

DEVELOPING A DIGITAL LIBRARY OF CHILDREN'S STORIES TO SUPPORT STORYTELLING INSTRUCTION FOR THIRD-GRADE STUDENTS

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ABSTRACT

This article presents the results of a study on developing a digital library of children's stories to support storytelling instruction for third-grade students. The research was conducted at Nguyen Viet Xuan Primary School (Thai Nguyen) with the participation of 10 teachers and 120 students. A combination of survey methods, product design, and pedagogical experimentation was employed. The digital library, built on the Google Sites platform, contains a system of children's stories categorized by themes, accompanied by illustrations and instructional materials for teachers. The experiment was carried out with two classes: Class 3A (experimental group using the digital library) and Class 3B (control group using traditional instruction) in October 2025. Storytelling skills were assessed using a rubric consisting of three criteria: content expression, language use, and expressive performance. The findings revealed that students in Class 3A demonstrated significantly greater improvement than those in the control group, with the proportion of students achieving the "Good" level increasing markedly across all three criteria. The study confirms that the application of a digital story library enhances the effectiveness of storytelling instruction, increases students' engagement, and improves their confidence. Therefore, the article recommends greater integration of digital learning resources in Vietnamese language education at the primary level.

Keywords: Digital Library, Children's Literature, Storytelling Skills, Third-grade Students, Vietnamese Language Instruction.

1. INTRODUCTION

Storytelling is one of the key activities in the Vietnamese language curriculum for Grade 3, contributing to the development of language competence, imaginative thinking, communication skills, and self-confidence in primary school students. However, classroom practice shows that storytelling activities still face several limitations: the supply of children's picture stories is not yet diverse, teachers spend considerable time preparing learning materials, while students increasingly tend to receive information through images and digital media. This creates a demand for innovation in teaching methods, in which the integration of digital learning resources is an appropriate direction in the current context of educational digital transformation.

Internationally, many studies have approached digital libraries from the perspectives of information technology and education. Arms (2000) defines a digital library as a collection of digital resources that is organized and provided with user-friendly search functions [1]. Borgman (1999) views the digital library as an integrated information system that supports access to and processing of knowledge [2]. The works of Chowdhury (2003), Lynch (2005), and UNESCO

(2012) all affirm the potential of digital libraries in expanding opportunities to access learning resources and enhancing the effectiveness of teaching and learning [3][4][5].

Alongside international research, many Vietnamese scholars have also shown interest in the development of digital libraries in education. Nguyen Huu Hung (2010) emphasizes that building digital libraries is an inevitable trend for educational institutions in the digital era, and proposes a systematic framework for organizing and managing digital libraries in schools [6]. Le Van Viet (2016) analyzes the urgent need to implement digital libraries in general schools and offers feasible technical and pedagogical solutions [7]. Following a similar applied perspective in education, Pham Thi Lan (2018) asserts that digital learning materials contribute to promoting a reading culture and improving language competence among primary school students, particularly through storytelling and visually supported reading activities [8].

These studies, both international and domestic, have clarified the role of digital libraries in innovating teaching in general and in developing language competence in particular. However, there remains a significant research gap: few studies focus on the development of digital libraries specifically for children's stories, and even fewer investigate the application of digital libraries in teaching storytelling skills to third-grade students—a highly aesthetic, linguistic, and communicative activity.

On the basis of these theoretical and practical considerations, the present study pursues two main objectives: (1) to develop a digital library of children's stories appropriate to the psychological and linguistic characteristics of third-grade students; and (2) to evaluate the effectiveness of this digital library in supporting storytelling instruction through pedagogical experimentation.

2. RESEARCH METHODS

The study employed a mixed-methods design, combining qualitative and quantitative approaches, and was implemented in three phases: a survey of classroom practice, the development of the digital library product, and a pedagogical experiment to evaluate the effectiveness of its application in Grade 3 storytelling instruction.

