

Fostering Linguistic Excellence Through *Sastranesia*: Developing Digital Platform to Enhance Writing Skills and Creativity

Hera Chairunisa *, Ayu Nadira Wulandari, Tomi Arianto, Lisa Anggraini

Universitas Negeri Medan, Indonesia, 20221

* herawenas@unimed.ac.id

ARTICLE HISTORY

Received : 2024-07-06

Revised : 2024-11-28

Accepted : 2024-12-02

KEYWORDS

Language education
Linguistic innovation
Press media website
Sastranesia
Writing creativity



ABSTRACT

The integration of digital platforms in education remains underexplored in enhancing creative writing skills in literature programs. This study developed and evaluated the needs of the press media website, *Sastranesia* Pers, to accommodate writing creativity and journalistic skills among Indonesian Literature students at Medan State University. Using a Research and Development (R&D) approach and the ADDIE model (Analysis, Design, Development, Implementation, Evaluation), the study involved 100 students enrolled in journalism language courses. The methodology included expert validation of the platform design and content, as well as student feedback through questionnaires and interviews. The findings reveal that the *Sastranesia* Pers website significantly improved students' creative writing skills by offering a dynamic, interactive platform for hands-on learning. Students developed proficiency in news writing, editing, and journalistic ethics, bridging theoretical concepts with practical application. Additionally, the website fostered collaborative learning through the formation of a vibrant student press community, which encouraged peer feedback and sustained engagement. Participants reported enhanced confidence in expressing their ideas creatively, while the platform's accessible design ensured ease of use and high engagement. Furthermore, the integration of digital tools demonstrated an effective approach to addressing challenges in traditional teaching methods, offering real-time feedback and fostering critical thinking. These findings underscore the transformative role of web-based media in language and writing education, with broader implications for integrating digital platforms to support creative and innovative learning.

1. Introduction

Language is central to human communication, serving as the primary means of expressing ideas, sharing information, and fostering creativity. In the modern era, mass media, powered by traditional and digital platforms, has become a dominant channel for delivering language-based content. The shift from print to digital media has transformed how people interact with language, offering unprecedented opportunities for global communication (Putra, 2019). This digital evolution, spurred by the Fourth Industrial Revolution, has compelled traditional media such as newspapers to adapt to technological advancements and societal changes, particularly in the wake of disruptions like the pandemic (Saptya et al., 2020; Kartinawati et al., 2022). These transitions underline the critical role of digital platforms in advancing linguistic expression and accessibility.

The internet, developed in the 1960s as a secure communication network (Adiarsi et al., 2015), has since evolved into a global medium for real-time interaction and creative linguistic endeavors. In Indonesia, internet adoption has skyrocketed, with 272.1 million users reported in 2020, exceeding the country's population due to widespread mobile device usage (Triyono, 2021). The internet's accessibility has revolutionized communication and education, enabling learners to enhance their linguistic skills and creativity in ways unimaginable in traditional settings (Tri, 2019). For students, digital platforms offer not only tools for refining writing but also spaces for engaging with language in meaningful and innovative ways.

Web-based platforms have revolutionized language education by integrating multimedia tools such as videos, audio clips, and interactive text that enhance creativity, engagement, and proficiency

among learners. These tools capture attention, stimulate sensory engagement, and accommodate diverse learning styles, improving motivation and comprehension (Al-Sabbagh, 2023; Teng, 2022). Research underscores their effectiveness in connecting vocabulary and grammar with contextual usage, leading to better retention and deeper understanding of language concepts (Teng, 2022; Mizan, 2024). Moreover, features like blogs and social networking sites promote collaboration and peer feedback, boosting intrinsic motivation and fostering effective language acquisition. Blogging, in particular, has been linked to improved writing and reading skills, as it encourages learners to actively engage with content and peers (Al-shaboul, 2023).

Additionally, combining synchronous and asynchronous web-based activities ensures inclusivity and accessibility for learners with diverse abilities, fostering equitable learning environments (Aswad et al., 2022). Empirical evidence highlights the transformative potential of multimedia in vocabulary acquisition and retention, allowing educators to move beyond traditional methods to create more engaging and impactful experiences (Al-Sabbagh, 2023). By leveraging these tools and interactive features, educators can cultivate proficient, motivated, and creative language users prepared to meet the demands of a digital age. This integration not only enhances language learning but also establishes dynamic, student-centered pedagogical practices for a rapidly evolving educational landscape (Teng, 2022; Aswad et al., 2022).

Further, Sa'ad (2020) notes the seamless integration of internet technology in education, while Maharani et al. (2021) emphasize the role of websites in providing accessible and engaging content. In the context of journalistic education, web platforms enable students to practice real-world writing tasks, bridging the gap between theoretical knowledge and practical application (Lubis, 2018). This dual focus on creativity and professional preparation positions web-based tools as critical resources for linguistic development.

Despite these advancements, there is limited research on how web-based platforms can systematically enhance linguistic creativity and journalistic writing skills. Existing studies often focus on technical aspects of website design (Colton, 2016) or the societal impact of digital media (Kertamukti et al., 2019). However, few studies have explored the use of digital platforms as tools for fostering linguistic creativity, particularly for journalism students (Fitriansyah, 2017).

Moreover, Digital platforms in language learning enhance creativity and collaboration, but the mechanisms remain underexplored. Sastre et al. (2022) highlight a focus on digital outputs over collaborative processes. Maruf and Kendrick et al. emphasize the role of digital storytelling in boosting engagement,

autonomy, and digital literacy (Maruf, 2023; Kendrick et al., 2022). Eslit and Guerra explore how blended learning and post-COVID-19 innovations provide insights to enrich language instruction (Eslit, 2023; Guerra, 2023). Further research is needed to understand how these tools foster collaboration and creativity.

This study addresses gaps in the educational landscape by developing the Sasindo Student Press Web, a digital platform tailored for Sastra Indonesia students. Research highlights that integrating digital technology into education significantly enhances learning outcomes, as demonstrated by its positive impact on educational practices in Indonesia (Sumarno, 2023). The platform combines journalistic principles with interactive digital tools, offering students practical experience in news writing, editing, and publication. This hands-on approach bridges the gap between theory and practice, fostering linguistic creativity and professional writing skills (Gosain, 2024). Its innovative design promotes collaborative and interactive learning environments, which enhance both individual and group engagement. By utilizing Web 3.0 technologies, the platform transforms traditional teaching into flexible, responsive processes, enabling self-guided learning and critical engagement with vast digital resources (Gosain, 2024). These features are crucial for developing critical thinking, media literacy, and digital communication skills (Isdendi et al., 2023). Additionally, the platform supports digital literacy in education, particularly for English as a Second Language (ESL) learners, providing a medium for language practice and digital competency development (Putra, 2023). By fostering exploration, creativity, and motivation, the Sasindo Student Press Web enhances student engagement and facilitates successful learning outcomes (Khaldi et al., 2023).

The significance of this research lies in its focus on integrating technology into language education. By developing and evaluating the Sasindo Student Press Web, this study contributes to understanding how digital platforms can address challenges in traditional writing education, particularly in fostering creativity and critical thinking. It offers a model for incorporating journalistic practices into language curricula, emphasizing the value of practical, student-centered learning approaches.

The structure of this paper is designed to provide a comprehensive exploration of the topic. The literature review situates the study within the broader context of language, media, and education. The methodology section describes the R&D approach used to design, develop, and implement the Sasindo Student Press Web. The findings and discussion sections evaluate its impact on students' linguistic creativity and writing proficiency. The conclusion highlights the implications of this study, emphasizing the transformative potential of digital platforms in advancing language education and fostering creative writing skills.

2. Literature Review

2.1 Digital Platforms in Language Education

Digital platforms have transformed language education by integrating multimedia elements, fostering collaboration, and providing real-time feedback (Tri, 2019). Web-based tools offer learners opportunities to engage interactively with content, enabling the practical application of theoretical concepts (Sa'ad, 2020). Maharani et al. (2021) emphasize the accessibility and engagement such platforms provide, particularly during the shift to online learning amid the COVID-19 pandemic. Despite these advancements, research often focuses on technical aspects or societal impacts of digital media (Kertamukti et al., 2019), leaving a gap in understanding their role in fostering linguistic creativity and professional writing skills.

