. Reflection should accompany each exercise so students explain why outputs were accepted, corrected, or rejected. This process develops metacognitive control, helping learners become active supervisors of AI rather than passive consumers of generated content.

Sixth, AI literacy should include ethical and pedagogical dimensions rather than focusing narrowly on technical operation. Sperling et al. (2024) show that AI literacy in education remains an emerging field requiring clearer conceptualization and thoughtful integration. For office professionals, ethical competence includes confidentiality, privacy, bias awareness, intellectual responsibility, and transparent disclosure when AI materially contributes to work. Administrative students often handle personal data, internal documents, and organizational communications, making careless use of public AI systems particularly risky. Training should use scenarios in which students decide whether information may be entered into an AI tool, how generated claims should be verified, and who remains accountable for final documents. Ethical reasoning should be assessed alongside speed and technical proficiency in practice today.

Seventh, digital literacy contributes directly to job readiness in office-administration education. Winarno et al. (2024) find that digital literacy and self-efficacy positively and significantly influence the job readiness of Office Administration Education students. This evidence supports a curriculum in which digital tasks become progressively more authentic and demanding. Students should move from basic application use toward integrated workflows involving document creation, data processing, scheduling, collaboration, records management, and AI-assisted problem solving. Self-efficacy can be strengthened through mastery experiences, constructive feedback, and opportunities to demonstrate competence independently. Importantly, AI should not perform every difficult step for students. Graduated scaffolding should ensure that learners can complete essential administrative functions without automation and can explain independently when AI assistance improves quality or efficiency.

Eighth, work-readiness assessment itself can benefit from digital innovation. Darni et al. (2024) develop a mobile-based intelligent measurement system for evaluating vocational students' work readiness and emphasize adaptation to technological and labor-market demands. This approach suggests that office-administration programs can monitor readiness continuously rather than waiting until graduation. Digital portfolios can document correspondence, spreadsheets, database tasks, presentations, meeting administration, and AI-assisted projects. Rubrics can assess accuracy, timeliness, communication, ethical use, and independence. Repeated assessment enables instructors to identify gaps before internships or employment. When AI is used, portfolios should include original prompts, generated outputs, student revisions, and verification notes so evaluators can distinguish genuine competence from unexamined automation. Evidence-based readiness assessment thereby reinforces accountable learning and strengthens transparent competency evidence.

Ninth, work readiness is influenced by more than technical skill alone. Agussalim et al. (2024) examine vocational graduates and show that entrepreneurial attitudes play an important role in readiness, illustrating the broader motivational and behavioral dimensions of employability. Future office professionals need initiative because administrative roles increasingly require problem solving, service improvement, and adaptation to changing digital processes. AI-enhanced training can support initiative through open-ended tasks in which students identify inefficiencies, propose improved workflows, and justify whether AI should be incorporated. Such projects encourage students to view technology as a resource for value creation rather than a fixed procedure. Readiness improves when learners can combine administrative discipline with curiosity, responsibility, and proactive problem solving under realistic organizational constraints at work.

Tenth, systematic evidence shows that vocational work readiness is multidimensional and shaped by individual, learning, and contextual factors. Suroto et al. (2024) identify motivation, interpersonal skills, self-efficacy, self-regulation, soft skills, experiential learning, internships, and social support among important influences. This finding cautions against defining AI-enhanced vocational training as a technology initiative alone. Office-administration programs should coordinate classroom learning, career development, industry exposure, and personal capability building. AI can enrich these components through simulations and feedback, but readiness emerges from their integration. Curriculum evaluation should therefore include indicators of communication, responsibility, adaptability, teamwork, confidence, and workplace experience alongside digital competence. A balanced readiness profile is more meaningful than measuring the number of AI applications students can operate for future office professionals.

Eleventh, field experience and communication remain central to the transition from vocational school to work. Deanda et al. (2024) examine field work practices, motivation, communication skills, and work readiness, highlighting the importance of connecting school learning with occupational experience. For office students, internships provide an environment for testing whether AI and digital skills transfer into actual organizational routines. Employers may use different systems, security policies, document standards, and communication cultures than schools. Students must learn to adapt while maintaining professional accuracy. Internship assignments should therefore require reflection on digital workflows, administrative expectations, and appropriate AI use. Structured mentoring between schools and employers can help students compare classroom practices with

workplace requirements and identify competencies that need further development before graduation.

Twelfth, office-administration education must evolve with digital workplace practices while preserving its occupational identity. Pramesti et al. (2024) emphasize the role of office administration education in the digital age and the need to respond to technological development. AI-enhanced training should therefore be embedded within core administrative subjects rather than taught only as a standalone technology topic. Correspondence courses can include AI-assisted drafting and verification; records courses can address intelligent search and confidentiality; meeting administration can use transcription and summarization tools; and spreadsheet learning can include analytical assistance. Integration makes AI meaningful because students encounter it within the procedures and standards of office work. The curriculum remains administration-centered while technology becomes a tool for achieving professional outcomes more effectively in practice.

