e-ISSN: 2745-9535
No. 105/E/KPT/2022
Jurnal Pengabdian Masyarakat
Member of: A/JEBI
Editorial Office: Jl. Soekarno-Hatta, Rembuksari No. 1A, Malang, East Java, Indonesia, 65113
Contact: Phone: +62 (341) 478494 e-mail: jpm@asia.ac.id
The journal is published by Institut Teknologi dan Bisnis Asia Malang
Website: https://jurnal.stie.asia.ac.id/index.php/jpm
Indexed in: Google Crossref neliti GARUDA Journal Dimensions

Enhancing UI/UX Design Competency Using Figma at SMK NU Donomulyo

[1]Adriani Kala'lembang, [1]Suastika Yulia Riska, [1]Azwar Riza Habibi, [1]Widya Adhariyanty Rahayu, [1]Yudistira Arya Sapoetra
[1]Institut Teknologi dan Bisnis Asia Malang, Indonesia
*Corresponding author
E-mail: adriani.riny@asia.ac.id

Volume
7
Issue
1
Edition
May
Page
69-74
Year
2026

Article History

Submission: 16-11-2025
Review: 6-12-2025
Accepted: 09-05-2026

Keyword

Competency;
UI/UX Design;
Figma;

How to cite

Kala'lembang, A., Riska, S. Y., Habibi, A. R., Rahayu, W. A., & Sapoetra, Y. A. (2026). Enhancing UI/UX Design Competency Using Figma at SMK NU Donomulyo. Jurnal Pengabdian Masyarakat, Volume 7(1), 69-74. https://doi.org/10.32815/jpm.v7i1.2855

Abstract

Purpose: This study addresses the competency gap between vocational graduates and industry demands for UI/UX design skills through a Figma-based training program at SMK NU Donomulyo.

Method: A hands-on, project-based workshop was delivered to 30 students. Effectiveness was measured via pre-test/post-test assessments, final project rubrics, and participant satisfaction surveys.

Practical Applications: The program provides students with industry-standard prototyping capabilities and ready-to-use digital portfolios, directly improving their employability in the growing digital design sector.

Conclusion: Findings revealed a 40.6% knowledge improvement, 100% project completion, and high satisfaction (4.5/5.0). The initiative successfully bridges educational and industrial requirements, confirming hands-on training as a vital strategy for vocational digital readiness.

Introduction

The industrial world has currently entered an era of massive digitalization, often referred to as Industry Revolution 4.0. This transformation has driven exceptionally high demand for digital products such as mobile applications, websites, and information systems. The success of a digital product is no longer measured solely by its technical functionality, but also by the quality of User Experience (UX) and the visual appeal of its User Interface (UI) (Hafidz et al., 2022; Wawolumaja et al., 2021). Technology companies, startups, and large corporations are now competing to create products that are intuitive, user-friendly, and visually attractive. Consequently, the UI/UX Designer profession has become one of the most sought-after roles in the digital industry, offering competitive compensation (Biantara & Dana, 2024; Kurniawan et al., 2025).

One tool that has become the gold standard in the global UI/UX design industry is Figma. Figma is a cloud-based design platform that enables real-time collaboration, interactive prototyping, and efficient workflows between designers and developers. Mastery of Figma is no longer merely an added value but a fundamental qualification for aspiring UI/UX designers (Auliasari et al., 2025; Putri & Arrafi, 2025). Therefore, there is an urgent need to ensure that vocational high school (SMK) students, particularly in regions such as Malang Regency, receive adequate exposure and training in modern UI/UX design tools and methodologies to remain competitive in the job market.

Based on preliminary observations and discussions with SMK NU Donomulyo, several specific challenges and issues related to the development of UI/UX design competencies were identified. These include: (1) a curriculum gap with industry needs, where design learning materials in schools still focus on conventional graphic design (such as creating posters, brochures, or photo editing) and have not yet thoroughly addressed digital product design workflows (UI/UX); (2) limited exposure to industry-standard tools, as students are not yet familiar with or have never used Figma intensively; and (3) a lack of structured training resources to provide intensive training focused on Figma and UI/UX methodologies. These issues indicate a significant competency gap between the skills currently possessed by students and the expectations of the industry. Therefore, this UI/UX design training program using Figma is proposed as a strategic solution to bridge this gap.

Method

The implementation process began with a comprehensive preparation phase aimed at understanding the baseline conditions and specific needs of the target participants. Initial observations and structured discussions were conducted with the teaching staff to evaluate students' existing competencies, review the current curriculum, and identify prevailing obstacles in UI/UX learning. This diagnostic stage focused on pinpointing precise competency gaps, particularly in foundational UI/UX knowledge, practical Figma application, and understanding modern digital product design workflows. Additionally, detailed participant profiles were compiled, capturing essential data such as class placement, academic major, and initial skill levels to ensure the training materials could be appropriately tailored to the students' proficiency.

