

Technology Based Creative Writing for Edupreneurship in Higher Education

Dessy Wardiah^{1*} , Hetilaniar² , Aswadi Jaya³ , Rizky Charles Wijaya⁴ 

^{1,2} Master's Program in Indonesian Language Education, Universitas PGRI Palembang, Indonesia

³ Master's Program in English Language Education, Universitas PGRI Palembang, Indonesia

⁴ Department of Cyber Law and Cyber Governance, Adi-Journal Incorporation, United States

¹dessywardiah77@univpgri-palembang.ac.id, ²hetilaniar@univpgri-palembang.ac.id, ³aswadijaya@univpgri-palembang.ac.id,

⁴charlesboy10@adi-journal.org

*Corresponding Author

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ABSTRACT

Higher education institutions are required to equip students with creative, innovative, digital, and entrepreneurial competencies to respond effectively to the challenges of the digital economy. The study is theoretically grounded in the Technological Pedagogical Content Knowledge (TPACK) framework, experiential learning theory, and edupreneurship theory to explain the integration of technology, pedagogy, and entrepreneurial value creation in product-oriented learning. **This study aims to** investigate how Technology-Based Creative Writing learning empowers edupreneurship through the development of short story books as learning products. **A qualitative descriptive** design was employed at Universitas PGRI Palembang. Data were collected through classroom observations, semi-structured interviews, document analysis of students' perspectives and experiences, and reflective learning artifacts. The collected data were analyzed through systematic qualitative procedures to ensure rigorous interpretation and credibility of the findings. **The findings reveal** that integrating digital platforms and collaborative writing tools enhances students' creativity, engagement, digital literacy, and entrepreneurial awareness. Students transformed creative ideas into value-oriented educational products, particularly short story books, demonstrating originality, innovation, and opportunity recognition. Furthermore, the learning process fostered edupreneurial values, including creativity, collaboration, independence, adaptability, and sustainability. **Technology-based creative** writing learning is an effective edupreneurial strategy integrating creative pedagogy, digital technology, and entrepreneurship in higher education. The findings contribute to innovative and sustainable learning models that strengthen entrepreneurial readiness, product-based learning, and twenty-first-century competencies while providing practical implications for technology-enhanced entrepreneurial education.

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1. INTRODUCTION

Higher education institutions are increasingly challenged to prepare graduates who are not only academically competent but also creative, innovative, and entrepreneurial in responding to the demands of the digital economy [1, 2]. In the context of rapid technological advancement, particularly the development of

digital platforms and Artificial Intelligence (AI), learning environments have shifted toward more flexible, technology-driven, and outcome-oriented models [3, 4]. Consequently, higher education is expected not only to transmit knowledge but also to generate tangible learning products that reflect creativity, innovation, and economic value. Within this context, edupreneurship has emerged as a strategic approach that integrates educational practices with entrepreneurial values to foster innovation, creativity, and sustainability in higher education [5, 6]. Edupreneurship emphasizes value creation through learning activities, encouraging students to transform academic processes into productive and market-oriented outputs [7, 8]. Previous studies have shown that edupreneurship contributes significantly to students' creativity, problem-solving skills, and readiness for the labor market [9, 10]. Technology-based learning environments further strengthen edupreneurial practices by enabling collaborative, student-centered, and product-based learning experiences. Digital tools, learning management systems, and interactive media support active learning, knowledge construction, and creative production, particularly in skill-based and project-oriented courses [11, 12]. These technological affordances allow learning activities to move beyond theoretical understanding toward the creation of authentic and meaningful products.

Creative writing learning, as part of language and literacy education, plays a crucial role in developing students' creativity, self-expression, and critical reflection [13, 14]. Previous research indicates that creative writing activities enhance linguistic competence, imagination, and cognitive engagement. Moreover, creative writing fosters transferable skills such as originality, communication, and critical thinking, which are essential for entrepreneurial development [15, 16]. Recent studies have begun to explore the integration of technology in creative writing instruction. Technology-Based Creative Writing learning, such as digital storytelling, online collaborative writing platforms, and AI-assisted writing tools, has been shown to increase student motivation, engagement, and creative outcomes [17, 18]. However, most existing research primarily focuses on pedagogical and linguistic outcomes, with limited attention to creative writing as a means of producing concrete learning products with edupreneurial value, such as published literary works [19, 20].