2.2 Journalistic Education and Writing Creativity

Journalistic education is crucial for cultivating writing creativity and essential professional skills among aspiring journalists. It emphasizes clarity, brevity, and precision in journalistic language, bridging the gap between academic writing and practical communication. These qualities enable journalists to distill complex information into accessible formats that engage diverse audiences (Oktaviana, 2024; Ali, 2024; Halimatussa'diyah & Rusdianto, 2024).

Integrating data journalism into the curriculum further enhances students' competencies, fostering data literacy and visualization skills through interdisciplinary collaboration. This approach prepares students to engage audiences effectively, particularly in areas like health journalism, where clarity and educational value are paramount (Cai, 2024; Jeong, 2023).

Moreover, principles of effective journalistic writing, such as Hemingway's advocacy for short, active, and simple sentences, are integral to maintaining reader engagement and improving news quality (Oktaviana, 2024). Studies underscore the role of straightforward language in avoiding ambiguity and enhancing public understanding, which is critical for impactful journalism (Zafar, 2024; Mishra, 2023). Journalistic education not only develops these skills but also underscores the profession's societal role as a mediator between government and society, shaping public discourse and policy through precise and compelling reporting (Herman, 2023; Bidzilya et al., 2022). By combining theoretical knowledge with practical application, journalism programs ensure students are well-prepared to navigate the complexities of modern media landscapes.

Digital platforms tailored to journalism enable students to practice real-world writing tasks, enhancing their skills in news writing, editing, and ethical considerations (Lubis, 2018). However, studies

often overlook the integration of creativity-focused tools in journalistic education, particularly in the context of Indonesian literature programs (Fitriansyah, 2017).

2.3 Conceptual Framework

Digital platforms offer potential for enhancing writing skills, but their role in fostering linguistic creativity is underexplored, particularly for Indonesian literature students. Research often overlooks collaborative capabilities and tailored approaches for specific groups. The ADDIE model, comprising Analysis, Design, Development, Implementation, and Evaluation, is an effective instructional design framework widely used in creating educational products. Its successful application in language teaching and multimedia resources demonstrates its adaptability for journalistic writing education (Adeoye, 2024; Afrilia and Istikharoh, 2023; Aydm et al., 2023; Mawarni and Hartoto, 2023; Chen et al., 2022).

Despite its potential, limited research examines the ADDIE model's application in developing educational platforms for journalistic writing. The model ensures thorough analysis and evaluation, critical for meeting learners' needs (Kurniawan et al., 2022; Taroreh and Arisandy, 2022). Studies highlight its success in creating effective learning modules and multimedia content, making it suitable for this field (Ramli et al., 2023; Zhang, 2024). By addressing challenges like resource quality and student engagement, the ADDIE model provides a structured framework for impactful educational platforms (Crompton, 2023; Saeidnia et al., 2022). Employing this model can enhance writing skills and linguistic creativity, bridging gaps in research and practice.

This review synthesizes insights from prior studies to establish a framework guiding the development of the *Sastranesia* Pers platform. The platform aims to address identified gaps by integrating journalistic principles with interactive digital tools, fostering both individual and collaborative learning. Its design emphasizes accessibility, engagement, and practical application, aligning with recommendations from studies on effective digital pedagogy (Colton, 2016; Sosiawan, 2008).

Furthermore, the focus on Indonesian literature students addresses the lack of localized research in this area. The reviewed literature underscores the transformative potential of digital platforms in language education, particularly in enhancing writing creativity and professional skills. However, gaps in research highlight the need for targeted studies that integrate collaborative tools and focus on specific learner groups. By addressing these gaps, the *Sastranesia* Pers platform contributes to advancing digital pedagogy and fostering innovative approaches to writing education.

3. Method

The study adopted a Research and Development (R&D) approach, guided by the ADDIE model, which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation. This methodological framework was selected to systematically develop and evaluate the Sasindo Student Press Web, a digital platform designed to enhance journalistic writing skills and creativity among Indonesian Literature students.

This study was conducted with students from classes A, B, and C in the Indonesian Literature Study Program, Department of Indonesian Language and Literature, during the even semester of the academic year 2022/2023. A total of 100 students from the 2021 cohort participated, and the entire population was included as the research sample to ensure comprehensive insights.

3.1 Data Collection

The primary tool for data collection was a questionnaire, designed to gather both quantitative and qualitative data. The questionnaires were categorized into three distinct types:

- 1) Validation questionnaires for design and material experts to assess the platform's relevance and quality.
- 2) Evaluation forms completed by field lecturers, offering an academic perspective on the platform's integration into coursework.
- 3) Feedback forms from students to capture their experiences, usability impressions, and suggestions for improvement of the Sasindo Student Press Web.

3.2 Data Analysis

Data analysis was performed using both qualitative descriptive and quantitative descriptive techniques:

- Qualitative Analysis: Responses and suggestions from experts and students were categorized and interpreted thematically to identify recurring patterns and actionable insights.
- Quantitative Analysis: Scores from the questionnaires were analyzed using percentage calculations based on predefined weightings. This approach ensured an objective evaluation of the platform's design and implementation.

Finally, the findings derived from the data analysis were meticulously consolidated into a detailed and comprehensive research report. This report thoroughly outlines the developmental process undertaken, provides an in-depth discussion of the evaluation outcomes, and explores the broader implications for potential future applications and advancements in the field.

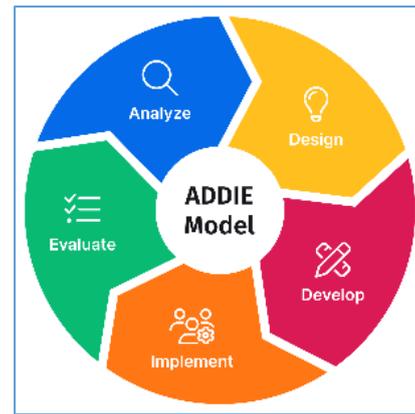


Figure 1. Design of the ADDIE model

This meticulous methodology ensured that each stage of the ADDIE model was thoroughly documented and evaluated, enabling the development of a robust and user-focused digital platform.

4. Result

This section presents the research findings derived from implementing journalistic training initiatives through the *Sastranesia* Pers website. These initiatives, including organizational, web, and writing sessions, were conducted prior to the establishment of the Indonesian Literature student press management. The central aim of the study was to evaluate the impact of the *Sastranesia* Pers website on enhancing the writing creativity of students in the Indonesian Literature Study Program at Medan State University. A total of 100 participants, distributed across three classes (A, B, and C), engaged in the training sessions, with class sizes comprising 37 students each for classes A and B, and 26 students for class C.

The findings are structured following the ADDIE Model: Analysis, Design, Development, Implementation, and Evaluation, elucidating each phase to underscore the systematic approach taken during the research.

4.1 Analysis Phase: Usability and Effectiveness

The analysis phase laid a critical foundation for the development and implementation of the *Sastranesia* Pers website. This phase focused on identifying user needs, aligning objectives with institutional goals, and formulating strategic plans for website development. Key activities during this phase included stakeholder engagement, detailed needs assessment, and the establishment of performance indicators.

4.1.1 Goals and Objectives

The analysis phase defined the primary goals and objectives for the *Sastranesia* Pers website. These included serving as a publication platform for students, promoting literary works, and fostering collaboration. Each goal was supported by measurable targets and strategic actions, as detailed in Table 1.

Table 4.1. Targets and strategic actions

Objective	Target	Strategy and Policy
To become a publication media for Indonesian literature students to express quality works.	Increase unique visitors by 20% per month.	Improve content quality and consistency by producing relevant content and maintaining regular publication frequency.
Promote and provide information about Indonesian student literary works to the wider community.	Achieve a 15% increase in engagement metrics.	Use digital platforms, such as SEO techniques, to enhance visibility and foster user interactions.
Build collaborations with organizations and improve publication quality.	Increase user retention rates and comments.	Foster partnerships with various organizations and implement audience feedback mechanisms to enhance quality.

