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Application of the synectics model to enhance students' writing skills through digital storytelling using kinemaster

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Abstract: This study aims to examine the application of the Synectics model in improving students' writing skills through digital storytelling using the Kinemaster app. The purpose of this research is to explore how integrating the Synectics model, a creative problem-solving approach, with digital tools can enhance students' writing outcomes. A qualitative descriptive methodology was employed to gather and analyze data. The findings indicate that students effectively utilized the Synectics model in combination with Kinemaster to create compelling digital stories. This approach not only strengthened their writing structure but also enhanced their creativity and engagement with the content. The study concludes that the integration of the Synectics model with digital storytelling tools can significantly improve students' writing skills by fostering creativity, critical thinking, and content presentation. Practical implications suggest that educators can adopt this innovative method to enrich writing instruction and align with the growing use of technology in education. This research offers valuable insights into modernizing writing pedagogy, making it more relevant and engaging for students in the digital age.

Keywords: *Digital Storytelling, KineMaster, Synectics Model, Writing Skills.*

1. Introduction

Writing competence is an essential skill that must be mastered by university students, particularly those in language-related fields [1]. Writing is not only a critical academic skill but also a fundamental tool for communication, creativity, and personal expression [2]. However, many students struggle to achieve their full potential in writing due to a lack of effective teaching models and the persistence of conventional, lecture-based learning methods. This traditional approach often fails to engage students in a way that fosters creativity, critical thinking, and effective writing skills [3]. As a result, students' writing abilities remain suboptimal, hindering their potential to produce high-quality written work [4].

Moreover, the rapid advancement of information and communication technology presents both opportunities and challenges in the field of education. Despite the widespread availability of digital tools, many students still underutilize technology in publishing or sharing their written works [5]. While technology has the potential to enhance learning and enable students to engage more interactively with course material, its full potential is often not realized without the proper pedagogical strategies [6]. In this context, one of the promising solutions lies in selecting an appropriate teaching model that integrates creativity, critical thinking, and technology.

One such model is the Synectics model, which can be particularly effective in fostering creativity and improving writing skills. Synectics is a teaching approach that encourages students to think

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creatively by generating analogies and using problem-solving techniques to tackle complex topics [7]. This model is particularly advantageous because it helps students develop original ideas, enhance their empathy, and engage in interpersonal connections, making it suitable for learners at all levels and across various subject areas [8]. By using analogies to develop storylines and narratives, Synectics can be applied to writing instruction, enabling students to create more engaging and innovative written work.

Digital storytelling is another promising strategy that can significantly enhance writing skills in the digital age [9]. Digital storytelling combines traditional storytelling techniques with modern digital media tools, such as videos, images, audio, and animation, to create compelling narratives [10]. It allows students to share their stories in an interactive and visually appealing manner, making the writing process more engaging. Digital storytelling also supports the development of technical skills and provides a platform for students to publish and share their work globally [11]. As such, it can be a powerful tool for enhancing students' creative and technological abilities.

The integration of Synectics with digital storytelling offers a unique opportunity to improve students' writing competencies [12]. Through the use of Synectics, students can develop the ability to generate creative ideas and connect them through analogies, which will serve as the foundation for their digital stories [13]. By engaging in the digital storytelling process, students can further refine their writing skills, learn to use multimedia effectively, and enhance their ability to express themselves in diverse ways. The combination of these two approaches is expected to help students develop a more comprehensive and effective writing practice [14].

Based on this background, the present study titled "The Application of the Synectics Model to Improve Students' Writing Skills through Digital Storytelling" was conducted. The aim of this research is to identify the needs for developing an effective writing teaching model, formulate development principles, create a prototype, and evaluate the effectiveness of the Synectics model in enhancing students' ability to write short stories. The study focuses on examining how the integration of Synectics with digital storytelling can improve students' writing skills and engagement in the writing process.

Technological advancements have already been widely incorporated into language learning, offering numerous benefits [15]. Several studies suggest that while technology may not always correlate significantly with academic achievement, it plays a crucial role in increasing student engagement and participation in class activities. Moreover, the use of technology can also foster the development of essential soft skills, such as teamwork, problem-solving, and independent learning. Educators have increasingly turned to various forms of technology to enhance classroom instruction and facilitate greater student participation [16].

Technology provides a wide array of tools and resources that can be used to modify lesson content, adapt assignments to meet students' needs, and track student progress more effectively [17]. The benefits of technology will be more fully realized when educators are able to identify and address the specific challenges students face in the classroom [18]. Research has shown that the integration of technology in the classroom is influenced by both students' and instructors' perceptions of technology, the availability of time to incorporate technology into lessons, technical support, and the level of technological literacy among both students and teachers.