3. RESEARCH RESULTS

3.1. Current Situation of Teachers' Use of Story Resources in Storytelling Instruction and Primary Students' Need for Access to Digital Learning Materials

The survey was conducted in September 2025 at Nguyen Viet Xuan Primary School (Thai Nguyen province) to examine the current use of story resources in storytelling instruction and the need for digital learning materials among teachers and students. The study employed questionnaires combined with short interviews and observation of three storytelling lessons. The participants included 10 teachers (60% currently teaching Grade 3 and 40% having previously taught Grade 3) and 120 students from three Grade 3 classes.

The findings show that 70% of teachers relied solely on stories in the textbook and a few familiar picture books, while only 30% occasionally sought additional stories from external sources, but with low frequency. Moreover, 80% of teachers reported difficulties in finding appropriate stories, with 60% citing a lack of time for selecting and evaluating materials, and 50% expressing concerns about the reliability of online story content. Additionally, 90% of teachers believed that the available illustrated stories were not diverse enough and failed to capture students' interest.

From the students' perspective, 82% preferred stories with animated or vividly colored illustrations, and 76% expressed a desire to view stories on digital devices rather than read plain

text. Notably, 100% of surveyed teachers expressed the need for a digital library of children's stories to support storytelling instruction, asserting that digital learning materials would reduce preparation time and enhance students' attention. These data indicate that the implementation of a digital story library in storytelling instruction is well-grounded and aligns with the learning characteristics of primary school students.

3.2. Building a digital library of children's stories to support storytelling instruction for third-grade students

3.2.1. Characteristics of third-grade students suitable for the use of a digital library

Third-grade students, typically aged 8–9, exhibit a strong preference for visual and dynamic activities and are easily attracted to images and colors. Their reading comprehension skills are developing but not yet fully stable; therefore, accessing stories with illustrations helps reduce the cognitive load of reading text and supports better comprehension of content. In addition, third graders have a growing need for self-expression and enjoy participating in creative storytelling activities. Survey results also show that 82% of students prefer viewing stories on digital devices, reflecting their familiarity with technological media. Consequently, a digital library—with advantages in visual representation, audio support, and interactive features—is well suited to their psychological characteristics and learning needs. It effectively aids students in visualizing story content, remembering key events, and developing storytelling skills.

3.2.2. Principles for developing a digital library of children's stories

The process of developing a digital library must adhere to several pedagogical and technical principles:

- Age-appropriateness: Story content should be concise, easy to understand, and educationally suitable for third-grade students. The language should be clear, vivid, and free of confusing expressions.
- Visualization and aesthetics: Illustrations must be clear, with harmonious colors that support the reconstruction of story content. The digital library interface should be friendly and easy to navigate for young learners.
- Accuracy and reliability: Story materials should be selected from reputable and legitimate sources, verified for content accuracy, and ensured to meet educational requirements
- Pedagogical orientation: Each story should include guiding questions, moral lessons, and suggested storytelling activities to assist teachers in organizing classroom instruction.
- Interactivity: The digital library should integrate images, audio, video, or simple interactive activities to enhance student engagement.

These principles ensure that the digital library functions not only as a repository of stories but also as an effective instructional tool that actively supports the teaching and learning of storytelling.

3.2.3. Process of developing the digital library

The development of the digital library of children's stories was carried out through four steps:

Step 1 – Collecting and selecting stories: Stories were sourced from children's books, Vietnamese folktales, translated foreign stories, and other reputable materials. Each story was evaluated based on criteria such as age appropriateness, educational value, simplicity of language, and potential to support storytelling instruction.

Step 2 – Editing and designing content: Each story was summarized concisely and accompanied by illustrations created by the research team or selected from appropriate open sources. Guiding questions, moral lessons, and learning worksheets were added. This editing process aimed to enhance pedagogical value and align the stories with the storytelling objectives of the Grade 3 curriculum.

Step 3 – Designing the interface and organizing the library pages: The digital library was built using Google Sites due to its accessibility and ease of use. Content was categorized into thematic sections: Family, Nature and Animals, Folktales and Fables, and Life Lessons. The interface was designed to be clear, visually appealing, child-friendly, and easy to navigate.

Step 4 – Pilot testing and refinement: The digital library was piloted with a small group of teachers and students to gather feedback. Based on the comments received, the research team revised the story structure, adjusted the color scheme and layout, and added more guiding questions before implementing the library in the official experiment.