4.1.2 Comprehensive Needs Assessment

To ensure alignment with the established goals, a thorough and detailed needs assessment was conducted. This process involved several critical steps, including:

- 1) Understanding User Expectations: Surveys and interviews with students and stakeholders revealed a demand for a user-friendly interface and diverse content offerings, including news, poetry, and literary reviews.
- 2) Identifying Content Gaps: Analysis of existing resources highlighted the absence of an integrated platform that could simultaneously serve as a publication medium and a learning tool for journalistic writing.
- 3) Assessing Technological Requirements: Collaboration with technical experts identified the need for SEO integration, responsive design, and compatibility with social media platforms.

4.1.3 Key Insights from Stakeholder Engagement

Engaging with stakeholders proved to be an invaluable process, offering critical insights and constructive feedback that significantly contributed to refining the objectives and strategies of the website, ensuring it aligns more closely with user needs and expectations:

- 1) User Preferences: Students emphasized the importance of intuitive navigation and visually appealing layouts.
- 2) Content Relevance: Faculty members suggested including academic and cultural content to expand the website’s audience.

- 3) Performance Indicators: Stakeholders recommended clear metrics to measure the website’s success, such as visitor growth, user feedback, and content reach.

4.1.4 Strategic Framework for Implementation

Based on the comprehensive analysis, a well-structured strategic framework was developed to ensure that each objective was both actionable and measurable. This framework was carefully designed to align with the overarching goals of the project and included the following the framework included:

- 1) Performance Metrics:
 - Visitor statistics (e.g., unique visitors per month).
 - Engagement indicators (e.g., user comments and shares).
 - Collaboration metrics (e.g., partnerships formed).
- 2) Content Planning:
 - Diverse content categories with defined update frequencies.
 - Integration of user-generated content to foster active participation.
- 3) Digital Integration:
 - Linking the website with social media platforms such as Instagram, YouTube, and Twitter to amplify reach.

Table 4.2 provides a concise summary of the key strategic components that form the foundation of the *Sastranesia* Pers website, highlighting its core objectives, functional elements, and implementation strategies.

Table 4.2 Strategic components of the *Sastranesia Pers*

Component	Details
Content Categories	News, poetry, short stories, reviews, cultural features, and academic articles.
Update Schedule	Daily updates for news; weekly updates for poetry, short stories, and reviews.
Social Media Integration	Instagram, YouTube, Twitter, TikTok, and WhatsApp as additional engagement channels.
User Feedback Mechanisms	Regular surveys and feedback collection to guide iterative improvements.

The analysis phase ensured a comprehensive understanding of the requirements and challenges associated with the *Sastranesia Pers* website. By aligning the platform’s goals with user needs and institutional objectives, this phase established a strong foundation for subsequent stages of development. The strategic insights gained during this phase guided the design and development of a website tailored to enhance writing creativity and foster collaboration among Indonesian Literature students.

4.2 Design Phase: Content and Structure

The design phase was pivotal in crafting an engaging, user-centric content strategy for *Sastranesia Pers*, a platform aimed at promoting creativity and literary expression among Indonesian Literature students. Incorporating visual elements, such as a well-thought-out logo design, can also strengthen audience engagement. A logo that reflects the institution's values and identity ensures consistency across all communications and



Figure 2. Sastranesia Logo Design

resonates with these different groups effectively. This phase focused on defining comprehensive content categories, audience segmentation, update schedules, and structural elements to optimize user experience (UX) and accessibility.

4.2.1 Content Strategy and Audience Engagement

A well-rounded content strategy was developed to address the multifaceted interests of students, lecturers, and alumni. The approach involved:

- 1) Content Diversity:
 - Incorporating a broad spectrum of topics, such as news, poetry, short stories, reviews, and cultural articles.
 - Introducing multimedia formats like podcasts and video interviews to diversify content delivery.
- 2) Audience-Centric Planning:
 - Tailoring content to meet the varying needs of students (academic resources), lecturers (research and teaching aids), and alumni (cultural and professional updates).

Table 4.3. Content Strategy Overview

Content Type	Target Audience	Update Frequency
News	Students, Lecturers	Daily
Short Story	Students, Alumni	Weekly
Features	Students, Lecturers, Alumni	Monthly
Poetry	Students, Alumni	Weekly
Reviews	Students, Lecturers, Alumni	Weekly
Culture	Students, Lecturers, Alumni	Monthly
Podcasts	Students, Lecturers, Alumni	Weekly

4.2.2 Structural Design and User Experience

The structural design emphasized simplicity, intuitiveness, and responsiveness:

- 1) Intuitive Navigation:
 - Clear menus and category tabs for easy access to specific sections.
 - Breadcrumb navigation to guide users through the site hierarchy.
- 2) Consistent Layout:
 - Uniform design elements across all pages to create a cohesive visual identity.
 - Use of the faculty’s thematic colors, with orange symbolizing energy and creativity.
- 3) Responsive Design:
 - Ensuring compatibility with smartphones, tablets, and desktops for seamless browsing.

Table 4.4. Key Structural Features

Feature	Description
Navigation Menu	Simplified and categorized for clarity
Color Scheme	Faculty-aligned thematic colors
Mobile Optimization	Adapted layouts for all devices
Accessibility Features	High-contrast options for readability

4.2.3 Integration with Social Media

To amplify its reach, *Sastranesia Pers* integrated social media channels, including Instagram, YouTube, Twitter, and TikTok. This feature allowed for:

- 1) Easy sharing of articles and multimedia content.
- 2) Real-time interaction with users via comments and likes.

Table 4.5. Social Media Integration

Platform	Purpose
Instagram	Visual storytelling and promotional posts
YouTube	Video features, interviews, and tutorials
Twitter	Quick updates and engagement threads
TikTok	Creative short videos to attract younger audiences

4.2.4 Frequency Planning and Content Scheduling

Strategic scheduling balanced regular updates with user engagement, avoiding content saturation. For instance:

- 1) Daily news updates ensured relevance.
- 2) Weekly and monthly updates for other categories maintained anticipation.

Table 4.6. Update Schedule

Frequency Categories	
Daily	News
Weekly	Poetry, Short Stories, Reviews, Podcasts
Monthly	Features, Culture

4.2.5 Design Outputs and Implementation Readiness

The design phase culminated in a robust framework that emphasized:

- 1) Content Alignment: Ensuring all materials adhered to journalistic and academic standards.
- 2) User-Centricity: Reflecting users’ needs in the navigation, content variety, and accessibility features.

This blueprint positioned *Sastranesia Pers* as a vibrant and interactive platform that bridges academic theory with practical application. The emphasis on user experience, diverse content, and strategic planning ensured a dynamic digital space for creative exploration and professional development in literature.

4.3 Development Phase: Prototype Creation and Validation

The development phase was a critical stage in transforming the conceptual framework of *Sastranesia Pers* into a functional prototype. This stage emphasized the integration of technical features, the alignment of content with ethical and journalistic standards, and the incorporation of user-centric design elements to ensure a seamless user experience. The activities conducted during this phase focused on creating, testing, and refining the prototype, with inputs from technical experts, content validators, and end-users.

4.3.1 Technical Integration

- Search Engine Optimization (SEO):
 - 1) The website was designed with SEO principles to enhance visibility on search engines, ensuring a wider reach.
 - 2) Keywords relevant to Indonesian literature, creative writing, and journalism were strategically incorporated.

- Social Media Connectivity: and TikTok, allowing users to share content and interact with it across diverse channels.
- 1) The website was integrated with major social media platforms, including Instagram, YouTube,
 - 2) APIs for social media were employed to enable real-time content sharing and automated updates.