In particular, the development of short story books as learning products has not been sufficiently examined within the framework of edupreneurship in higher education [21, 22]. Short story books produced through creative writing courses have the potential to function not only as academic outputs but also as creative products that embody innovation, authorship, and potential economic value. This indicates a research gap in positioning Technology-Based Creative Writing learning as a systematic strategy for empowering edupreneurship through product-oriented outcomes [23]. Unlike previous studies that primarily examined technology-supported creative writing from linguistic, motivational, or pedagogical perspectives, this study positions Technology-Based Creative Writing as an edupreneurial learning ecosystem that transforms students' creative works into authentic educational products with potential economic value. The novelty of this research lies in proposing a product-oriented learning perspective in which short story books function not merely as instructional outcomes but also as edupreneurial products integrating creative writing pedagogy, digital technology, entrepreneurial value creation, and sustainable higher education practices [24]. This perspective extends existing literature by introducing an educational model that connects technology-enhanced creative learning with tangible product development and entrepreneurial readiness.

Therefore, this study aims to investigate how Technology-Based Creative Writing learning can empower edupreneurship in higher education through the development of short story books as learning products. Specifically, this research seeks to:

1. Examine the role of technology in supporting creative writing learning.
2. Analyze the integration of edupreneurship values in the process of developing short story books.
3. Explore the potential of short story book production as an innovative learning product that fosters creativity, entrepreneurial thinking, and sustainable learning outcomes.

By addressing these objectives, this study is expected to contribute to the advancement of edupreneurship, creative writing pedagogy, and technology-enhanced learning while supporting Sustainable Development Goals related to quality education and creative economic growth. This study is theoretically grounded in the Technological Pedagogical Content Knowledge (TPACK) framework, Experiential Learning Theory, and Edupreneurship Theory, which collectively explain how technology integration, authentic learning experiences, and entrepreneurial value creation interact to support product-oriented creative writing learning in higher education. Based on these theoretical foundations, this study proposes a conceptual framework illustrating the

relationships among Technology-Based Creative Writing, digital learning processes, short story book development, and the enhancement of edupreneurship competencies, as presented in Figure 1.



Figure 1. Conceptual Framework of Technology-Based Creative Writing for Developing Edupreneurship Competencies in Higher Education

Figure 1 illustrates the conceptual framework of this study, showing how Technology-Based Creative Writing is transformed into an edupreneurial learning process in higher education. The framework begins with Technology-Based Creative Writing supported by digital technologies, AI, and online learning platforms, followed by digital collaboration that facilitates idea sharing and peer feedback. Students then engage in the creative writing process to produce and refine literary works, which are subsequently developed into short story books as tangible educational products. This process fosters edupreneurship values, including creativity, innovation, collaboration, responsibility, and value creation, ultimately enhancing entrepreneurial competencies and promoting sustainable learning through technology-enhanced, product-oriented creative writing.

2. METHODS

2.1. Research Design

This study adopted a qualitative descriptive research design with a product-oriented learning approach to examine the implementation of Technology-Based Creative Writing in fostering edupreneurship among university students [25, 26]. The research emphasized the development of short story books as tangible learning products created through structured creative writing activities supported by digital technology while exploring students' learning experiences and the integration of edupreneurship values within a natural educational setting [27]. Furthermore, the study aimed to develop a transferable learning framework that demonstrates how technology-enabled creative writing can strengthen edupreneurial competencies and support the implementation of technology-enhanced learning in higher education.

2.2. Research Setting and Participants

This research was conducted at Universitas PGRI Palembang, Indonesia, during the 2025/2026 academic year. The participants were undergraduate students enrolled in Creative Writing courses in the Language and Literature Education Program. Participants were selected using purposive sampling based on the following inclusion criteria:

- Active participation in Technology-Based Creative Writing learning.
- Involvement in collaborative digital writing activities.
- Completion of the short story book project.

- Willingness to participate in interviews.

The study involved one class consisting of 32 students and two lecturers who participated in the implementation of Technology-Based Creative Writing learning. For the interview stage, ten students and two lecturers were purposefully selected to represent diverse levels of engagement, writing ability, and experience in using digital platforms. Semi-structured interviews lasted approximately 30–45 minutes and explored participants' perceptions, learning experiences, technology utilization, and reflections on the development of short story books as edupreneurial learning products.