Following the preparatory stage, the training was executed through a face-to-face, intensive workshop format grounded in a practice-based learning approach. Rather than relying heavily on theoretical instruction, the sessions prioritized direct, hands-on engagement with Figma's interface and core functionalities. Participants were guided through step-by-step exercises that mirrored real-world UI/UX design processes, enabling them to actively apply concepts such as wireframing, component creation, and interactive prototyping. This experiential methodology ensured that students could immediately translate theoretical principles into tangible design outputs, fostering both technical proficiency and creative problem-solving skills in a collaborative learning environment.

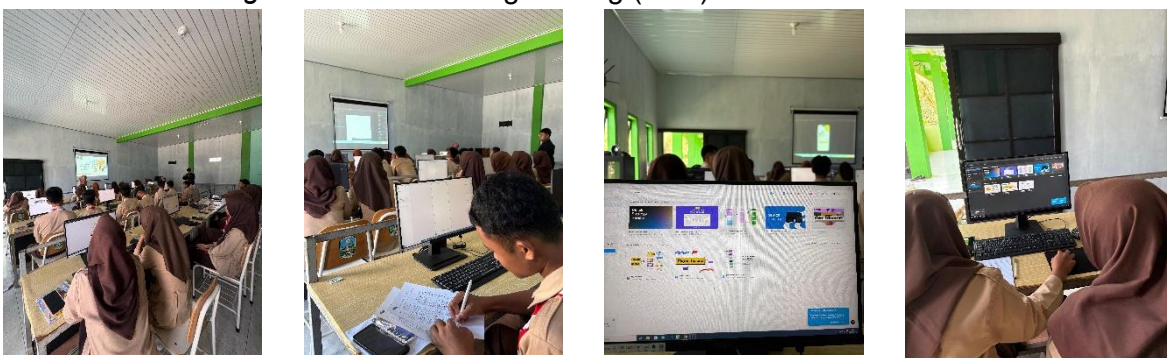
To measure the overall effectiveness of the program and the quality of the design

outputs produced, a structured evaluation phase was implemented upon completion of the training. The assessment employed a multi-dimensional framework that examined participants' cognitive understanding of UI/UX principles, their technical mastery of Figma tools, and their ability to systematically apply design methodologies to their final projects. By analyzing both the qualitative design outcomes and quantitative performance metrics, this evaluation provided comprehensive insights into the program's impact, confirming whether the targeted competency enhancements were successfully achieved and identifying actionable areas for future instructional refinement.

Result

The program was attended by 30 students from the Software Engineering (RPL) and Multimedia majors at SMK NU Donomulyo, with a 100% attendance rate throughout the training sessions. This full participation reflected strong student enthusiasm and engagement with the UI/UX design material and Figma-based practical activities. To assess cognitive learning outcomes, a pre-test and post-test evaluation was administered, covering fundamental concepts of UI/UX, user-centric design principles, and relevant design terminology. The results demonstrated a significant improvement in theoretical understanding, with participants' average scores increasing by 40.6%—from 58.50 in the pre-test to 82.25 in the post-test. This substantial gain exceeded the minimum target improvement of 20%, indicating that the initial instructional approach combining presentation and concept introduction effectively transferred foundational UI/UX knowledge to the participants.

Figure 1. Software Engineering (RPL) Students' Activities



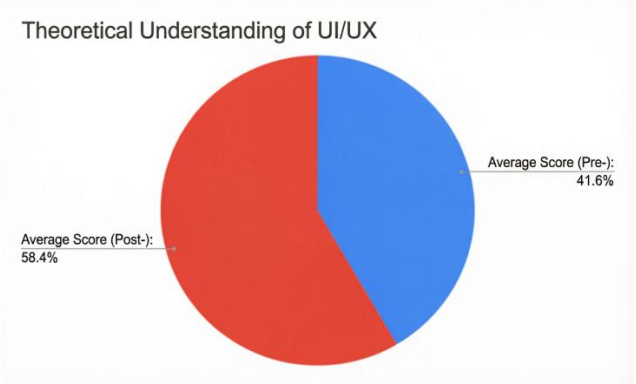
Source: Author's Work, 2025.

Practical skill mastery was evaluated through a structured rubric applied to each participant's final project: a simple interactive application prototype developed using Figma. The rubric assessed three core dimensions: proficiency in using Figma features (such as Auto Layout and Components), visual consistency and wireframing quality, and the functionality of interactive prototyping. As presented in the assessment data, participants achieved an average score of 85.3 for feature utilization, 79.5 for visual consistency, and 88.0 for interactive prototyping functionality, resulting in an overall project average of 84.3. Notably, 100% of participants successfully completed their final projects and produced at least one functional prototype suitable for inclusion in a digital portfolio. The high score in interactive prototyping further confirms that the hands-on, practice-based methodology effectively equipped students with applicable technical skills in Figma.