3.2.4. Sample digital library product developed

Sample story: “Người bạn bốn chân” (The Four-Legged Friend)

Step 1 – Story selection: The story was selected from a Vietnamese children’s story collection published by Kim Dong Publishing House. It features humanistic content, is age-appropriate, and is suitable for use in storytelling instruction. The story recounts the friendship between an orphaned boy and a loyal dog who always protects him. During an unexpected fire, the dog saves the boy, leaving a meaningful lesson about love and gratitude. The story is appropriate for third-grade students because its clear narrative structure supports coherent retelling; the emotionally rich characters foster expressive storytelling; and the vivid events help students practice descriptive language.

Step 2 – Editing and content design: Based on the original version, the research team edited the story to make it concise, clear, and suitable for the duration of a Grade 3 storytelling lesson. The story was reorganized into five main events: (1) the boy’s circumstances and living situation; (2) the arrival of the small dog and the formation of their friendship; (3) the danger arising when the house catches fire; (4) the dog’s brave act of rescuing the boy; and (5) the positive ending and the lesson about gratitude. This restructuring ensures logical flow, ease of visualization, and alignment with the Grade 3 Vietnamese curriculum requirement that “students can retell a story based on pictures or a given outline.”

Alongside the textual content, the research team developed a moral lesson, a set of guiding questions, and a learning worksheet to help students record key ideas, outline the story, and express their reflections. The guiding questions were designed to develop storytelling competence by encouraging students to reconstruct content, describe actions and emotions, and express personal viewpoints.

For the system of guiding questions, the research team categorized them into three groups:

1. Content recall questions, including:

Under what circumstances did the boy and the dog meet?

What details in the story show that the boy and the dog were closely attached to each other?

What event put the boy in danger?

2. Analytical and emotional questions, including:

What did the dog do when the house caught fire, and what do you think this action shows?

Which detail in the story do you find the most touching, and why?

If you were a character in the story, how would you feel when being rescued by the dog?

3. Extended and creative questions, including:

Imagine the story with a different ending—what would you change?

What lesson do you take from this story?

Can you give another real-life situation in which courage, like that of the dog, is needed?

This system of questions helps teachers guide storytelling activities according to different cognitive levels: recall, analysis, and creativity. For the sample worksheet: The worksheet was designed to help students actively record essential information for storytelling, ensuring three requirements: understanding content, selecting appropriate language, and expressing emotions. For example:

WORKSHEET – STORY “THE FOUR-LEGGED FRIEND”

1. Characters in the story

- ☐ The orphan boy
- ☐ The little dog
- ☐ The villagers

(You may add additional characters if any appear in the story.)

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2. Main events of the story (in correct order)

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3. Words and expressions you will use when telling the story

Action words:

Emotion words:

Descriptive words/phrases:

4. Your feelings when telling the story

- ☐ Happy
- ☐ Moved
- ☐ Admiring
- ☐ Worried

→ Why do you feel that way?

.....

5. Lessons you learn from the story

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6. Think of another title for this story

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The research team also developed a script for a two-minute audio narration, focusing on rhythm, pacing, and expressive intonation to support the digital version of the story. For example:

[Warm, gentle tone]

Once upon a time, in a small village, there lived an orphan boy in a simple thatched house. Although his life was full of hardship, he remained cheerful and kind-hearted.

[More cheerful tone]

One day, as he was sitting in front of his house, the boy saw a little stray dog. He gently petted it and offered it some food. From that moment on, the dog followed him like a loyal friend. Every day, the two were inseparable—playing together and taking care of one another.

[Lower, slightly anxious tone]

One hot noon, while the boy was asleep, a fire suddenly broke out in the kitchen. Smoke filled the air and covered the entire house. The little dog ran around barking loudly to wake him, but the boy did not wake up.

[Faster, more dramatic tone]

Without hesitation, the dog rushed into the burning house, grabbed the boy's shirt, and pulled him outside. When he woke up, the boy still did not understand what had happened; he only saw the dog standing beside him, its fur singed and its eyes filled with worry.