Faculty perceptions of teaching and knowledge greatly impact the approach they adopt in their teaching, including whether they utilize teacher-centered or student-centered methods [19]. Research indicates that instructors who view students as active knowledge creators are more likely to adopt teaching strategies that integrate technology into their lessons [20]. Moreover, adequate technical support is crucial for the successful integration of technology into teaching. Institutions must ensure that systems are in place to provide training for both teachers and students, as well as provide the necessary infrastructure for the effective use of digital tools [20].

Storytelling, a long-standing pedagogical strategy, has proven to be an effective method for enhancing writing instruction [20]. Storytelling allows individuals to share experiences, reflect on life events, and convey emotions through narrative [21]. In the context of education, storytelling helps students connect with others by sharing personal experiences, fostering empathy and understanding

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[22]. This social aspect of storytelling contributes to the development of essential communication skills and enhances students' ability to engage with others on a deeper level [23].

Digital storytelling takes this traditional method to the next level by incorporating digital media, enabling students to craft more dynamic and visually compelling narratives [24]. The media tools used in digital storytelling, such as videos, images, and animations, make the storytelling process more interactive and engaging [25]. Scholars argue that using digital storytelling in the classroom is an effective way to improve language skills, as it encourages students to think critically, organize their ideas clearly, and express themselves creatively.

In the classroom, there are two main reasons why educators may choose to incorporate digital storytelling into their curriculum [26]. First, educators seek to integrate digital storytelling as part of their teaching approach to improve engagement and learning outcomes. Second, digital storytelling allows educators to connect with global networks and foster collaboration, making it an excellent tool for promoting active participation in a global context. Further notes, many students today are focused on enhancing their social presence, and digital storytelling offers a valuable avenue for students to express themselves in creative ways that are meaningful and relevant to their peers.

Digital storytelling is an effective learning method to deliver material in an interesting and interactive way [27]. One tool that can be used to improve the quality of digital storytelling is KineMaster [28]. KineMaster is a complete and professional video editing application, available for iOS and Android devices [29]. This application supports various layers of video, audio, images, text, and effects, allowing teachers to create interesting and high-quality learning videos [30].

By using KineMaster, learning materials can be presented in the form of relevant animated videos, so that students are more focused and interested in what is being conveyed [31]. The resulting videos can also be shared directly to social media platforms such as YouTube, WhatsApp, and Facebook, making it easier for teachers to reach students [32]. The KineMaster application, with a simple interface but complex features, enables a more effective learning process and makes it easier for students to understand the material.

In the context of language education, students are expected to hone their writing skills, yet the demanding curriculum and vast amount of material to cover often leave little room for extensive writing practice. As such, instructors may struggle to dedicate enough time to developing students' writing abilities [33]. The integration of digital storytelling into the curriculum offers an effective solution to this challenge, providing students with an opportunity to engage in the creative process and share their stories with a broader audience [34].

This study, therefore, seeks to explore the application of the Synectics model and digital storytelling in improving students' writing skills. By using these innovative approaches, the research aims to contribute to the development of more effective writing pedagogy that fosters creativity, critical thinking, and technological fluency, ultimately empowering students to become more skilled and confident writers.

2. Theoretical Studies

In this review, the detailed literature review is divided into several sections. The first part discusses the use of KineMaster as a video editing tool and its application in educational contexts. Then, the discussion shifts to digital storytelling and its impact on enhancing writing skills, particularly through the use of the Synectics model. Lastly, the review explores the theoretical frameworks that support the integration of creative problem-solving and digital tools like KineMaster in writing instruction.

2.1. KineMaster As a Video Editing Tool in Education

KineMaster is a versatile video editing application that allows users to create and edit high-quality videos with ease [35]. It is widely used in various educational settings due to its user-friendly interface and the variety of multimedia tools it offers [36]. KineMaster provides features such as video cutting, layering, adding text, audio, and images, as well as visual effects that can help create engaging digital

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content [37]. This makes it an ideal tool for digital storytelling, where students can combine narrative writing with visual elements to produce compelling multimedia stories [38]. The main functions of KineMaster will be explained in the table below [39].

Table 1.
Main functions of kinemaster.

Functions	Description
Video Editing	Cutting, arranging, and merging video clips.
Media Integration	Adding text, images, and audio.
Visual Effects	Providing various transition effects and filters.
Multi-Layer Editing	Using multiple media layers simultaneously.
Voice Recording	Recording voice for narration or background.
Video Export	Exporting videos in high quality.
Creative Learning	Creating digital storytelling and multimedia content.