Table 1. Characteristics of Research Participants

Participants	Number	Research Role
Students	32	Participated in Technology-Based Creative Writing learning
Interviewed students	10	Semi-structured interviews
Lecturers	2	Facilitators and interview participants

Table 1 presents the demographic composition and research roles of the participants involved in this study. A total of 32 undergraduate students participated in the implementation of Technology-Based Creative Writing learning activities, while 10 students were purposefully selected for in-depth semi-structured interviews to represent diverse levels of engagement, writing ability, and experience in using digital technologies. In addition, two lecturers participated as learning facilitators and interview informants to provide complementary perspectives regarding the implementation of the learning model. This participant composition enabled the collection of comprehensive data from multiple viewpoints, thereby strengthening the credibility and depth of the qualitative findings.

2.3. Research Procedures

The research was conducted through four systematic stages:

- **Planning Stage** : Researchers designed a Technology-Based Creative Writing framework integrating edupreneurship values through digital platforms, collaborative writing applications, and AI-assisted tools. Learning outcomes emphasized both creative writing competence and the development of short story books as authentic learning products.
- **Implementation Stage** : Students participated in brainstorming, drafting, revising, peer review, and editing through digital platforms with collaborative learning and AI-assisted writing support. They were encouraged to view their creative works as educational products with entrepreneurial value.
- **Product Development Stage** : Students compiled their stories into printed and digital short story books through editing, layout design, cover creation, and publishing preparation, transforming learning outcomes into authentic products with creative and economic value.
- **Reflection and Evaluation Stage** : Students reflected on their learning experiences and entrepreneurial development, while evaluation focused on both the learning process and the quality of the short story books produced.

2.4. Data Collection

Data were collected using multiple qualitative instruments to ensure data richness and credibility:

- **Observation** : Non-participant classroom observations documented student engagement, collaboration, technology use, and instructional implementation throughout the learning process.
- **Semi-Structured Interviews** : Interviews with ten students and two lecturers explored experiences, perceptions, challenges, and understanding of edupreneurship in Technology-Based Creative Writing learning.
- **Document Analysis** : Students' drafts, revised manuscripts, peer feedback, digital collaboration outputs, reflective assignments, and completed short story books were analyzed to identify creativity, collaboration, and entrepreneurial value creation.

- **Reflective Journals** : Students' reflective journals were analyzed to examine learning experiences, technology adaptation, creative processes, and entrepreneurial awareness.

Table 2. Data Collection Techniques and Sources

Instrument	Data Source	Purpose
Observation	Classroom activities	Student engagement
Interviews	Students & lecturers	Perceptions and experiences
Document analysis	Drafts & books	Creativity and entrepreneurial values
Reflective journals	Students	Reflection and triangulation

Table 2 summarizes the qualitative data collection techniques employed in this study and their respective data sources and purposes. Multiple instruments were utilized to obtain comprehensive and complementary evidence regarding the implementation of Technology-Based Creative Writing learning. Classroom observations documented students' engagement and technology integration during learning activities, while semi-structured interviews provided in-depth insights into participants' experiences, perceptions, and reflections. Document analysis focused on students' creative writing outputs and the development of short story books as tangible learning products, whereas reflective journals captured students' personal learning experiences and entrepreneurial awareness. The use of multiple data sources facilitated methodological triangulation, thereby enhancing the credibility and trustworthiness of the research findings.

2.5. Data Analysis

Data were analyzed using thematic analysis following the procedure proposed by [28]. The analysis consisted of six phases:

- Familiarization with the data through repeated reading of observation notes, interview transcripts, and documents.
- Generation of initial codes related to technology integration, creative writing activities, and entrepreneurship.
- Searching for recurring themes.
- Reviewing and refining themes.
- Defining and naming themes.
- Producing an analytical interpretation aligned with the research objectives.

The analysis focused on understanding how technology-supported creative writing facilitated the development of short story books as authentic learning products while strengthening students' entrepreneurial competencies.

2.6. Trustworthiness

To enhance the trustworthiness of the findings, this study adopted the criteria proposed by Lincoln and Guba. Credibility was established through methodological triangulation involving classroom observations, interviews, document analysis, and reflective journals, as well as member checking with participants. Transferability was supported through detailed descriptions of the research context, participants, and instructional procedures. Dependability was strengthened by maintaining a transparent audit trail documenting all stages of data collection and analysis. Confirmability was achieved by preserving analytical records, coding decisions, and researcher reflections throughout the research process.