To gauge program effectiveness and participant satisfaction, a brief post-training questionnaire was distributed. Respondents rated the relevance of the material to industry needs at 4.7/5.0, the clarity of instruction at 4.6/5.0, the adequacy of practical facilities at 4.0/5.0, and the effectiveness of the hands-on approach at 4.8/5.0. The overall average satisfaction score reached 4.5/5.0, categorized as "Very Satisfied." These findings collectively indicate that the training program not only enhanced participants' theoretical knowledge and technical competencies but also delivered a highly relevant and well-executed learning

experience aligned with vocational education goals in the digital design sector.

Figure 2. Diagram of UI/UX Theoretical Understanding



Source: Author's Work, 2025.

Discussion

The findings demonstrate a substantial enhancement in both theoretical knowledge and practical UI/UX design skills among vocational students, as evidenced by a 40.6% increase in post-test scores and an average final project evaluation of 84.3. This significant improvement surpasses the minimum competency target and underscores the effectiveness of the practice-based learning approach. The hands-on workshop format enabled students to immediately apply conceptual knowledge to tangible design tasks, reinforcing cognitive retention through experiential learning. These outcomes align with recent studies emphasizing that direct engagement with industry-standard tools accelerates skill acquisition in digital design disciplines (Harsel et al., 2024; Putri & Arrafi, 2025). The particularly high scores in interactive prototyping (88.0) indicate that students rapidly internalized the workflow from static wireframes to dynamic, user-testable interfaces, a critical competency in modern UI/UX practice.

Table 1. Final Figma Project Assessment Results

Assessment Criteria	Average Score (Scale 1-100)	Achievement Description
Use of Auto Layout and Components	85.3	Participants were assessed as capable of using collaborative features effectively.
Visual Consistency and Wireframing	79.5	Fairly good; requires further deepening in Design System.
Interactive Prototyping Functionality	88.0	Participants successfully created simulatable prototypes at 100%.
Average Project Score	84.3	Achieved: Each participant has a UI/UX project portfolio.

Source: Author's Work, 2025.

The successful integration of Figma into the training proved instrumental in bridging the identified competency gap between conventional graphic design instruction and contemporary digital product development. As a cloud-based platform, Figma's real-time collaboration, component-based architecture, and seamless prototyping capabilities closely mirror professional industry workflows, thereby providing students with authentic, workplace-relevant learning experiences. The fact that 100% of participants produced functional prototypes suitable for digital portfolios confirms that the program effectively transitioned learners from passive technology users to active digital creators. This resonates with findings by Alfina et al. (2024) and Kurniasari et al. (2025), who highlight Figma's adaptability and efficiency in preparing novice designers for collaborative, agile development environments. By embedding

such tools into vocational curricula, educational institutions can better align graduate competencies with labor market expectations.

Table 2. Program Outcomes and Participant Satisfaction Results

No.	Satisfaction Indicator	Average Score (Scale 1-5)	Description
1	Relevance of material to industry needs.	4.7	Highly Relevant
2	Clarity of material delivery by the instructor.	4.6	Very Clear
3	Availability and adequacy of practical facilities (computers).	4.0	Adequate
4	Applied hands-on (direct practice) method.	4.8	Highly Effective
	Overall program average score	4.5	Very Satisfied

Source: Author's Work, 2025.

Participant feedback further validates the program's relevance and pedagogical soundness, yielding an overall satisfaction score of 4.5/5.0. The highest ratings were recorded for the hands-on methodology (4.8) and material relevance to industry needs (4.7), reinforcing the premise that vocational education achieves optimal outcomes when theoretical instruction is tightly coupled with practical application. While facility adequacy received a comparatively lower score (4.0), it did not impede learning achievements, suggesting that well-structured instructional design can effectively mitigate minor resource constraints. These findings carry meaningful implications for SMK curriculum development, advocating for a strategic shift from legacy design software toward modern, collaborative platforms. Implementing targeted, project-based interventions of this nature can systematically reduce the skills mismatch and enhance students' readiness for emerging roles in the digital economy.

Despite the program's clear success, certain limitations warrant consideration. The short-term duration of the training and the absence of a longitudinal follow-up restrict definitive conclusions regarding long-term skill retention and direct employment outcomes. Additionally, the feedback on hardware facilities highlights the ongoing need for institutional investment in updated computing resources to sustain intensive design workloads. Future iterations of this program could incorporate iterative design challenges, structured peer critiques, and direct industry mentorship to further develop critical thinking and professional adaptability. Nevertheless, the current model offers a scalable, evidence-based framework for vocational institutions aiming to modernize their digital design education and cultivate industry-ready competencies.