[Warm and slow tone]

The villagers quickly extinguished the fire and praised the little dog for its bravery. The boy hugged his four-legged friend tightly, tears welling in his eyes as he realized he had just been saved.

[Gentle, inspiring ending tone]

From that day on, the bond between the boy and the dog grew even stronger. The story reminds us that love often comes from the simplest things, and courage can be found in anyone—even a small dog.

After developing the narration script, teachers may use several tools to create the audio version of the story. Common simple and free options include Google Text-to-Speech (via Google Docs or Chrome extensions), Narakeet, Voice Recorder Pro, Ausynclab, and Audacity (a free desktop software).

Step 3 - Designing the interface and organizing the product on the digital library. This step focuses on uploading the edited stories to the digital platform (Google Sites), designing a visually clear interface, and organizing materials in a structured way that is convenient for teachers and students during storytelling instruction. The main activities include:

- + Selecting the platform and designing the library interface: The digital library was built on Google Sites due to its ease of use, free access, compatibility with primary school devices, and ability to integrate images, audio, and video. The interface prioritizes bright colors and a clear layout suited to third graders' cognitive characteristics. The homepage includes: the title of the digital library; a navigation menu (Story Collection – Themes – Worksheets – Teacher Support); a prominent illustration to capture attention; a brief user guide.

- + Organizing story content by theme: To help teachers choose stories aligned with instructional goals, the collection is divided into four themes: Friendship and Family; Nature and Animals; Folktales and Fables; and Life Lessons. Each theme functions as a “sub-folder” containing: a list of stories displayed as thumbnails (small images with titles); a button to open each story; a short summary indicating the key content. This organization aligns with the Grade 3 Vietnamese curriculum and significantly reduces teachers' preparation time.

- + Presenting each story on its dedicated page: Each story is presented on a separate page following a consistent structure to support both teachers and students:

Section 1: Title and short introduction: The story title is displayed prominently, accompanied by a 2–3 sentence description to help students orient themselves before reading.

Section 2: Six illustrations following the story sequence. Illustrations are arranged in narrative order with brief captions to facilitate retelling. Students may click to enlarge images.

Section 3: Storytelling audio (2 minutes). A button “► Listen to the story” allows students to play the audio recording.

Section 4: Guiding questions. A set of 5–7 questions is provided across three levels: recall, analysis, and creative connection.

Section 5: Worksheet. A downloadable PDF is included, encouraging students to prepare an outline before storytelling.

Section 6: Teacher guidance. Suggestions for organizing storytelling activities and rubric-based assessment are provided.

+ Interactive support features: To enhance engagement and support effective storytelling, the digital library includes: image zooming functions; quick navigation buttons between story sections; high-quality audio and images suitable for classroom projection; gentle page transitions appropriate for young learners.

These features are designed to increase student interest, enrich visual–auditory experiences, and help learners gradually develop coherent and expressive storytelling skills.

Step 4 -

Pilot testing and refinement: After completing the content and interface of the story on the digital library, the research team conducted a pilot test to evaluate its suitability, ease of use, and ability to support storytelling activities for third-grade students. The pilot test was carried out with a small group consisting of one Grade 3 teacher and ten randomly selected students at Nguyen Viet Xuan Primary School.

During the pilot process, the teacher was asked to use the story “The Four-Legged Friend” in a short storytelling activity, which included showing students the illustrations, playing the audio narration, guiding them to answer the prompting questions, and having them retell a part of the story. The teacher recorded observations related to navigation, clarity of the interface, convenience when projecting the content, as well as students’ reactions and levels of engagement. Simultaneously, the students were observed for their concentration, interest, ability to follow the narrative through images and audio, and their ability to retell the story after using the digital material.

The results showed that 90% of the students were able to follow the story easily through the six illustrations, and 80% reported that the audio helped them understand the story more quickly and retell it with greater confidence. The teacher evaluated the interface as “clear and easy to use,” but suggested adjusting the font size in the description section to improve readability when projected in the classroom. Some illustrations were noted to appear “slightly pale when projected in a bright classroom,” prompting the research team to increase the contrast and saturation for better visual quality.