2.7. Ethical Considerations

Prior to data collection, participants were informed about the objectives and procedures of the study. Participation was voluntary, and informed consent was obtained from all participants. Confidentiality and anonymity were maintained by replacing participants' identities with pseudonyms during data analysis and reporting. Participants were informed that they could withdraw from the study at any stage without any academic consequences.

2.8. Proposed Edupreneurial Learning Framework

Based on the learning procedures implemented in this study, a replicable technology-based edupreneurial learning framework was identified. The framework consists of five interconnected stages:

- Digital idea generation through collaborative technologies.
- Technology-assisted creative writing and iterative revision.
- Collaborative peer feedback using online platforms.
- Product development into publishable short story books.
- Dissemination, reflection, and entrepreneurial value creation.

The proposed framework demonstrates how digital technologies systematically facilitate the transformation of learning activities into authentic educational products while fostering creativity, innovation, collaboration, and entrepreneurial competencies. The framework is transferable to other higher education contexts implementing technology-enhanced project-based learning and serves as a practical model for integrating creative writing, digital pedagogy, and edupreneurship.



Figure 2. Proposed Technology-Based Creative Writing Framework for Developing Edupreneurship Competencies through Short Story Book Production

Figure 2 illustrates the proposed Technology-Based Creative Writing framework for fostering edupreneurship competencies in higher education. The process begins with technology-enhanced idea generation, followed by collaborative writing, peer feedback, and AI-assisted revision to improve writing quality. Students then develop their manuscripts into short story books through compilation, layout design, and digital publishing before disseminating them as printed or electronic publications. This product-oriented learning process enhances creativity, innovation, digital literacy, collaboration, opportunity recognition, and entrepreneurial readiness, demonstrating how technology-supported creative writing generates authentic educational products with educational, social, and entrepreneurial value.

3. RESULTS AND DISCUSSION

3.1. Results from Interviews

3.1.1. Students' Perceptions of Technology-Based Creative Writing Learning for Short Story Book Development

Technology-Based Creative Writing learning was consistently perceived by students as facilitating the development of short stories into publishable short story books. Participants reported that digital technologies supported idea generation, drafting, revision, editing, collaboration, and access to online resources, while

increasing motivation, creativity, flexibility, confidence, and the quality of their writing. Digital platforms also enabled peer feedback, strengthened narrative development, and broadened opportunities for publication, making the writing process more meaningful and product-oriented.

One student explained:

“Technology helps me organize my ideas more clearly and systematically. It also makes the revision process easier because I can edit and improve my writing at any time without rewriting everything from the beginning.” (S1)

Another student emphasized the broader impact of technology on publication:

“Our writing can be published online and read by a broader audience. This makes the writing process more meaningful because our work has real readers.” (S5)

Overall, these findings indicate that Technology-Based Creative Writing effectively supports the production of short story books as authentic learning products.

3.1.2. Integration of Edupreneurship Values in Creative Writing Learning through Short Story Book Production

Interview findings showed that edupreneurship values were embedded throughout the creative writing process. Students developed originality, creativity, collaboration, responsibility, problem-solving, opportunity recognition, and value creation while producing short story books [29, 30]. They recognized that creative writing extends beyond academic assessment by generating authentic products with educational and potential economic value. Lecturers also confirmed that learning activities were intentionally designed to cultivate entrepreneurial thinking through product-oriented writing [31].

A student stated:

“We learn that writing ideas can become valuable products. Creative writing is not only about expression but also about producing something meaningful.” (S2)

A lecturer further explained:

“Writing tasks are designed to encourage creative thinking and entrepreneurial values. Students are guided to see writing as a productive activity.” (L1)

These findings demonstrate that Technology-Based Creative Writing successfully integrates edupreneurship values through short story book development.

3.1.3. The Role of Technology in Supporting Edupreneurship-Oriented Learning and Product Creation

Students perceived technology as a key enabler of edupreneurship-oriented learning by making creative writing more efficient, collaborative, and aligned with real-world creative industries [32]. Digital technologies facilitated idea development, continuous revision, multimedia exploration, online publication, learner autonomy, collaboration, and digital literacy, ultimately improving both writing quality and entrepreneurial readiness [33].