Table 4.7. Key Technical Integrations

Feature	Implementation Details	Expected Outcome
SEO Optimization	Meta tags, keywords, alt text for images	Improved search engine ranking
Social Media APIs	Automated sharing features	Increased audience engagement
Analytics Tools	Google Analytics integration	Real-time monitoring of user behavior
Mobile Compatibility	Responsive web design	Enhanced accessibility across devices

4.3.2 User-Centric Design

- Layout and Navigation:
 - 1) Clear and intuitive navigation menus were developed, with breadcrumb features to guide users seamlessly.
 - 2) A minimalistic yet vibrant layout was chosen to maintain user focus on content while enhancing readability.
- Branding and Visual Identity:
 - 1) The website employed orange as the primary color to symbolize creativity and energy, reflecting the essence of the Faculty of Languages and Arts.
 - 2) The *Sastronesia* Pers logo was prominently displayed, incorporating elements such as a microphone symbolizing journalistic voice and creative expression.
 - 3) Accessibility Features: High-contrast modes and adjustable font sizes were included to cater to users with visual impairments.

Table 4.8. User-Centric Design Features

Design Aspect	Implementation	Benefit
Navigation	Multi-level menu, breadcrumbs	Easier content discovery
Visual Identity	Consistent color schemes, logo placement	Stronger brand recognition
Accessibility	Adjustable fonts, high-contrast options	Inclusive user experience

4.3.3 Content Reliability

- Alignment with Journalistic Standards:
 - 1) Content was curated and edited to adhere to journalistic principles, emphasizing accuracy, clarity, and objectivity.
 - 2) Articles underwent peer reviews to ensure factual correctness and high editorial quality
- Ethical Guidelines: The website adhered to ethical journalism guidelines, avoiding plagiarism, sensationalism, and misinformation.
- Content Validation: Validators evaluated content for relevance, consistency, and alignment with the target audience's needs.

Table 4.9. Content Validation Process

Validation Stage	Validator Type	Focus Areas
Initial Review	Content Experts	Relevance, accuracy
Peer Review	Academic Validators	Journalistic ethics, objectivity
User Feedback	Student Representatives	Engagement, usability

4.3.4. Prototype Testing and Validation

The prototype underwent rigorous testing phases, including:

1) Self-Evaluation:

- Internal testing by the development team to identify and resolve technical glitches.

- Ensured alignment with the initial objectives and curriculum standards.

2) Expert Review:

- Involved technical experts and journalistic validators.
- Key recommendations included improving layout readability, enhancing accessibility, and integrating analytics tools.

Table 4.10. Expert Suggestions and Implementations

Suggestion	Implementation Details	Outcome
Improve Layout Organization	Simplified grid-based structure	Enhanced readability
Enhance Accessibility Features	Added contrast and font adjustment	Broader user inclusivity
Strengthen Social Media Links	Improved API connections	Seamless cross-platform sharing

- One-to-One Testing: Testing conducted with representative students from classes A, B, and C. Feedback emphasized enhancing navigation, diversifying content, and maintaining high-quality articles.

Table 4.11. Student Feedback and Actions

Feedback from Students	Action Taken	Impact
Enrich visual content	Added relevant images and graphics	Increased engagement
Expand article categories	Introduced dictionary and career sections	Greater content diversity
Ensure error-free writing	Strengthened editorial processes	Improved trust and credibility

4.3.5 Outputs of the Development Phase

1) Functional Prototype: A fully operational prototype equipped with SEO features, social media integration, and responsive design.

2) Validated Content: High-quality, reliable articles across multiple categories.

3) Enhanced User Features: Intuitive navigation, accessibility tools, and a vibrant visual identity.

The development phase laid the groundwork for *Sastranesia* Pers as an innovative, user-focused platform fostering creativity and collaboration among Indonesian Literature students. Through iterative validation and refinement, the platform evolved into a robust digital space aligned with its academic and creative objectives.

4.4 Implementation Phase: Formative Evaluation and User Feedback

The implementation phase focused on the practical application of the *Sastranesia* Pers prototype, ensuring its functionality aligned with academic objectives and user expectations. This phase incorporated formative evaluations, involving iterative reviews and adjustments based on expert validation and student feedback. The implementation strategy was designed to identify discrepancies, enhance usability, and optimize the platform's effectiveness in fostering writing creativity.

4.4.1 Self-Evaluation

The development team conducted a thorough self-assessment of the prototype to verify its alignment with

the predefined goals, curriculum standards, and user requirements. Key activities during this stage included:

- 1) Technical Review:
 - Debugging any system errors to ensure seamless functionality.
 - Testing cross-device compatibility to validate responsive design features.
- 2) Content Verification: Reviewing articles and multimedia content for accuracy, consistency, and adherence to journalistic standards.
- 3) Alignment Check: Ensuring the platform's features met the targeted objectives, such as promoting creativity and providing a collaborative learning environment.

Table 4.12. Self-Evaluation Focus Areas

Focus Area	Evaluation Criteria	Action Taken
Technical Functionality	Smooth navigation, error-free pages	Debugged navigation and loading issues
Content Accuracy	Adherence to journalistic standards	Reviewed and refined content
Curriculum Alignment	Relevance to academic objectives	Adjusted sections to fit learning outcomes

4.4.2 Expert Review

Expert validators, including technical specialists and journalistic professionals, evaluated the prototype to ensure its robustness and quality. Their reviews focused on the website's content, structural organization, and user interface. Based on their assessments, the following improvements were implemented:

- 1) Layout Optimization:
 - Simplified grid-based layouts to enhance readability.

- Clear categorization of sections for better information retrieval.
- a. Accessibility Enhancements: Introduced high-contrast display options and adjustable font sizes for visually impaired users.
- b. Social Media Integration: Strengthened connections between the platform and social media accounts through seamless API integrations.

Table 4.13: Expert Recommendations and Implementations

Recommendation	Implementation Details	Outcome
Improve Layout Organization	Reorganized content sections	Enhanced user readability and engagement
Enhance Accessibility Features	Added contrast adjustments, font sizing	Broadened accessibility for diverse users
Strengthen Social Media Connections	Improved API functionalities	Increased cross-platform interaction

4.4.3 One-to-One Testing

To gather direct user feedback, one-to-one testing sessions were conducted with representative students

from classes A, B, and C. The hands-on testing sessions aimed to identify usability challenges and gather insights into user preferences. The feedback was consolidated into actionable revisions:

- **Content Expansion:** Students suggested incorporating more in-depth articles, including career advice, dictionary features, and cultural analyses.
- **Navigation Improvements:** Feedback highlighted the need for clearer navigation paths and consistent layouts across sections.
- **Content Quality Assurance:** Users emphasized the importance of error-free, high-quality articles to maintain credibility.

Table 4.14. Student Feedback and Adjustments

Feedback	Action Taken	Result
Need for more in-depth articles	Added career, dictionary, and cultural content	Greater content variety
Improve navigation clarity	Streamlined menu structures and paths	Enhanced ease of use
Ensure high content quality	Strengthened editorial and proofreading processes	Built user trust and platform credibility

4.4.4 Formative Evaluation Summary

The formative evaluation phase emphasized iterative improvements based on continuous feedback. These

adjustments ensured the prototype evolved into a user-friendly and academically relevant platform that supported creative writing and journalistic education.

Table 4.15. Formative Evaluation Summary

Evaluation Stage	Key Findings	Resulting Actions
Self-Evaluation	Minor navigation bugs and content gaps	Resolved issues and added missing elements
Expert Review	Suggestions for layout and accessibility	Implemented all expert recommendations
One-to-One Testing	Users requested expanded content categories	Introduced new sections and refined navigation

4.4.5 Outputs of the Implementation Phase

- **Enhanced Prototype:** A revised version of the website with optimized navigation, expanded content, and robust accessibility features.
- **User-Centric Improvements:** Changes based on expert and user feedback ensured the platform was engaging, credible, and easy to use.
- **Validated Functionality:** Comprehensive testing validated the platform's alignment with academic goals and its ability to foster creativity in writing.

By incorporating iterative feedback loops during the implementation phase, *Sastranesia Pers* successfully addressed user needs and institutional objectives. The platform emerged as a powerful tool for Indonesian Literature students, blending academic rigor with practical usability to foster creativity and collaboration in the digital age.