In addition, based on student feedback, the research team adjusted the pacing of the audio recording, increased the volume during the climax (the fire incident), and slowed the narrative in the ending to enhance emotional impact. The system of guiding questions was refined by shortening lengthy questions and adding prompts that encouraged students to express personal feelings.

After incorporating these suggestions, the research team finalized the digital version of the story by revising the summary text, redesigning the layout of the illustrations, increasing caption font size, optimizing the audio, and adding clearer usage instructions. The completed product met pedagogical, aesthetic, and usability requirements and was ready for implementation in the pedagogical experiment with Class 3A.

3.3. Pedagogical experiment

The pedagogical experiment was conducted to evaluate the effectiveness of the digital library of children's stories in supporting the development of storytelling skills among third-grade students. The experiment took place at Nguyen Viet Xuan Primary School (Thai Nguyen province) in October 2025, with two classes of comparable size and ability: Class 3A (40 students) served as the experimental group using the digital library in storytelling instruction, while Class 3B (42 students) served as the control group taught using traditional methods.

Regarding the experimental design, a parallel-group model was employed. Both classes studied the same storytelling topic from the Grade 3 Vietnamese curriculum, but differed in instructional materials: the experimental class used digital stories with illustrations, audio, and worksheets, while the control class used textbook stories and the teacher's oral narration. The experiment was conducted within a single regular storytelling lesson to ensure stability of other instructional factors.

The experimental procedure was implemented during a storytelling lesson on the topic "Retell a story you have heard or read about courage." This lesson requires students to recount a story depicting a character's bravery, making it suitable for integrating the digital story "The Four-Legged Friend." In Class 3A, the teacher organized activities using the digital library: students first viewed the six illustrations, listened to the audio narration, and briefly discussed the main events. They then completed a worksheet, noting key events, descriptive language, and emotions. After preparation, students practiced retelling segments of the story in small groups, followed by volunteer presentations before the class. The teacher provided support through prompting questions, reminders of picture sequences, and guidance on expressive delivery. In Class 3B, instruction followed the traditional approach: the teacher introduced the lesson, read aloud the sample story from the textbook, asked checking questions, and guided students to retell based on an outline. Students relied solely on the printed text and the teacher's narration without visual or audio support.

At the end of the lesson, students in both classes individually performed storytelling tasks. Their performances were assessed using a rubric with three criteria: (1) content expression, (2) language use, and (3) expressiveness, each rated at three levels: Good, Satisfactory, and Needs improvement. Data from both classes were analyzed using descriptive statistics, focusing on comparing the percentage of students reaching each level across the three criteria.

The results revealed clear differences between the two groups. For content expression, 75% of students in the experimental class achieved the Good level, compared to 45% in the control class. For language use, 70% of Class 3A students were rated Good, whereas only 38% of Class 3B students reached this level. For expressiveness, 65% of the experimental group performed well, nearly double the 30% in the control group. This consistent advantage across all criteria indicates that the digital library had a significantly positive impact on students' storytelling skills, helping them retell stories more coherently, use richer vocabulary, and express emotions more naturally and confidently.

Overall, the experiment demonstrated that the use of a digital library of children's stories substantially improved storytelling performance among third-grade students. With higher proportions of students achieving the Good level across all three assessment dimensions—content expression, language use, and expressiveness—the digital library proved effective in enhancing lesson quality and fostering students' confidence and engagement in storytelling activities.

4. CONCLUSIONS

The findings of the study indicate that the development and implementation of a digital library of children's stories is feasible and meets the practical needs of teachers and students in Grade 3 storytelling instruction. The digital library was designed through a systematic process that ensures pedagogical soundness, visual clarity, and ease of use. The pedagogical experiment demonstrated the clear effectiveness of the digital library in enhancing students' storytelling skills: the proportion of students achieving the "Good" level in content expression, language use, and expressiveness was consistently higher in the experimental group than in the control group. This confirms that the integration of digital learning materials not only improves the quality of storytelling instruction but also increases students' engagement and confidence. The study suggests expanding the story collection, developing additional interactive features, and implementing the digital library on a larger scale to further examine its broader impact on Vietnamese language teaching.

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