KineMaster is a video editing application that allows users to edit and produce professional-quality videos using various features such as cutting, arranging clips, and adding multimedia elements (text, images, audio) [40]. The application supports multi-layer editing, enabling users to add several elements at once. Visual effects, transitions, and voice recording features are also available to enrich the content. KineMaster is often used in creating digital storytelling, presentations, and other creative projects, allowing users to produce engaging and high-quality content [41].

The use of KineMaster in the classroom enables students to engage in creative learning activities that go beyond traditional text-based assignments. By incorporating multimedia into their stories, students develop their ability to convey ideas more effectively and engage with content in a deeper, more interactive way [42]. Furthermore, tools like KineMaster promote collaboration and creativity, allowing students to work on projects that integrate various digital media forms.

2.2. Digital Storytelling and Its Role in Enhancing Writing Skills

Digital storytelling is an educational approach that combines the art of storytelling with digital technology to enhance learning [43]. It involves the creation of narratives that use multimedia elements such as video, images, and sound to communicate ideas in a more engaging and dynamic manner. In the context of writing instruction, digital storytelling can be a powerful tool to help students improve their writing skills by providing a platform for them to practice structuring and expressing their ideas creatively.

Research has shown that digital storytelling can improve writing skills by promoting critical thinking, narrative development, and language use. Digital storytelling fosters creativity and helps students organize their thoughts more effectively [44]. Moreover, students are encouraged to pay attention to the elements of storytelling, such as plot, characters, and setting, which are crucial in improving their narrative writing. By producing a digital story, students actively engage with both writing and multimedia, enhancing their writing abilities in the process [45].

2.3. The Synectics Model and Its Application in Writing Instruction

The Synectics model is a creative problem-solving approach that encourages the use of analogies and connections between seemingly unrelated ideas to stimulate innovative thinking [46]. In the context of writing instruction, the Synectics model can be applied to help students develop their writing skills by encouraging them to think outside the box and approach writing tasks from different perspectives. This model promotes brainstorming, idea generation, and creativity, all of which are essential for producing compelling and original writing.

When combined with digital storytelling, the Synectics model enhances students' ability to generate unique and creative content. Students are encouraged to use analogies, metaphors, and other creative thinking techniques to enrich their narratives, ultimately leading to more engaging and well-structured

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stories. By applying the Synectics model in digital storytelling activities, students not only improve their writing skills but also develop their problem-solving and critical thinking abilities [47].

2.4. Theoretical Frameworks Supporting the Use of KineMaster in Digital Storytelling

Several educational theories support the integration of tools like KineMaster in digital storytelling for enhancing writing skills. Constructivist learning theories, as proposed by Hartikainen, et al. [48] emphasize the importance of active learning and social interaction in the construction of knowledge. Digital storytelling, facilitated by KineMaster, offers students an opportunity to engage actively in the learning process by creating and sharing their own stories. This active involvement helps students internalize and apply the concepts they are learning, leading to better writing outcomes.

The Theory of Multimedia Learning by Qianyi and Zhiqiang [49] also supports the use of multimedia tools like KineMaster in writing instruction. Learners understand and retain information better when it is presented through both verbal and visual channels. Digital storytelling tools such as KineMaster combine these two channels, allowing students to create stories that are not only well-written but also visually and audibly engaging. This approach aligns with the cognitive theory of multimedia learning, which suggests that the integration of different media formats enhances comprehension and retention.

Additionally, the Social Cognitive Theory by Bruton, et al. [50] highlights the role of observational learning in the development of skills. Through collaborative digital storytelling projects using KineMaster, students can observe and learn from their peers, which further enhances their writing and multimedia skills. The KineMaster display will be displayed in the picture below (https://play.google.com/store/apps/details?id=com.nexstreaming.app.kinemasterfree&hl=en&pli=1).