One participant commented:

“Ideas can be developed and revised more quickly using digital tools. The writing process becomes more efficient.” (S2)

Overall, the findings confirm that technology plays a central role in empowering edupreneurship-oriented creative writing learning by transforming creative writing into a product-oriented learning experience that generates educational, creative, and entrepreneurial value [34]. In line with the research objectives, the results demonstrate that Technology-Based Creative Writing learning at Universitas PGRI Palembang effectively empowers edupreneurship through the development of short story books as innovative learning products [35]. The integration of technology not only enhances creativity, collaboration, autonomy, and awareness of entrepreneurial value but also improves pedagogical outcomes and enables sustainable value creation, positioning creative writing as a strategic edupreneurial practice in higher education [36, 37].

3.2. Results from Observations

Observations were conducted to obtain a direct and contextual understanding of the implementation of Technology-Based Creative Writing learning oriented toward the development of short story books as learning products in higher education [38]. The observation process was carried out systematically across multiple learning sessions to capture the consistency of instructional practices and student engagement throughout the learning activities. Through classroom and online learning observations, the researcher examined students' learning activities, interaction patterns, lecturer facilitation, and the use of digital platforms throughout the creative writing and book production process [39]. The observational data were used to complement and strengthen the interview findings, providing a comprehensive picture of how Technology-Based Creative Writing learning empowers edupreneurship values among students [40]. The observations focused on learning activities, student participation, lecturer roles, the use of technology, collaboration patterns, and the alignment of learning practices with edupreneurship-oriented and product-based learning principles [41].

Table 3. Results from Observations

Observation Criteria	Description	Comments
Technology-Based Learning Practices	Integration of digital platforms in creative writing and book development	The observations showed that lecturers consistently integrated digital platforms into creative writing learning, including online brainstorming tools, collaborative writing platforms, and digital publishing media. These tools supported students in developing ideas, drafting and revising short stories, and compiling them into short story books. Technology functioned not only as a learning medium but also as a tool for creative production and publication.
Student Participation and Engagement	Level of student involvement during learning activities	Most students actively participated in all stages of learning, from brainstorming and drafting to revising, peer-reviewing, and preparing texts for book compilation. High enthusiasm was particularly evident during collaborative editing and digital publishing activities. A small number of students required initial encouragement to engage fully.
Collaborative Learning and Peer Interaction	Patterns of collaboration and peer feedback	Students collaborated in small groups and online discussion spaces to exchange ideas, provide feedback, and jointly revise short stories. Collaboration extended beyond face-to-face interaction to asynchronous online collaboration, reflecting authentic digital writing and publishing practices.
Student-Centered Learning Orientation	Degree of student autonomy in learning	The learning process was predominantly student-centered. Students were given autonomy to select themes, narrative styles, and digital tools for their short stories. The lecturer acted as a facilitator, providing guidance and feedback without dominating the creative process.
Creative Exploration and Innovation	Experimentation with themes, styles, and narratives	Students demonstrated initiative in exploring diverse themes and narrative structures suitable for short story books. Many students experimented with creative techniques and multimedia elements, indicating innovation and willingness to take creative risks.
Independent Learning and Initiative	Students' self-directed learning behavior	Observations revealed that students independently revised their writing, sought online references, and explored digital resources to improve the quality of their short stories. This behavior reflects strong learning autonomy and responsibility for product quality.

Integration of Edupreneurship Values	Presence of creativity, innovation, collaboration, and value creation	Creative writing tasks were closely aligned with edupreneurship values. Students treated their short stories as creative products, particularly when preparing texts for digital publication and book compilation. Opportunity recognition, originality, collaboration, and responsibility were consistently observed.
Lecturer's Role as Facilitator	Guidance and support provided by the lecturer	The lecturer provided scaffolding through guiding questions, feedback on drafts, and technical support related to digital platforms. Rather than providing direct solutions, the lecturer encouraged reflection, revision, and independent problem-solving.
Learning Atmosphere and Motivation	Classroom climate and student motivation	The learning atmosphere was supportive, interactive, and motivating. Students appeared confident in expressing creative ideas, and technology contributed to a relaxed yet productive learning environment.
Challenges Observed	Obstacles encountered during implementation	Some challenges were identified, including variations in students' digital literacy and occasional technical issues such as internet connectivity. However, these challenges did not significantly disrupt the creative writing or book production process.