4.5 Evaluation Phase: Comprehensive Review, Revisions, and Outcomes

The evaluation phase was the culmination of iterative reviews and improvements aimed at refining the *Sastranesia Pers* platform into a highly functional and user-friendly digital space. This stage involved analyzing user feedback, assessing content and structural elements, and implementing targeted revisions to meet both educational and creative objectives.

4.5.1 Revisions Based on Feedback

Feedback from students, experts, and stakeholders was systematically analyzed to identify areas for improvement. The following key revisions were implemented to enhance the platform:

- **Content Expansion:**
 - 1) **New Sections:** Career advice, dictionary features, and in-depth analytical articles were introduced to provide diverse content for students and alumni.

- 2) Cultural and Professional Focus: Expanded content to include cultural insights and professional development topics, broadening the platform’s appeal.
- Navigation Enhancements:
 - 1) Redesigned navigation menus to improve usability and accessibility.
 - 2) Added breadcrumbs and categorized content sections for seamless exploration.
- Consistency and Accuracy:
 - 1) Strengthened editorial processes to eliminate grammatical errors and maintain a high standard of content quality.
 - 2) Established a quality assurance workflow for regular updates and error checks.

Table 4.16. Key Revisions and Outcomes

Revision Type	Implemented Changes	Resulting Benefits
Content Expansion	Added career, dictionary, and analytical articles	Enhanced content diversity
Navigation Enhancements	Redesigned menu and added breadcrumbs	Improved user experience
Consistency and Accuracy	Strengthened proofreading processes	Built trust and credibility

The evaluation phase yielded critical insights into the platform’s effectiveness in achieving its objectives:

- Enhanced Writing Creativity:
 - 1) Students demonstrated significant improvement in their ability to produce journalistic content, effectively bridging theoretical knowledge and practical application.
 - 2) The inclusion of diverse content formats (e.g., news, poetry, reviews) provided students with opportunities to explore various writing styles and genres.
- Positive User Engagement:
 - 1) Dynamic, regularly updated content attracted a wide audience base, fostering sustained interaction.
 - 2) User-friendly design and seamless navigation contributed to high retention rates and repeat visits.
- Alignment with Educational Objectives:
 - 1) The integration of theoretical concepts and hands-on practice in journalism aligned with academic goals, fostering deeper learning and skill development.
 - 2) The platform became a vital tool for enhancing students’ understanding of journalistic ethics and principles.
- Improved Collaboration and Impact:
 - 1) The platform facilitated partnerships with literary and cultural organizations, amplifying its reach and influence.
 - 2) It served as a collaborative space for students, lecturers, and alumni, promoting a sense of community and shared learning.

Table 4.17. Evaluation Outcomes

Key Finding	Evidence/Impact
Enhanced Writing Creativity	Improved quality of student-submitted articles
Positive User Engagement	Increased user retention and feedback responses
Educational Alignment	High satisfaction ratings from lecturers
Improved Collaboration	Partnerships with cultural and literary groups

4.5.2 Systematic Application of the ADDIE Model

The application of the ADDIE model provided a structured framework for iterative improvements:

- 1) Analysis: Identified user needs and institutional goals to guide development.

- 2) Design: Created a content and structural framework emphasizing user-centricity and accessibility.
- 3) Development: Built and tested a functional prototype with integrated technical features.
- 4) Implementation: Conducted self-evaluations, expert reviews, and one-to-one testing to gather feedback.
- 5) Evaluation: Refined the platform based on user feedback, aligning it with academic and professional objectives.

4.5.3 Overall Impact and Future Directions

The evaluation phase confirmed the platform's success in meeting its primary goals while identifying areas for continuous growth:

- 1) Strengthened Academic Integration: The platform is now a core component of the journalism curriculum, offering students a practical outlet for their academic learning.
- 2) Sustainability and Scalability: Recommendations for future iterations include incorporating AI-driven content suggestions and analytics tools to enhance user engagement and platform performance.

Table 4.18. Recommendations for Future Development

Area for Growth	Suggested Action	Expected Outcome
Content Personalization	Introduce AI-driven content recommendations	Improved user satisfaction
Advanced Analytics	Implement robust tracking tools	Data-driven decision-making
Cross-Language Support	Add translation features for regional content	Broadened audience base

By addressing feedback and systematically applying the ADDIE model, the *Sastranesia* Pers platform successfully emerged as a pivotal tool for fostering writing creativity and professional skills among Indonesian Literature students. Its user-centric design, content diversity, and alignment with educational objectives make it a sustainable and impactful resource, with the potential for continuous innovation and scalability.

5. Discussion

This study aimed to design and evaluate the *Sastranesia* Pers website, a digital platform to enhance creative writing and journalistic skills among Indonesian literature students at Medan State University. Employing the ADDIE model, the research systematically addressed gaps in traditional teaching methods by integrating a user-friendly platform that combines theoretical knowledge with practical applications. The findings underscore the platform's transformative role in bridging academic learning and real-world practice, while also providing insights into its broader implications for language education.

The analysis phase established a comprehensive understanding of user needs and institutional objectives, guided by surveys and interviews with students, faculty, and stakeholders. These inputs revealed a strong demand for a platform that supports diverse content, such as news, poetry, and cultural articles (Sulasari, 2023). Faculty members emphasized the inclusion of academic and cultural content to enrich the platform, while institutional stakeholders highlighted the importance of measurable performance indicators,

such as visitor growth and engagement rates, to ensure the platform's long-term success (Sharma, 2024). The findings also aligned with research indicating that technology integration in education enhances accessibility and user engagement by addressing diverse learner needs (Maharani et al., 2021; Wu, 2024). Additionally, the analysis phase identified gaps in traditional teaching approaches, particularly the lack of interactivity and limited opportunities for practical application. These findings reflect broader research advocating for personalized and adaptive learning environments that respond to individual learner needs, as supported by Aditia (2024) and Marsofiyati (2024).

The platform's design phase focused on creating a structure that caters to the diverse needs of students, faculty, and alumni. Content categories were carefully developed to include news, short stories, cultural features, and reviews, ensuring the platform's broad appeal and relevance. Multimedia elements, such as podcasts and video interviews, were integrated to offer enriched learning experiences, consistent with best practices in educational design that emphasize the importance of multimedia in fostering engagement and comprehension (Youhasan et al., 2022). Accessibility was a priority, with features such as high-contrast options and adjustable font sizes supporting inclusivity (Tiurkedzhy et al., 2022; Mufarroha, 2023).

Social media platforms like Instagram, YouTube, and TikTok have revolutionized communication and community engagement by enabling real-time interaction and content sharing. This interactivity fosters a sense of community and broadens information dissemination, enhancing user participation and

connectedness, which are vital for building vibrant online communities (Kartashova, 2024). During crises, social media has proven to be a critical tool for communication and resilience, offering dynamic interactions that strengthen social ties (Xie et al., 2022). For instance, during the COVID-19 pandemic, individuals in cohesive neighborhoods with active social media use reported better resilience and support systems, demonstrating the platforms' role in enhancing social capital (Carter & Cordero, 2022). Moreover, their use in health communication allows rapid information dissemination and engagement, promoting public health initiatives (Kumalasari & Sulistiadi, 2022).

The influence of social media on interpersonal relationships and youth engagement is equally significant. These platforms facilitate conversations and community formation around shared interests, reinforcing social support networks and a sense of belonging (Pradhan & Singh, 2023; Rizqi & Riorini, 2022). For youth, social media serves as a collaborative space for learning and skill development, supporting personal and professional growth (Kadokia, 2024). By encouraging active participation, social media strengthens community ties and fosters a shared sense of purpose, making it an indispensable tool for navigating challenges and enhancing connectedness (Alfitri, 2024).

The development phase transformed the conceptual framework into a functional prototype by integrating technical features such as search engine optimization and social media APIs to ensure the platform's visibility and usability (Nabilah, 2024). Content curation adhered to journalistic standards, emphasizing clarity, accuracy, and ethical considerations, which are crucial for maintaining credibility in digital platforms (Jauregui-Velarde et al., 2023). Feedback from validators, including students and content experts, played a pivotal role in refining the platform. Suggestions informed enhancements in visual content, navigation clarity, and the expansion of article categories, reflecting the iterative and user-centered nature of effective platform development (Hansen et al., 2022).