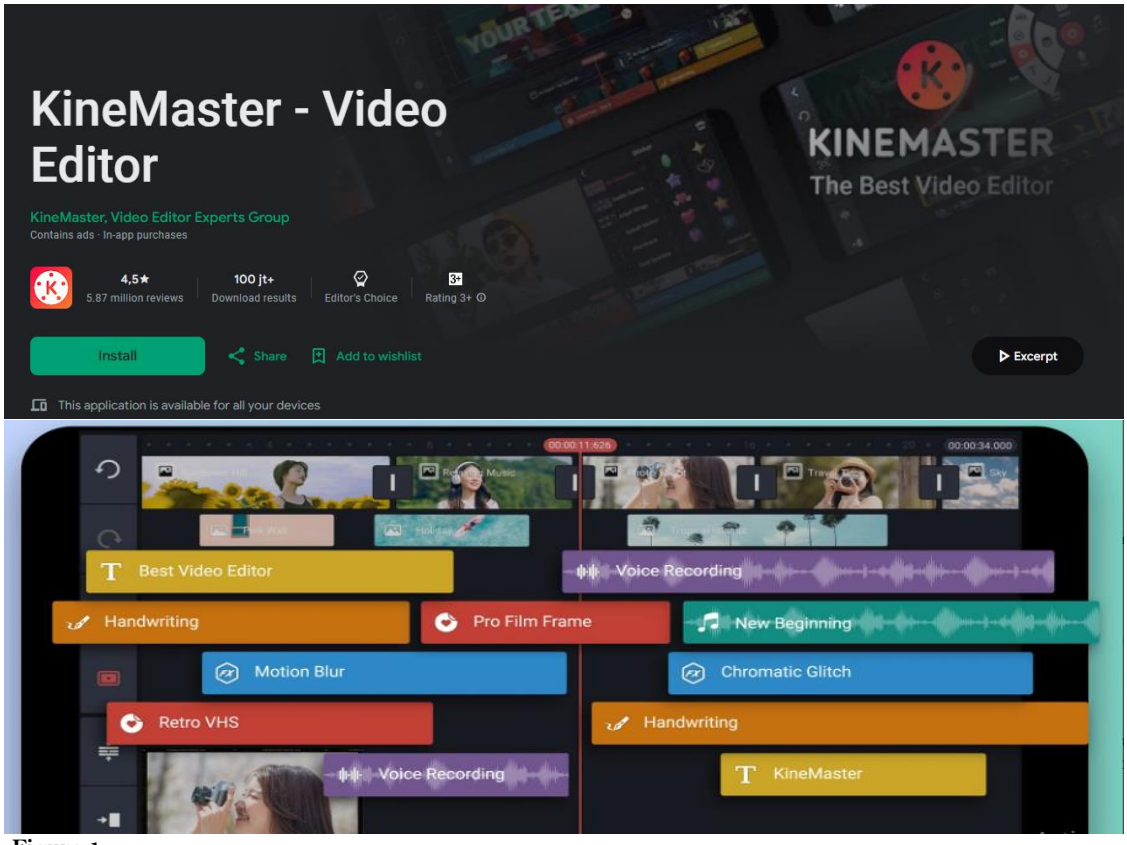

Figure 1.
KineMaster application display.

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The use of KineMaster for digital storytelling in conjunction with the Synectics model presents a promising approach to enhancing students' writing skills. By incorporating multimedia elements and creative problem-solving techniques, students can develop more engaging and well-structured narratives. KineMaster's capabilities as a video editing tool provide an ideal platform for creating digital stories, allowing students to experiment with different forms of media while improving their writing skills. Supported by educational theories such as constructivism, multimedia learning, and social cognitive theory, this approach not only enhances writing outcomes but also fosters creativity, collaboration, and critical thinking. Thus, the combination of KineMaster and the Synectics model offers a powerful method for modernizing writing instruction and equipping students with the skills they need for the digital age.

3. Methodology

This research employs a descriptive qualitative approach aimed at exploring the implementation of the Synectics Model in writing instruction supported by digital storytelling media [51, 52]. The study was conducted at several universities in Indonesia, including Universitas Islam Sultan Agung (Unissula), Universitas Gudang Jati (UGJ), Universitas Ahmad Dahlan (UAD), and IKIP Bojonegoro, with a subject group of 40 third-semester students enrolled in the Creative Writing course.

3.1. Participants

The subjects of this study are third-semester students enrolled in Creative Writing courses at four universities: Unissula, UGJ, UAD, and IKIP Bojonegoro, with a total of 40 participants. The population of this study consists of all third-semester students from the language education programs at these institutions. A purposive sampling method was employed to select students who were actively participating in the Creative Writing classes that incorporated digital storytelling as a learning tool. These participants were chosen based on their involvement in courses that utilized the Synectics Model and KineMaster for digital storytelling activities aimed at enhancing their writing skills.

3.2. Data Collection and Instruments Research

The research instruments used in this study consist of two types: documentation and observation [53]. The documentation instruments were employed to gather data in the form of teaching materials used by the instructors and the short story writing outputs produced by the students throughout the course. The documentation technique was applied to collect information related to learning resources, teaching strategies, and the written works submitted by students. This included the materials provided by the instructors to guide the students in using the Synectics Model and digital storytelling tools such as KineMaster.