Based on the observational data presented in Table 3, Technology-Based Creative Writing learning oriented toward short story book development was implemented effectively and aligned with edupreneurship principles. Students actively participated in brainstorming, drafting, revising, peer feedback, editing, and book compilation, while digital platforms facilitated collaboration, creativity, and continuous improvement of writing quality. Furthermore, students perceived their writing not merely as academic assignments but as creative products with educational and potential economic value [42, 43]. The integration of digital technologies and collaborative learning activities fostered responsibility, innovation, independent learning, and opportunity recognition, which are central dimensions of edupreneurship [44, 45]. Overall, the findings confirm that Technology-Based Creative Writing promotes active participation, collaboration, creativity, independent learning, and value creation, thereby supporting the development of edupreneurship competencies in higher education through the production of short story books [46].

3.3. Key Findings of Technology-Based Creative Writing Learning

The findings indicate that Technology-Based Creative Writing learning effectively promotes creative, technological, and entrepreneurial competencies among higher education students [47]. Data from interviews, observations, and document analysis show that digital technology supports collaborative creative writing while fostering motivation, creativity, autonomy, and edupreneurship. The production of short story books strengthened students' responsibility and transformed their creative work into authentic educational products with creative and potential economic value [48]. Table 4 summarizes the key findings and their contributions to the development of students' edupreneurship competencies.

Table 4. Key Findings of Technology-Based Creative Writing Learning and Edupreneurship Development

Aspect of Learning	Observed Characteristics
Creative Writing Process	Idea originality, structured narratives, reflective texts
Technology Utilization	Digital platforms, collaborative tools, online publishing
Edupreneurship Values	Creativity, innovation, collaboration, value creation
Student Engagement	Active participation, motivation, sustained involvement

Table 4 summarizes the key aspects of Technology-Based Creative Writing learning and their contributions to edupreneurship development. The findings show that students demonstrated originality, structured narratives, and reflective writing while effectively utilizing digital platforms for drafting, collaboration, peer

feedback, and publication. The learning process also fostered creativity, innovation, collaboration, value creation, and active engagement, encouraging students to view their writing as authentic educational products with potential creative and economic value. Overall, these findings confirm that Technology-Based Creative Writing learning effectively strengthens both creative writing competencies and edupreneurship in higher education.

3.4. Discussion

3.4.1. The Role of Technology in Supporting Creative Writing Learning

The findings from interviews, observations, and document analysis indicate that technology plays a significant role in supporting creative writing learning by facilitating idea organization, collaboration, continuous revision, and digital publishing [49, 50]. These findings are consistent with the TPACK framework, demonstrating that the integration of technology, pedagogy, and content enhances creative writing competence, learner autonomy, and instructional effectiveness through flexible learning resources and immediate feedback [51].

3.4.2. Integration of Edupreneurship Values in Creative Writing Learning

The findings show that edupreneurship values, including creativity, innovation, collaboration, independence, and opportunity recognition, were embedded throughout the creative writing process [52]. Students actively collaborated, assumed responsibility for their learning products, and recognized the educational and economic value of creative writing. These results support previous studies emphasizing creative thinking, innovation, and value creation as core elements of entrepreneurship education [53].

3.4.3. Development of Short Story Books as Learning Products

A key contribution of this study is the development of short story books as authentic learning products. Document analysis showed improvements in narrative quality, originality, thematic coherence, and language use, while the publication process strengthened students' ownership and responsibility. From an edupreneurship perspective, these products represent creative value creation by connecting academic learning with authentic practice [54].

3.4.4. Technology-Based Creative Writing Learning as an Edupreneurial Strategy

Technology-Based Creative Writing learning functions as an effective edupreneurial strategy by integrating creative competencies with entrepreneurial mindsets, including innovation, collaboration, responsibility, and opportunity recognition. Consistent with Experiential Learning Theory, students gained meaningful learning experiences through writing, revising, publishing, and presenting authentic products [55].