The implementation phase confirmed the platform's relevance and functionality through its application in real-world educational settings. Self-assessments conducted by the development team ensured alignment with curriculum objectives, while feedback from experts and students identified actionable improvements, such as refining navigation paths and diversifying content offerings. These findings resonate with research emphasizing the importance of iterative feedback mechanisms to optimize the user experience and achieve educational objectives (Pursan, 2023; Evans, 2024). The platform was successful in fostering student creativity and bridging theoretical concepts with practical

applications, consistent with Anaya's (2023) advocacy for interactive and personalized learning environments.

During the platform's evaluation phase, significant refinements were made to enhance functionality and sustain user engagement. New features, including dedicated sections for career advice and cultural analyses, were introduced to attract a broader audience, aligning with research emphasizing user-friendly design and targeted content for improved engagement (Ikunne, 2023). Navigation enhancements, such as categorized sections and breadcrumb features, simplified information retrieval and elevated the overall user experience (Raeside et al., 2022). To ensure quality and build user trust, the editorial process was fortified, reinforcing the platform's objectives of promoting creativity, engagement, and academic rigor. The structured application of the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) provided a replicable framework for integrating creativity and professional preparation into language curricula (Jin et al., 2022; Gruebner et al., 2022).

The incorporation of user feedback mechanisms emerged as a critical strategy for enhancing engagement and retention. Research shows that platforms actively involving users in development foster a sense of ownership, which boosts satisfaction and engagement (Farrel et al., 2022). This participatory approach ensures the platform evolves continuously, remaining relevant and responsive to user needs (Carvalho et al., 2022). By integrating feedback and emphasizing adaptability, the platform not only sustains user interest but also solidifies its role as an innovative tool for education and professional development.

This study contributes to addressing a significant research gap by demonstrating how a digital platform can support linguistic creativity and professional writing skills, particularly for Indonesian literature students. The *Sastranesia Pers* platform's localized and student-centered approach is a unique feature that distinguishes it from previous studies, which often lack a focus on specific target groups. This research highlights the transformative potential of integrating journalistic principles with digital tools, emphasizing the importance of accessibility, collaboration, and practical application in language education.

The platform also has broader implications for integrating digital tools into education. By fostering creativity, inclusivity, and professional development, it offers a model for future educational platforms. While the *Sastranesia Pers* website has shown significant promise, it remains in a developmental stage and requires ongoing improvements. Future research should explore its scalability in diverse educational and cultural contexts, as well as its potential for incorporating advanced technologies such as artificial intelligence, augmented reality, and multilingual

support. These advancements could enhance personalization, engagement, and global applicability, aligning the platform with emerging trends in digital education.

It is essential to acknowledge that the *Sastranesia* Pers platform is still growing and needs further refinement to fully accommodate the creative and journalistic potential of Indonesian literature students. Its objectives of fostering writing creativity and journalistic proficiency can be further strengthened through continuous updates and improvements. By focusing on linguistic and cultural elements, the platform can evolve into a more comprehensive tool that not only supports academic goals but also promotes language and literary excellence among students at Medan State University.

6. Conclusions

The study developed and evaluated the *Sastranesia* Pers platform as a transformative tool to enhance creative writing and journalistic skills among Indonesian literature students. Key findings revealed that the platform significantly bridged theoretical knowledge with practical application by fostering an interactive, collaborative, and student-centered learning environment. The novelty of this research lies in its comprehensive integration of journalistic principles with digital technology, creating a pioneering model for language education that addresses gaps in traditional methods. The platform not only enhanced students' creative expression and technical writing skills but also promoted community engagement and sustained motivation through its dynamic and accessible design. These advancements underscore the broader implications of integrating digital tools into education, particularly in fostering linguistic creativity and professional preparedness in the digital age. Future research is recommended to explore the scalability of such platforms in diverse educational and cultural contexts, as well as the incorporation of emerging technologies such as AI-driven personalization, augmented reality, and multilingual support to broaden global applicability and enrich learning experiences further.

5. Acknowledgement

The author expresses gratitude to the Department of Indonesian Language and Literature at FBS UNIMED, colleagues at FBS, the Head of the USU Communication Doctoral Study Program, and the administrators of *Sastranesia* Pers.

References

Adeoye, M. (2024). Revolutionizing education: Unleashing the power of the ADDIE model for effective teaching and learning. *JPI (Jurnal Pendidikan Indonesia)*, 13(1), 202–209. <https://doi.org/10.23887/jpiundiksha.v13i1.68624>

- Adiarsi, G. R., Stellarosa, Y., & Silaban, M. W. (2015). Literasi media internet di kalangan mahasiswa. *Humaniora*, 6(4), 470–480. <https://doi.org/10.21512/humaniora.v6i4.3376>
- Aditia, R. (2024). Psychological review of visual communication on the Instagram platform: Analysis of support for SDGs-5 empowerment for gender equality. *Mediasi: Jurnal Kajian dan Terapan Media Bahasa Komunikasi*, 5(2), 158–176. <https://doi.org/10.46961/mediasi.v5i2.1235>
- Afrilia, L., & Istikharoh, L. (2023). Developing English educational videos for senior high school students. *Leksika: Jurnal Bahasa, Sastra, dan Pengajarannya*, 17(2), 135. <https://doi.org/10.30595/lks.v17i2.16755>
- Alfitri, A. (2024). Uniting communities: Harnessing social capital for community resilience during coronavirus disease 2019. *International Journal of Public Health Science (IJPHS)*, 13(2), 744. <https://doi.org/10.11591/ijphs.v13i2.23416>
- Ali, S. (2024). The use of journalistic language in writing religious rubrics in the Malut Post newspaper. *Jurnal Ilmiah Mandala Education*, 10(1), 37. <https://doi.org/10.58258/jime.v10i1.6494>
- Al-Sabbagh, D. (2023). Impact of different multimedia modalities on vocabulary acquisition among second-language English learners: An empirical investigation. *Educational Sciences*, 31(4), 1–27. <https://doi.org/10.21608/ssj.2023.323795>
- Al-Shaboul, D. (2023). Students' perceptions on the effects of blogging sites in enhancing their motivation for foreign languages writing and reading proficiency. *Migration Letters*, 20(S12), 157–168. <https://doi.org/10.59670/ml.v20is12.5869>
- Anaya, M. M., Navarro, R. B., Regino, Y. C., Castillo, J. A., & Contreras-Florez, J. (2023). Designing a framework for the appropriation of information technologies in university teachers: A four-phase approach. *Data & Metadata*, 2, 53–70. <https://doi.org/10.56294/dm202353>
- Aswad, M., Yassi, A., Pammu, A., Nasmilah, & Gashti, Z. (2022). An account of teaching vocabulary to Indonesian EFL learners through web-based language instruction (WLI): Attitude in focus. *Education Research International*, 2022, Article 1660055. <https://doi.org/10.1155/2022/1660055>
- Aydin, A., Gürsoy, A., & Karal, H. (2023). Mobile care app development process: Using the ADDIE model to manage symptoms after breast cancer surgery (Step 1). *Discover Oncology*, 14(1). <https://doi.org/10.1007/s12672-023-00676-5>
- Bidzilya, Y., Rusynko-Bombyk, L., Solomin, Y., Hetsko, H., & Barchan, O. (2022). Implementation