Additionally, the observation instrument was utilized to record and observe events occurring during the learning process, particularly related to the implementation of the Synectics Model and the use of digital storytelling media. Direct classroom observations were conducted to capture the interactions between students and instructors, focusing on how students applied the Synectics Model to develop their writing skills and utilized KineMaster for creating digital stories. These observations aimed to assess the effectiveness of the instructional approach and the students' engagement with the learning process. The data collected through both documentation and observation were then analyzed using data reduction, data presentation, and conclusion drawing techniques to identify patterns and insights regarding the enhancement of students' writing skills through digital storytelling.

3.3. Data Analysis

The data analysis technique used in this study follows a qualitative approach, consisting of three main stages: data reduction, data presentation, and conclusion drawing [53]. In the first stage, the collected data, which includes documents such as teaching materials, student short story writings, and field data obtained through observation, will be reduced to focus on information that is most relevant to

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the research objectives. This involves filtering out unnecessary details and prioritizing data that directly addresses the research questions related to the implementation of the Synectics model and its impact on students' writing skills.

In the second stage, the reduced data will be systematically organized and presented in a manner that facilitates understanding and further analysis. This could include categorizing the data based on themes, such as the use of the Synectics model in writing, students' engagement with digital storytelling tools like KineMaster, and the quality of their writing outcomes. The goal of this stage is to provide a clear and structured overview of the data that highlights key findings.

Finally, the third stage involves drawing conclusions based on the presented data. This stage will identify patterns or themes that emerge from the data, such as the effectiveness of the Synectics model in enhancing students' creativity, the role of digital storytelling in writing development, and the impact of using KineMaster as a storytelling tool. The conclusions drawn will offer insights into how the integration of the Synectics model and digital storytelling influences students' writing processes and engagement, ultimately contributing to the development of innovative writing instruction methods. This analysis procedure aims to provide a comprehensive understanding of the relationship between the teaching strategies employed and the students' writing outcomes.

4. Research Results

4.1. The Application of KineMaster in Enhancing Students' Writing Skills through Digital Storytelling

The use of KineMaster, a versatile video editing tool, significantly contributed to enhancing students' writing skills through the process of digital storytelling. By integrating multimedia elements such as text, images, audio, and video, KineMaster allowed students to express their ideas more creatively and dynamically, fostering both their writing and digital literacy skills.

In the context of the Synectics model, which emphasizes creative thinking and analogy-making, KineMaster provided a platform for students to visually represent their personal and direct analogies. This helped students deepen the emotional impact of their narratives while improving their ability to organize ideas and structure their stories. Students found that the combination of visual and auditory elements helped them clarify their thoughts, making their stories more engaging and coherent.

The ability to edit and refine their digital stories allowed students to engage in the critical revision process, which is a key stage of the Synectics model. Through iterative editing, students were able to adjust visuals, re-record audio, and fine-tune video elements, improving the quality of their narratives. This process also contributed to enhancing their writing skills by emphasizing the importance of clarity, coherence, and logical progression in storytelling.

Furthermore, the use of KineMaster encouraged students to experiment with different formats and storytelling techniques, enhancing their creativity and problem-solving skills. Students developed a deeper connection with their work, as the ability to incorporate personal experiences and analogies through multimedia made their narratives more authentic and emotionally resonant. The combination of writing and digital storytelling fostered a sense of accomplishment, as students not only wrote stories but also brought them to life through video.

In summary, the application of KineMaster in digital storytelling significantly enhanced students' writing skills by promoting creativity, improving narrative structure, and fostering digital literacy. The use of multimedia elements in conjunction with the Synectics model facilitated a more interactive, engaging, and effective writing process, helping students refine their writing while developing valuable skills for the digital age.

4.2. The Application of the Synectics Model to Enhance Students' Writing Skills through Digital Storytelling Using KineMaster

This study aimed to explore the effectiveness of applying the Synectics model in enhancing students' writing skills through digital storytelling. The findings revealed that a systematic approach to implementing the Synectics model significantly improved students' creative writing abilities. The study

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identified a structured approach involving six stages of writing development, aligned with Synectics principles, which enabled students to better organize their ideas, develop deeper content, and ultimately publish their work on digital storytelling platforms such as KineMaster. The following table will show the stages of the Synectic Model in Improving Writing Skills.

Table 2.
Stages of the synectics model in enhancing writing skills.

Stage	Description
Stage 1: Describing the Current Situation	In this stage, students were tasked with describing the topic they intended to write about. The lecturer encouraged critical thinking and detailed observation, laying the foundation for the writing process.
Stage 2: Direct Analogy	Students proposed direct analogies based on their understanding of the topic. This stage helped them move beyond surface-level descriptions, fostering creativity through familiar connections.
Stage 3: Personal Analogy	Students integrated personal experiences into their writing. By using personal analogies, students made their stories more authentic and emotionally engaging.
Stage 4: Solid Conflict	Students introduced conflicts, both internal and external, into their stories. The presence of conflict added complexity and emotional depth, enhancing reader engagement.
Stage 5: Direct Analogy (Revisited)	Students revisited and refined their direct analogies, ensuring they aligned with the narrative's conflict and themes. This step improved coherence and narrative quality.
Stage 6: Re-evaluating the Original Task	The final stage encouraged students to reflect on their growth and revisit their original writing task, ensuring alignment with initial objectives and improving overall narrative quality.