Thirteenth, AI literacy is connected with employability. Wut et al. (2025) find that perceived AI literacy is associated with internal and external employability among university students and emphasize the need for curricula that prepare learners for jobs requiring AI competence. For future office professionals, employability therefore depends on demonstrating productive and responsible AI use. Employers are likely to value graduates who can accelerate routine work without sacrificing accuracy, confidentiality, or service quality. Vocational programs should help students articulate these capabilities through portfolios and competency evidence rather than merely listing AI tools on resumes. Career preparation should also teach students to explain how human judgment, administrative expertise, and AI assistance interact in their work, demonstrating professional maturity rather than technological dependence.

Fourteenth, sustainable AI integration requires educators who understand both technical possibilities and pedagogical safeguards. Schmitt and Brutzer (2025) develop a generative-AI training framework for vocational educators and report improvements in prompt design and critical assessment following structured professional development. This evidence highlights teacher competence as a prerequisite for student competence. Office-administration instructors need practical knowledge of generative AI, data protection, prompt design, verification, and occupational applications. They also need common policies so students receive consistent expectations across subjects. Professional development should use authentic administrative examples and provide reusable task designs, assessment rubrics, and ethical guidance. Without prepared educators, AI integration may become inconsistent, overly permissive, or focused on novelty rather than vocational learning outcomes. Teacher capability therefore anchors curriculum transformation.

Fifteenth, workplace readiness is strengthened when vocational learning is connected with authentic industry experience. Gustiawan et al. (2025) show that internship programs contribute to work readiness among vocational students by providing exposure to real tasks and organizational expectations. For AI-enhanced office training, internships should become a bridge between simulated digital competence and workplace performance. Students can observe which administrative tasks are automated, which require human judgment, how organizations protect data, and how digital tools affect communication and coordination. Reflection assignments can compare school-based AI practices with employer policies and identify transferable competencies. The framework culminates in work-based learning: digital competence enables tool use, administrative skills ensure

quality, AI literacy supports augmentation, and internship experience converts these capabilities into workplace readiness.

Table 1. AI-Enhanced Vocational Training Framework for Future Office Professionals

Training domain	Core learning focus	Authentic office application	Readiness outcome
AI literacy	Capabilities, limits, prompting, verification, ethics	Drafting, summarizing, information support	Responsible human-AI collaboration
Digital competence	Office software, cloud systems, data, security	Documents, spreadsheets, databases, collaboration	Digital fluency and adaptability
Administrative skills	Accuracy, correspondence, records, scheduling, service	Integrated office simulations and projects	Occupational competence
Professional capabilities	Communication, teamwork, self-efficacy, judgment	Role-play, problem solving, client interaction	Professional confidence and accountability
Work-integrated learning	Internship, mentoring, career guidance, reflection	Industry workflows and workplace standards	Transferable workplace readiness

CONCLUSION

This study concludes that AI-enhanced vocational training for future office professionals should integrate digital competence, administrative skills, and workplace readiness within a single occupationally grounded curriculum. AI literacy expands digital competence by requiring students to understand capabilities, limitations, verification, data risks, and responsible human oversight. Administrative competence remains essential because students need procedural knowledge to judge whether AI-assisted correspondence, records, schedules, summaries, and other outputs meet professional standards. Technology therefore strengthens vocational preparation when it augments rather than replaces occupational knowledge and accountable judgment.

Workplace readiness emerges from the interaction of technical capability with self-efficacy, communication, interpersonal skills, adaptability, motivation, and authentic work experience. Effective programs should combine guided AI practice with office simulations, collaborative projects, digital portfolios, career guidance, and internships. Educators should use graduated scaffolding so students gain productivity benefits from AI without becoming dependent on automated outputs. Assessment should examine not only final products but also verification processes, ethical decisions, independence, and the student's ability to explain why AI was or was not appropriate for a particular administrative task.

Future research should test the proposed framework in vocational schools, polytechnics, and office-administration education programs using longitudinal, quasi-experimental, and mixed-method designs. Studies can measure AI literacy, digital competence, administrative performance, self-efficacy, internship quality, and multidimensional workplace readiness before and after AI-enhanced instruction. Research should also examine employer expectations, teacher competence, data-governance practices, and the risk of overreliance on generative systems. Such evidence would help determine which combinations of AI support, authentic administrative practice, and work-integrated learning produce graduates who are productive, ethical, adaptable, and genuinely ready for digitally transformed office environments.

REFERENCES

1. Anshori, F., Soenarto, & Rohmantoro, D. (2022). A preliminary study: Analysis of the digital competence of vocational students on the island of Lombok. *In Proceedings of the 1st UPY International Conference on Education and Social Science*. https://doi.org/10.2991/978-2-494069-39-8_15