- of the principles of lifelong learning as a background for quality specialized education of journalists. *Journal of Curriculum and Teaching*, 11(1), 142. <https://doi.org/10.5430/jct.v11n1p142>
- Cai, M. (2024). The role of data journalists as educators. *Preprint*. <https://doi.org/10.31219/osf.io/apzs9>
- Carter, E., & Cordero, M. (2022). Salir adelante: Social capital and resilience during the COVID-19 pandemic in Argentina. *Health & Place*, 77, 102870. <https://doi.org/10.1016/j.healthplace.2022.102870>
- Carvalho, A., Duivenvoorden, A., Simões, A., Grilo, C., Prola, L., Gala, P., ... & Martinho, R. (2022). BarraSim4P: A digital platform for the structural design of cold-formed steel elements from the company Barraferros. *CE/Papers*, 5(2), 90–99. <https://doi.org/10.1002/cepa.1704>
- Chen, Q., Li, Z., Tang, S., Zhou, C., Castro, A., Jiang, S., ... & Xiao, J. (2022). Development of a blended emergent research training program for clinical nurses (Part 1). *BMC Nursing*, 21(1). <https://doi.org/10.1186/s12912-021-00786-x>
- Colton, D. (2016). *Introduction to website design and development: HTML5, CSS3, and JavaScript* (4th ed.). Tech Publishing.
- Crompton, H. (2023). Examining technology use within the ADDIE framework to develop professional training. *European Journal of Training and Development*, 48(3/4), 422–454. <https://doi.org/10.1108/ejtd-12-2022-0137>
- Eslit, E. (2023). Digital alchemy in literature and language: Unveiling pedagogical potentials through blended learning. *Preprint*. <https://doi.org/10.20944/preprints202306.1195.v1>
- Evans, G. (2024). Clinical educator expertise: A scoping review. *The Clinical Teacher*, 21(4), 345–356. <https://doi.org/10.1111/tct.13729>
- Farrel, M., Romadhony, A., & Hasmawati, H. (2022). Content and context-based analysis of university social media engagement. *JATISI (Jurnal Teknik Informatika dan Sistem Informasi)*, 9(4), 3227–3237. <https://doi.org/10.35957/jatisi.v9i4.2696>
- Fitriansyah, F. (2017). Pemanfaatan web berbasis aplikasi multimedia pada mata kuliah dasar-dasar jurnalistik. *Jurnal Cakrawala*, 17(2), 125–131.
- Gosain, K. (2024). A study on understanding the mediation of Web 3.0 technologies in the teaching-learning process and its effect on students' achievement. *International Research Journal on Advanced Engineering and Management (IRJAEM)*, 2(4), 948–956.
- Gruebner, O., Haasteren, A., Hug, A., Elayan, S., Sýkora, M., Albanese, E., ... & Rhein, M. (2022). Digital platform uses for help and support seeking of parents with children affected by disabilities: Scoping review. *Journal of Medical Internet Research*, 24(12), e37972. <https://doi.org/10.2196/37972>
- Guerra, J. (2023). And now what (Part 2)? Language teaching: What did we learn and what remains after the lockdowns? *The American Journal of Social Science and Education Innovations*, 5(6), 18–25. <https://doi.org/10.37547/tajssei/volume05issue06-05>
- Halimatussa'diyah, C. N., & Rusdianto, R. Y. (2024). *Pengaruh Fasilitas, Aksesibilitas dan Harga Tiket Masuk terhadap Keputusan Konsumen dalam Memilih Destinasi Wisata Jawa Timur Park 1, Kota Batu* [Undergraduate thesis, UPN Veteran Jawa Timur]. UPN Veteran Jatim Repository. <https://repository.upnjatim.ac.id/id/eprint/32907>
- Hansen, C., Arlitt, R., Eifler, T., & Deininger, M. (2022). Design by prototyping: Increasing agility in mechatronic product design through prototyping sprints. *Proceedings of the Design Society*, 2, 201–210. <https://doi.org/10.1017/pds.2022.22>
- Herman, H. (2023). Public perceptions of the functions and roles of journalists in supporting communication between government and society in Bone Regency. *Jurnal Ad'ministrare*, 10(2), 295. <https://doi.org/10.26858/ja.v10i2.53133>
- Ikwunne, T. (2023). Decent: A sociotechnical approach for developing mobile health apps in underserved settings. *Digital Health*, 9. <https://doi.org/10.1177/20552076231203595>
- Isdendi, R. R., Nanda, I., & Suganda, M. W. (2023, August). The role of Indonesia's digital citizenship generation in the realization of ethics in cyberspace. In *4th Annual Civic Education Conference (ACEC 2022)* (pp. 514–525). Atlantis Press.
- Jauregui-Velarde, R., Peña, G., Bellido-García, R., & Cabanillas-Carbonell, M. (2023). Mobile app prototype: Telemedicine for mental health care during pandemic. *International Journal of Online and Biomedical Engineering (iJOE)*, 19(1), 155–177. <https://doi.org/10.3991/ijoe.v19i01.34691>
- Jeong, J. (2023). Exploring health journalists' professional role conceptions: A comparative analysis of newspaper and other health journalists. *Asia-Pacific Journal of Convergent Research Interchange*, 9(8), 355–364. <https://doi.org/10.47116/apjcri.2023.08.28>
- Jin, J., Ahmad, T., Parikh, N., Srikumaran, D., Woreta, F., & Ramanathan, S. (2022). In the mind of the ophthalmology residency applicant: Deciding where to apply, interview, and rank. *Journal of*

- Academic Ophthalmology*, 14(2), e201–e208. <https://doi.org/10.1055/s-0042-1756123>
- Kadakia, M. (2024). From selfies to scholarly insights: The educational potential of youth engagement on social media. *International Research Journal on Advanced Engineering and Management (IRJAEM)*, 2(3), 228–236. <https://doi.org/10.47392/irjaem.2024.0036>
- Kartashova, L. (2024). Comparing social media use in school management: Experiences from Ukraine and the United States. *CTE Workshop Proceedings, 11*, 98–119. <https://doi.org/10.55056/cte.684>
- Kartinawati, E., Alfikri, M., & Sumanti, S. T. (2022). New journalist work patterns and news media production in pandemic. *Jurnal ASPIKOM*, 7(2), 80–95. <https://doi.org/10.24329/aspikom.v7i2.1184>
- Kendrick, M., Early, M., Michalovich, A., & Mangat, M. (2022). Digital storytelling with youth from refugee backgrounds: Possibilities for language and digital literacy learning. *TESOL Quarterly*, 56(3), 961–984. <https://doi.org/10.1002/tesq.3146>
- Kertamukti, R., Nugroho, H., & Wahyono, S. B. (2019). Kontruksi identitas melalui stories highlight Instagram kalangan kelas menengah. *Jurnal ASPIKOM*, 4(1), 26–40. <https://doi.org/10.24329/aspikom.v4i1.502>
- Khalidi, M. (Ed.). (2024). *Technological tools for innovative teaching*. IGI Global.
- Kumalasari, R., & Sulistiadi, W. (2022). Policy on the use of social media in hospitals in building communication during the COVID-19 pandemic: Literature review. *Journal of Indonesian Health Policy and Administration*, 7(1), 206. <https://doi.org/10.7454/ihpa.v7i1.5994>
- Kurniawan, R., Kurniawan, A., Heynoek, F., & Sigit, C. (2022). Development of teacher e-module for dynamic balance movement for grade 3 elementary school with autism. *Advances in Health Sciences Research*, 8(3). <https://doi.org/10.2991/ahsr.k.220203.015>
- Lubis, M. S. I. (2018). Media online: Eksistensi dari media cetak di Kota Medan. *Jurnal Network Media*, 1(1), 26–35.
- Maharani, D., Helmiyah, F., & Rahmadani, N. (2021). Penyuluhan manfaat menggunakan internet dan website pada masa pandemi COVID-19. *Abdifomatika: Jurnal Pengabdian Masyarakat Informatika*, 1(1), 1–7. <https://doi.org/10.25008/abdifomatika.v1i1.130>
- Marsofiyati, M., Solihatin, E., & Situmorang, R. (2024). The synergy between workforce, students, and lecturers in collaborative learning. *International Journal of Evaluation and Research in Education (IJERE)*, 13(3), 1391–1402. <https://doi.org/10.11591/ijere.v13i3.27761>
- Maruf, N. (2023). Investigating EFL teachers' perceptions and meanings on digital storytelling in language learning: A narrative approach. *JEELS (Journal of English Education and Linguistics Studies)*, 10(2), 357–378. <https://doi.org/10.30762/jeels.v10i2.912>
- Mawarni, S., & Hartoto, H. (2023). Development of the Rumah Karya application in the educational technology study program as a media database for the works of lecturers and students. *Jurnal Inovasi Teknologi Pendidikan*, 10(1), 106–113. <https://doi.org/10.21831/jitp.v10i1.58902>
- Mishra, R. (2023). Communication barriers in legal English: A brief analysis. *International Journal of Research in English*, 5(1), 188–191. <https://doi.org/10.33545/26648717.2023.v5.i1c.103>
- Mizan, A. (2024). Development of web-based audio-visual media for fi'il amr for beginners learning at Ma'had Al-Jami'ah UIN Raden Intan Lampung. *E3S Web of Conferences*, 482, Article 05006. <https://doi.org/10.1051/e3sconf/202448205006>
- Mufarroha, F., Haq, A. F., Maghfiroh, A., Anamisa, D. R., Supianto, A. A., & Jauhari, A. (2023). Quality assurance of academic websites using performance testing tools. *Technium Romanian Journal of Applied Sciences and Technology*, 16, 226–233. <https://doi.org/10.47577/technium.v16i.9985>
- Nabilah, N. (2024). Redefining assessment: Creating a groundbreaking prototype for domain affective in project-based learning. *Contemporary Mathematics and Science Education*, 5(1), Article ep24005. <https://doi.org/10.30935/conmaths/14457>
- Oktaviana, M. (2024). Implementation of journalistic language in the UMKM and cooperatives column in the online media Ekorantt.com. *IJESS (International Journal of Education and Social Science)*, 5(2), 236–246. <https://doi.org/10.56371/ijess.v5i2.329>
- Pesantex, A. (2022). Mobile application prototype for the development of phonological awareness in children's school. *Preprint*. <https://doi.org/10.46254/eu05.20220071>
- Pradhan, J., & Singh, S. (2023). Unraveling the impact of social media on interpersonal communication and relationships. *International Journal of Research Publication and Reviews*, 4(3), 1622–1625. <https://doi.org/10.55248/gengpi.2023.32497>
- Pursan, G., Adeliyi, T. T., & Joseph, S. (2023). Information technology technical support success