4.3. Application of Digital Storytelling

Incorporating digital storytelling was a key aspect of the project. Students created digital stories based on their written works using tools such as KineMaster. The use of multimedia elements images, sounds, and voice recordings enhanced the storytelling experience and developed students' digital literacy and communication skills.

Students were initially hesitant about expressing their ideas, but over time, through iterative writing and revision, they gained confidence. The use of digital tools like KineMaster allowed students to visualize and share their work in an engaging format. Many students, initially apprehensive about sharing their work publicly, gained a sense of accomplishment as they saw their stories come to life in digital form, receiving positive feedback from peers and instructors alike.

4.4. Lecturer Observations on Student Progress

Lecturer observations indicated that students successfully implemented the Synectics model in their writing. The iterative process allowed students to deepen their ideas and organize their thoughts effectively. By using the six stages of Synectics, students created engaging stories that demonstrated creativity, critical thinking, and a strong narrative structure.

The use of KineMaster as a digital storytelling tool further motivated students, encouraging them to refine their digital storytelling and multimedia skills. By the end of the course, students successfully published their digital stories, which were met with positive feedback and recognition from peers, enhancing their sense of achievement and confidence in their writing abilities. The following is a group photo after conducting research with students in the image below.

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Figure 2.
Group photo after the implementation of the synectics model to improve students' writing skills through digital storytelling using kinemaster.

Last, the application of the Synectics model in creative writing, combined with digital storytelling tools like KineMaster, was highly effective in improving students' writing skills. The six stages of the Synectics model provided a structured and creative approach to developing ideas, refining concepts, and incorporating personal experiences into writing. The use of digital storytelling not only enhanced students' writing abilities but also helped develop their digital literacy and multimedia communication skills. This study highlights the potential of integrating creative models like Synectics with digital tools in writing instruction, preparing students to engage with contemporary communication methods in the digital age. The success of this model suggests its broader applicability in educational contexts to foster creativity and critical thinking in students.

5. Discussion

5.1. The Application of KineMaster in Enhancing Students' Writing Skills through Digital Storytelling

The integration of KineMaster, a video editing tool, in educational contexts, particularly for digital storytelling, provides an innovative approach to enhancing students' writing skills. By combining KineMaster with the Synectics model, students can express their ideas creatively through multimedia, such as text, audio, images, and video. This encourages students to think beyond traditional writing and

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helps them communicate ideas visually and emotionally [54]. Research supports that multimedia enriches storytelling and engages students [55].

KineMaster also allows students to apply the Synectics model's stages, especially personal and direct analogies, by incorporating video footage and images, which deepens the emotional resonance of their stories. Digital storytelling goes beyond writing, transforming narratives into interactive, multi-sensory experiences, which enhances student engagement [56]. The tool's editing features support revision, particularly in refining analogies and aligning visuals with written content, thereby improving the final product [57].

Furthermore, KineMaster fosters digital literacy, a vital skill in today's world. Students gain confidence in expressing ideas across different media, enhancing both their writing and communication skills. The tool aligns with , emphasizing the importance of grammar and coherence in successful communication, reinforcing key writing competencies [58].

The creative freedom KineMaster provides motivates students to engage more deeply in the writing process. It encourages experimentation and ownership of their work, leading to improved writing and digital storytelling skills. Positive feedback and the ability to share digital stories further enhance students' motivation and creativity [59].

In conclusion, KineMaster significantly improves students' writing by combining the Synectics model with multimedia capabilities. This enhances critical thinking, creativity, and digital communication skills, making it a valuable tool in modern education. Through digital storytelling, students are better prepared for success in a technology-driven world.

5.2. The Application of the Synectics Model to Enhance Students' Writing Skills through Digital Storytelling Using KineMaster

Based on the discussion above, it can be concluded that students have successfully implemented the synectic model in writing instruction. The six-step approach of the synectic model ranging from describing the current situation to revisiting the initial task has proven effective in enhancing students' creative thinking skills and their ability to structure stories [60]. This aligns with the theories on the importance of analogies in stimulating creative thinking, as well as emphasis on the role of conflict in story development [1]. By incorporating these stages, students were able to generate original ideas and organize their narratives more effectively [61].