2. Barboutidis, G., & Stiakakis, E. (2023). Identifying the factors to enhance digital competence of students at vocational training institutes. *Technology, Knowledge and Learning*, 28(2), 613–650. https://doi.org/10.1007/s10758-023-09641-1
3. Hornberger, M., Bewersdorff, A., & Nerdel, C. (2023). What do university students know about artificial intelligence? Development and validation of an AI literacy test. *Computers and Education: Artificial Intelligence*, 5, 100165. https://doi.org/10.1016/j.caeai.2023.100165
4. Xu, G., Cai, J., Jiang, B., Li, Z., Yang, H., & Zheng, J. (2023). ChatGPT/AIGC and the future vocational education. *Journal of East China Normal University (Educational Sciences)*, 41(7), 64–77. https://doi.org/10.16382/j.cnki.1000-5560.2023.07.007
5. Indrawati, C. D. S., Subarno, A., Winarno, W., Permansah, S., Wirawan, A. W., & Rusmana, D. (2023). Influence of work motivation, interpersonal skills, and knowledge construction on the work readiness of vocational students. *Education Research International*, 2023, 4956337. https://doi.org/10.1155/2023/4956337
6. Tzirides, A. O., Zapata, G., Kastania, N. P., Saini, A. K., Castro, V., Ismael, S. A. R., You, Y., Santos, T. A. d., Searsmith, D., O'Brien, C., Cope, B., & Kalantzis, M. (2024). Combining human and artificial intelligence for enhanced AI literacy in higher education. *Computers and Education Open*, 6, 100184. https://doi.org/10.1016/j.caeo.2024.100184
7. Sperling, K., Stenberg, C.-J., McGrath, C., Åkerfeldt, A., Heintz, F., & Stenliden, L. (2024). In search of artificial intelligence (AI) literacy in teacher education: A scoping review. *Computers and Education Open*, 6, 100169. https://doi.org/10.1016/j.caeo.2024.100169
8. Winarno, W., Ninghardjanti, P., Subarno, A., & Umam, M. C. (2024). The effect of digital literacy and self efficacy on the job readiness: A case of Office Administration Education students. *Jurnal Pendidikan Progresif*, 14(2). https://doi.org/10.23960/jpp.v14.i2.202491
9. Darni, R., Harisman, Y., Sukma, D., Fitriana, E., & Sulistiobudi, R. A. (2024). Integration of a mobile-based smart measurement system to assess the level of work readiness of vocational students in higher education. *International Journal of Interactive Mobile Technologies*, 18(17), 61–74. https://doi.org/10.3991/ijim.v18i17.50679
10. Agussalim, A., Mukhlis, I., Rohayati, S., Wahyuni, W., & Said, S. (2024). Unemployment of vocational high school graduates: The effect of work skills, family socio-economic status, and entrepreneurial attitudes on work readiness. *Jurnal Ekonomi Pendidikan dan Kewirausahaan*, 12(2), 187–204. https://doi.org/10.26740/jepk.v12n2.p187-204
11. Suroto, S., Sunyono, S., Sukirlan, M., Winatha, I. K., Yuliyanto, R., & Rahmawati, F. (2024). Factors affecting the work readiness of vocational school

students: A systematic literature review. *Jurnal Pendidikan Progresif*, 14(3). https://doi.org/10.23960/jpp.v14.i3.2024124

12. Deanda, G. G., Darmawan, I. A., & Irwanto, I. (2024). Influence of field work practices, work motivation, and communication skills on vocational school students' work readiness. *Jurnal Edukasi Elektro*, 8(1). https://doi.org/10.21831/jee.v8i1.70865
13. Pramesti, D. D., Kholid, K., & Septantina, R. A. (2024). The role of office administration education in the digital age. *Journal of Managerial Sciences and Studies*, 2(1), 442–448. https://doi.org/10.61160/jomss.v2i1.33
14. Wut, T.-M., Chan, E. A.-h., Wong, H. S.-m., & Chan, J. K. Y. (2025). Perceived artificial intelligence literacy and employability of university students. *Education + Training*, 67(2), 258–274. https://doi.org/10.1108/ET-06-2024-0272
15. Schmitt, C., & Brutzer, A. (2025). Generative artificial intelligence in vocational education and training: A framework for sustainable teacher competence development. *Vocation, Technology & Education*. https://doi.org/10.54844/vte.2025.0940
16. Gustiawan, W., Putri, B. K. D., Azra, T., & Sari, M. P. (2025). Internship programme and work readiness among vocational students. *Issues and Perspectives in Business and Social Sciences*, 5(1). https://doi.org/10.33093/ipbss.2025.5.1.2
17. Ma'arif, S., Zulaihati, S., & Swaramarinda, D. R. (2025). Assessing the impact of internship, self-efficacy, and career guidance on work readiness in vocational school students. *Jurnal Pendidikan Ekonomi, Perkantoran, dan Akuntansi*, 6(1), 87–97. https://doi.org/10.21009/jpepa.0601.08
18. Chinedu, C. C., & Olabiyi, O. S. (2023). Integrating artificial intelligence and digital skills into vocational education and training curricula. *Journal of Vocational Education & Training*, 75(4), 512–530. https://doi.org/10.1080/13636820.2023.2189342
19. Holmes, W., & Tuomi, I. (2022). State of the art and practice in AI in education. *European Journal of Education*, 57(4), 542–570. https://doi.org/10.1111/ejed.12533
20. Sugiyono. (2022). *Metode penelitian kuantitatif, kualitatif, dan R&D* (2nd ed.). Alfabeta.