- factors in higher education: Principal component analysis. *International Journal of Advanced Computer Science and Applications (IJACSA)*, 14(6), 530–540. <https://doi.org/10.14569/ijacsa.2023.0140630>
- Putra, R. A. (2019). Tantangan media massa dalam menghadapi era disrupsi teknologi informasi. *Jurnal Sistem Informasi (JUSIFO)*, 5(1), 1–6. <https://doi.org/10.19109/jusifo.v5i1.5003>
- Raeside, R., Jia, S., Redfern, J., & Partridge, S. (2022). Navigating the online world of lifestyle health information: Qualitative study with adolescents. *JMIR Pediatrics and Parenting*, 5(1), e35165. <https://doi.org/10.2196/35165>
- Ramli, R., Razali, R., & Armia, A. (2023). Qualitative study: Teaching Indonesian as the national language to students in the all-digital era: Challenges and solutions. *International Journal for Multidisciplinary Research*, 5(3). <https://doi.org/10.36948/ijfmr.2023.v05i03.3108>
- Rani, W. M., & Iryani, I. (2023). Validity of green chemistry student worksheet based on project-based learning for phase E at SMAN 9 Padang. *Jurnal Pendidikan dan Pembelajaran Kimia*, 12(3), 138–147.
- Rizqi, S., & Riorini, S. (2022). Stimulus of loyalty to beauty product influencer on social media. *The Management Journal of Binaniaga*, 7(2), 197–212. <https://doi.org/10.33062/mjb.v7i2.10>
- Sa'ad, M. I. (2020). *Otodidak web programming: Membuat website edutainment*. PT Elex Media Komputindo.
- Saeidnia, H., Kozak, M., Ausloos, M., Herțeliu, C., Mohammadzadeh, Z., Ghorbi, A., ... & Hassanzadeh, M. (2022). Development of a mobile app for self-care against COVID-19 using the analysis, design, development, implementation, and evaluation (ADDIE) model: Methodological study. *JMIR Formative Research*, 6(9), e39718. <https://doi.org/10.2196/39718>
- Saptya, R., Permana, M., & Abdullah, A. (2020). Surat kabar dan perkembangan teknologi: Sebuah tinjauan komunikatif. *Jurnal Ilmu Politik dan Komunikasi*, 10(1), 1–23.
- Sastre, M., Pifarré, M., Cujba, A., Cutillas, L., & Falguera, E. (2022). The role of digital technologies to promote collaborative creativity in language education. *Frontiers in Psychology*, 13, Article 828981. <https://doi.org/10.3389/fpsyg.2022.828981>
- Sharma, S. K., Yadav, V., Srivastava, S., & Shukla, H. (2024). Study notion (an ed-tech platform). *International Journal of Innovative Research in Computer Science & Technology (IJIRCST)*, 12(Special Issue 1), 385–390. <https://doi.org/10.55524/csistw.2024.12.1.67>
- Sosiawan, E. A. (2008). Evaluasi implementasi e-government pada situs web pemerintah daerah di Indonesia: Perspektif konten dan manajemen. *Seminar Nasional Informatika*, 2008(November 2007), 88–98.
- Sulasari, A. (2023). Assessing the impact of online training platforms on continuing education in science and technology fields. *Journal of Technology in Science and Engineering Training (JTEST)*, 1(1), 19–24. <https://doi.org/10.51629/jtest.v1i1.171>
- Sumarno, S. (2023). The integration of digital technology in public management transformation: Implications for educational advancements in Indonesia. *International Journal of Asian Education*, 4(2), 115–120.
- Taroreh, B., & Arisandy, D. (2022). Development of thematic digital comics for healthy children during the COVID-19 pandemic for PJOK learning class V elementary school students in Palembang. *Kinestetik: Jurnal Ilmiah Pendidikan Jasmani*, 6(1), 10–16. <https://doi.org/10.33369/jk.v6i1.20454>
- Teng, M. (2022). The effectiveness of multimedia input on vocabulary learning and retention. *Innovation in Language Learning and Teaching*, 17(3), 738–754. <https://doi.org/10.1080/17501229.2022.2131791>
- Tiurkedzhy, N. S., Davydova, I. O., Marina, O. Y., & Marin, S. O. (2022). Accessibility analysis of digital libraries and specialized library resources. *University Library at a New Stage of Social Communications Development Conference Proceedings*, 7, 218–231. https://doi.org/10.15802/unilib/2022_270121
- Tri, S. (2019). *Statistik Telekomunikasi Indonesia 2019*. Badan Pusat Statistik.
- Triyono, A. (2021). Jurnalisme online sebagai kontrol informasi hoaks Pilkada serentak di media. In *Proceedings of the National Seminar on Media and Communication* (pp. 45–60). Penerbit Tahta Media Group.
- Wu, W. (2024). Digital computing-based course recommendation algorithm for distance education platforms. *Journal of Electrical Systems*, 20(6s), 2124–2134. <https://doi.org/10.52783/jes.3127>
- Xie, L., Pinto, J., & Zhong, B. (2022). Building community resilience on social media to help recover from the COVID-19 pandemic. *Computers in Human Behavior*, 134, Article 107294. <https://doi.org/10.1016/j.chb.2022.107294>

- Youhasan, P., Henning, M., Chen, Y., & Lyndon, M. (2022). Developing and evaluating an educational web-based tool for health professions education: The flipped classroom navigator. *BMC Medical Education*, 22(1), Article 36. <https://doi.org/10.1186/s12909-022-03647-6>
- Zafar, U. (2024). Improved diagnostic confidence imparted by radiologists in radiology reports after educational interventions on reporting styles. *Cureus*. <https://doi.org/10.7759/cureus.53926>
- Zhang, W. (2024). The path of enhancement of traditional cultural heritage on moral education based on ADDIE model. *Applied Mathematics and Nonlinear Sciences*, 9(1). <https://doi.org/10.2478/amns-2024-0561>