Furthermore, the knowledge of grammar and spelling provided by the instructor played a crucial role in enabling students to express their ideas in writing. This foundational knowledge equipped students with the confidence to construct clear and coherent sentences, ultimately improving the quality of their writing [62]. This finding aligns with research, which highlights the importance of grammar mastery in the development of effective writing skills [63]. The use of personal analogies and direct analogies within the synectic model also facilitated students' creative thinking, allowing them to produce deeper and more emotionally resonant stories .

The publication of students' writing on a digital storytelling platform added a new dimension to the writing process. Digital storytelling not only allowed students to express themselves in a more dynamic and creative way, but it also introduced them to essential digital literacy skills in the modern era. This outcome is consistent, which indicates that digital storytelling can increase student engagement in the learning process and encourage experimentation with diverse media [9]. Therefore, the combination of the synectic model and digital storytelling can be considered an effective approach to enhancing students' writing abilities while motivating them to gain more confidence in expressing their ideas creatively.

The findings of this research indicate a significant impact of applying the Synectics model on enhancing students' writing skills, specifically in the context of writing short stories. By utilizing a structured approach, which involves six steps in the writing process, students were able to develop their creativity, strengthen their narrative skills, and successfully publish their work through digital

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storytelling platforms. This section discusses the application of the Synectics model in the teaching of writing, comparing it with relevant theories and research findings.

5.3. The Synectics Model and Its Stages

The Synectics model, which comprises six distinct stages, is designed to facilitate creative problem-solving and idea generation. In the context of writing short stories, these stages were applied to guide students in developing their narratives. Each stage, from describing the current situation to revisiting the initial task, plays a vital role in fostering creative thinking and improving writing quality. The following will display along with a discussion of the Stages of the Synectic Model in Improving Writing Skills in the following table below.

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Table 3.
Discussion of the Stages of the Synectic Model in Improving Writing Skills.

Stage	Description
Stage 1: Describing the Current Situation	The first stage requires students to describe a situation or topic as they see it. This step encourages students to engage in critical thinking and helps them clarify their thoughts. According to describing situations in detail is an essential skill for effective narrative writing, as it enables students to develop a clear understanding of the story's context [64]. This aligns with the findings of the study, where students were observed to gain a better grasp of their topics and begin forming coherent storylines.
Stage 2: Direct Analogy	In the second stage, students were asked to propose direct analogies to the situation or topic they had described. This stage emphasizes the importance of analogy in the creative process, a principle highlighted who suggest that analogies stimulate creative thought and help students make connections between seemingly unrelated concepts [65]. The use of analogies, as seen in this research, enabled students to deepen their understanding of the topic and explore new narrative angles. This stage was also critical in enhancing students' ability to think beyond the immediate context and make connections to broader themes, thereby enriching their stories with more complexity.
Stage 3: Personal Analogy	The third stage, which involves drawing personal analogies, requires students to relate the topic to their own experiences. This process is essential for fostering emotional engagement in writing. Personal connections can help students develop authentic and meaningful narratives, a concept supported who asserts that personal experience is a rich source of inspiration for creative writing [66]. The findings of this study align with Gage's theory, as students were able to incorporate their own experiences into their stories, which resulted in more relatable and compelling narratives [67]. Students reported feeling more confident in their writing as they connected their personal lives to the topics at hand, an outcome that underscores the effectiveness of this stage in promoting self-expression.
Stage 4: Solid Conflict	The fourth stage involves identifying and developing a "solid conflict" within the story. Conflict is a fundamental element of narrative writing, and its role in driving plot and character development is well documented. Emphasizes that conflict is central to storytelling, as it propels the narrative and reveals the complexities of the characters [68]. In the study, students effectively identified and integrated conflicts into their stories, which helped to create more dynamic and engaging narratives [69]. This stage proved to be crucial in enhancing the depth of their stories, as students were able to refine the conflict and explore how it impacted the characters [70].
Stage 5: Direct Analogy (Revisited)	In the fifth stage, students were asked to revisit their analogies, refining them based on the conflict they had identified in the previous stage. This revision process allowed students to further develop their narratives and ensure coherence between the plot, characters, and conflict. As suggest, revising is a critical part of the writing process, allowing students to refine their ideas and enhance the quality of their work [71]. The study's results revealed that students who engaged in this revision process were able to produce more polished and cohesive stories. By refining their analogies and reworking their conflicts, students were able to ensure that their stories were both logically structured and emotionally resonant [72].
Stage 6: Re-evaluating the Original Task	The final stage of the Synectics model asks students to return to their initial writing task and reflect on their entire process. This step encourages students to consider how their analogies, conflicts, and personal connections have shaped their stories [73]. It also allows them to identify areas for improvement and make final revisions. This reflective process is integral to the writing process, as it helps students develop a sense of ownership over their work and refine their skills [74].