Conclusion

The UI/UX design training program using Figma successfully enhanced the competencies of SMK NU Donomulyo students in understanding fundamental UI/UX concepts and applying them through the development of interactive prototypes. The 100% attendance rate and the significant improvement in post-test scores compared to pre-test results demonstrate the effectiveness of the practice-based learning approach. Mastery of key Figma features such as Auto Layout, Components, and interactive prototyping enabled participants to produce design portfolios that meet industry standards. The exceptionally high participant satisfaction level (average score of 4.5 out of 5) indicates strong relevance of the training content and effective program implementation. Consequently, this training model can serve as a replicable framework for bridging the competency gap among vocational students in addressing the demands of the digital technology labor market, particularly in the field of UI/UX design.

Figma, as a cloud-based design platform, facilitates real-time collaboration and workflow efficiency in UI/UX design processes, thereby equipping aspiring designers with the practical and adaptive skills required by the industry (Alfina et al., 2024; Kurniasari et al., 2025). Furthermore, practice-based training has proven effective in strengthening both theoretical understanding and technical proficiency, as evidenced by the 40.6% increase in theoretical comprehension scores and high average final project ratings (85.3 for collaborative feature usage and 88.0 for interactive prototyping functionality). These findings reinforce the importance of integrating theoretical instruction with hands-on practice in technology-driven vocational education (Harsel et al., 2024; Putri & Arrafi, 2025; Ramadhani & Hidayati, 2024).

Acknowledgements

The community service team would like to express their sincere gratitude to Institut Teknologi dan Bisnis Asia Malang for providing financial support that enabled the successful implementation of this community service activity. The team also extends their appreciation to SMK NU Donomulyo for their cooperation and for encouraging their students to actively participate in this program.

Reference

Alfina, Lathifah, A., & Kurnia, U. I. (2024). Efektivitas penggunaan figma sebagai alat prototyping dalam mata kuliah interaksi manusia dan komputer 1,2,3. J-Diteksi (Jurnal Pendidikan Teknologi Informasi), 3(2), 40–45.

Auliasari, K., Orisa, M., Kertaningtyas, M., & Abdillah, Z. (2025). Figma Masuk Sekolah: Inovasi Pembelajaran UI Design untuk Generasi Digital. Kreatif : Jurnal Pengabdian Masyarakat Nusantara, 5(2), 131–144.

Biantara, I. G. D. O., & Dana, I. M. K. (2024). Desain Digital Untuk Generasi Muda: Pengembangan Kemampuan UI/UX Menggunakan Figma Pada SMATaruna Bangsa Sentul Dan SMK Triatmajaya Dalung. Jurnal Binacipta, 3(2), 63–73.

Hafidz, A., Prasetyo, A., & Raharjo, M. (2022). Web Quality Analysis (UI/ UX) in the marketplace using a Technology Acceptance Model (TAM) approach. Journal of Information System, Informatics and Computing, 6(2), 611–622. https://doi.org/10.52362/jisicom.v6i2.958

Harsel, A., Hadiya, R., Widyatmoko, K., & Mulyahartantya, N. (2024). Eksplorasi Desain UI / UX Digital Siswa Menggunakan Figma di SMAN 15 Semarang. JNPMIK (Jurnal Nasional Pengabdian Masyarakat Ilmu Komputer), 3(2), 46–57.

Kurniasari, E., Reyhandera, R. N., & Kembaren, S. B. (2025). Penerapan Metode Design Thinking Dalam Perancangan UI / UX Aplikasi Tafsir Mimpi Menggunakan Figma. Jurnal Minfo Polgan, 13(2), 2212–2221.

Kurniawan, E., Syafnur, A., Rahmadani, N., & Marpaung, N. (2025). Fundamental User Interface Dan User Experience (UI / UX) Design Di Lingkungan Sekolah Menengah Kejuruan. Journal Of Indonesian Social Society, 3(2), 92–98.

Putri, R. E., & Arrafi, R. (2025). Sosialisasi Penggunaan Figma dalam Desain UI / UX Aplikasi. Jurnal Hasil Pengabdian Masyarakat (JURIBMAS), 4(1), 131–136.

Ramadhani, S., & Hidayati, R. (2024). Analisis Kepuasan Mahasiswa terhadap Penggunaan Aplikasi Figma dalam Desain UI/UX dengan Pendekatan End-User Computing Satisfaction (EUCS). Digital Transformation Technology (Digitech), 4(2), 1132–1139.

Wawolumaja, J. F., Huseini, M., Subarsa, K. Y., & Anggraini, R. (2021). Pengaruh user experience (ux) design terhadap kemudahan pengguna dalam menggunakan aplikasi carsworld. Acta Diurna, 17(1), 53–71.