3.4.5. Contribution to Technopreneurship and Technology-Enhanced Learning

This study contributes to technopreneurship by showing that technology-supported creative writing develops entrepreneurial competencies through digital content creation [56]. The proposed model integrates collaborative digital platforms, AI-assisted writing tools, and product-based assessment, providing a transferable approach to technology-enhanced learning across higher education contexts [57].

3.4.6. Contribution to Sustainable Development Goals

This study supports SDG 4 (Quality Education) and SDG 8 (Decent Work and Economic Growth) by promoting creativity, digital literacy, collaboration, and entrepreneurial competencies through technology-enhanced creative writing [58]. The production of short story books as authentic learning products demonstrates how creative ideas can be transformed into educational outputs with potential economic value, contributing to sustainable higher education practices.

4. MANAGERIAL IMPLICATIONS

The findings of this study provide important managerial implications for higher education institutions seeking to strengthen edupreneurship through technology-enhanced learning. The proposed Technology-Based Creative Writing model demonstrates how digital technology, creative pedagogy, and entrepreneurial competencies can be integrated into a product-oriented learning process that enables students to produce authentic educational products with academic, social, and potential economic value.

For university administrators, the findings highlight the importance of investing in digital learning infrastructure, collaborative platforms, AI-assisted writing tools, and institutional publishing facilities to support innovation, digital literacy, and entrepreneurial competency development. For lecturers and curriculum

developers, the study offers a practical framework for implementing project-based creative writing through collaborative learning, peer feedback, AI-assisted revision, digital publishing, and product dissemination, enabling students to experience the complete cycle of creative production.

The findings also emphasize the value of partnerships with publishers, educational technology providers, and creative industry practitioners to expand opportunities for publication and commercialization of students' work. Overall, the proposed model provides a practical and transferable framework for promoting digital transformation, sustainable educational innovation, graduate employability, and entrepreneurial readiness in higher education.

5. CONCLUSION

This study concludes that Technology-Based Creative Writing learning effectively empowers edupreneurship in higher education through the development of short story books as authentic learning products. The integration of digital platforms, collaborative writing tools, and AI-assisted applications enhanced students' creative, technological, and entrepreneurial competencies, enabling them to transform creative writing into products with educational and potential economic value. Grounded in the TPACK framework, Experiential Learning Theory, and Edupreneurship Theory, the findings demonstrate how technology, pedagogy, and entrepreneurial value creation interact to support meaningful product-oriented learning. Overall, Technology-Based Creative Writing represents an effective edupreneurial strategy that integrates creative pedagogy, technology, and entrepreneurship in higher education.

The findings also provide practical implications for lecturers, curriculum developers, and higher education institutions by highlighting the importance of integrating digital technologies, collaborative learning, and product-based assessment into creative writing courses. This approach supports the development of creativity, digital literacy, entrepreneurial competencies, and sustainable education while contributing to SDG 4 (Quality Education) and SDG 8 (Decent Work and Economic Growth).

Future research should examine the effectiveness of this model using mixed-methods or experimental approaches across different institutions and disciplines. Further studies may also explore the commercialization potential of students' creative products and the long-term impact of edupreneurship-oriented creative writing learning on graduates' entrepreneurial development and career outcomes.

6. DECLARATIONS

6.1. About Authors

Dessy Wardiah (DW)  <https://orcid.org/0000-0002-3769-3432>

Hetilanar (HH)  <https://orcid.org/0000-0001-6564-4358>

Aswadi Jaya (AJ)  <https://orcid.org/0000-0001-5706-0977>

Rizky Charles Wijaya (RC)  <https://orcid.org/0009-0003-8655-1339>

6.2. Author Contributions

Conceptualization: DW, HH, AJ and RC; Methodology: DW, HH, AJ and RC; Software: DW, HH, AJ and RC; Validation: DW, HH, AJ and RC; Formal Analysis: DW, HH, AJ and RC; Investigation: DW, HH, AJ and RC; Resources: DW, HH, AJ and RC; Data Curation: DW, HH, AJ and RC; Writing Original Draft Preparation: DW, HH, AJ and RC; Writing Review and Editing: DW, HH, AJ and RC; Visualization: DW, HH, AJ and RC; All authors DW, HH, AJ and RC, have read and agreed to the published version of the manuscript.

6.3. Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon request.

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6.5. Declaration of Conflicting Interest

The authors declare that they have no conflicts of interest, known competing financial interests, or personal relationships that could have influenced the work reported in this paper.

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