5.4. The Role of Digital Storytelling in Enhancing Writing Skills

In addition to the Synectics model, this study incorporated digital storytelling as a platform for students to publish their stories. Digital storytelling, which combines narrative writing with multimedia elements such as images, audio, and video, offers students a more dynamic way to express their creativity. Digital storytelling enhances student engagement by allowing them to combine various media, thus offering a richer storytelling experience [75].

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The use of digital storytelling in this research allowed students to experiment with different forms of media, which made their stories more interactive and engaging. The inclusion of multimedia elements not only improved the quality of the stories but also allowed students to develop valuable digital literacy skills. This aligns with the research, who found that digital storytelling significantly enhanced student engagement and provided a more holistic learning experience [76].

The results of this study demonstrate that digital storytelling can serve as an effective tool for promoting creativity and improving writing skills. By integrating visual and auditory components, students were able to create more immersive narratives, which were well-received by both their peers and instructors.

5.5. Increased Confidence and Student Motivation

One of the most notable outcomes of this research was the significant increase in student confidence and motivation. At the beginning of the writing process, many students were hesitant to express their ideas due to fear of making mistakes. However, over time, students became more confident in their writing and more willing to take risks in their storytelling. This transformation can be attributed to the supportive structure provided by the Synectics model and the opportunity to receive feedback throughout the process.

Bandura's theory of self-efficacy suggests that confidence in one's abilities grows through positive reinforcement and successful experiences [77]. In this study, students' growing confidence was evident as they progressed through the six stages of the Synectics model. The combination of structured feedback and the freedom to explore creative possibilities led students to develop a greater sense of agency in their writing.

Additionally, the use of digital storytelling further contributed to students' motivation, as it offered an innovative and engaging way to present their work. The positive feedback from peers and instructors, as well as the public sharing of their stories on digital platforms, motivated students to continue developing their writing skills.

5.6. Implications for Future Writing Instruction

The findings of this research have several important implications for writing instruction. First, the application of the Synectics model in teaching writing demonstrates the value of structured, creative problem-solving approaches in fostering student creativity and improving writing skills. By guiding students through a series of thought-provoking stages, the Synectics model encourages them to think critically, connect ideas, and refine their narratives.

Second, the integration of digital storytelling into writing instruction offers students a more dynamic and engaging way to present their work. As the use of multimedia in storytelling becomes increasingly important, digital storytelling provides a valuable opportunity for students to develop both their writing and digital literacy skills. Educators can build upon this approach by incorporating additional digital tools and platforms to enhance student learning experiences.

Finally, the study highlights the importance of reflection and revision in the writing process. Students who actively engage in revisiting their work and making revisions are more likely to produce high-quality, cohesive stories. This underscores the need for instructors to create a supportive environment where students feel comfortable revising and improving their writing. Last, the application of the Synectics model in conjunction with digital storytelling offers a powerful approach to enhancing students' writing skills. The six stages of the Synectics model provide students with a structured, creative process for developing their narratives, while the use of digital storytelling enables them to experiment with different forms of media and engage with their audience in meaningful ways. The findings of this study suggest that these strategies not only improve students' writing but also increase their confidence and motivation. Future writing instruction can benefit from incorporating these approaches, as they offer valuable tools for fostering creativity, critical thinking, and digital literacy in students.

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6. Conclusion

In conclusion, the integration of KineMaster as a video editing tool, combined with the Synectics model, has proven to be an effective method in enhancing students' writing skills through digital storytelling. The six-step approach of the Synectics model provided a structured yet imaginative framework, allowing students to think critically, connect ideas through analogies, and develop coherent narratives. This process not only fostered creativity but also improved their ability to express ideas clearly and meaningfully.

Additionally, students' foundational knowledge of grammar played a key role in supporting their ability to present thoughts in an organized and readable manner. With increased confidence in their grammar skills, students were able to more freely apply their creativity, resulting in richer and more expressive written works.

The use of digital storytelling platforms, such as KineMaster, further enhanced students' storytelling abilities by allowing them to incorporate multimedia elements, combining text with visual components to create dynamic and engaging narratives. This not only expanded their creative possibilities but also aligned with modern trends in digital literacy.

Ultimately, the combination of the Synectics model and digital storytelling tools like KineMaster significantly improved students' writing skills, helping them communicate their ideas more effectively in the digital age. This approach provides students with the skills and confidence to navigate both creative and technical aspects of modern communication.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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