

EFFECTS OF STORYTELLING BOOKS TO ENHANCE YOUNG CHILDREN'S READING COMPREHENSION THROUGH INTERACTIVE TEACHING METHOD

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ABSTRACT:

This study examines the impact of interactive teaching methods utilizing picture storybooks on reading comprehension among young children. An experimental design compares an interactive teaching group with a conventional storytelling control group, involving 32 kindergarteners aged five to six in Hualien City, Taiwan. Pre- and post-test assessments, alongside observational data, reveal significant improvements in reading attitudes, book concepts, and story comprehension within the experimental group. Statistical analysis confirms the efficacy of interactive strategies, despite a small sample size. Findings suggest that integrating interactive teaching with storybooks fosters early reading interest and comprehension, laying a foundation for future literacy development.

KEYWORDS: Early Childhood Education; Interactive Teaching; Picture Storybooks; Reading comprehension; Storytelling Strategies

INTRODUCTION:

Reading stands as a core language skill and a layered mental venture, as noted in earlier research [12]. Early encounters with books spark not only growth in writing prowess but also help widen vocabularies, introduce varied grammatical forms, and even kindle an ear for rhythmic recitation. In many cases this early mix creates a solid base for later learning (see [3]). Picture storybooks often take center stage in preschool storytelling sessions—which, while drawing high levels of focus at first, tend to see a sudden drop in engagement when simple questions follow, thus hindering a deeper connection with the narrative.

Upon closer examination, the observed decline appears to be associated with a rather conventional instructional method: a narrative is presented once, followed by basic questions and a brief conclusion. This repetitive approach contributes to a somewhat monotonous experience, as the questions tend to focus on the mere recall of details rather than fostering authentic curiosity [19]. In general, this pattern indicates that innovative and diverse strategies may be more effective in promoting deeper comprehension and enhancing overall engagement.

Classroom observations further reveal an additional peculiarity: the designated reading area is seldom utilized spontaneously by young learners. Even during the rare instances when children do visit, they are more captivated by the oversized, colorful illustrations than by the text itself, often flipping through the pages rapidly before returning the books to the shelf. This behavior clearly indicates that the initial enthusiasm for reading requires further cultivation [19]. Such recurring patterns highlight the necessity for targeted interventions aimed at igniting genuine interest and developing improved reading skills. The present study builds on earlier work linking interactive teaching to reading comprehension by shifting the focus to early childhood settings. It explores whether weaving picture storybooks into an interactive teaching format can boost narrative understanding among kindergarteners in Hong Kong. The overall aim centers on nurturing an early fondness for reading and a deeper grasp of stories, which in turn can shape later language-learning strategies. Two pressing questions guide this inquiry: First, does using interactive teaching methods in kindergarten settings improve picture storybook comprehension among young learners in Hualien County, Taiwan? Second, what approaches do kindergarten teachers in Hualien County, Taiwan, employ to support storytelling and enhance reading abilities among early learners?

LITERATURE REVIEW:

Storytelling engages young children through vivid characters and illustrations, eliciting excitement [1]. However, limited life experience and cognitive capacity often restrict questions posed by children to superficial or poorly

articulated inquiries, lacking specificity [1]. Optimizing question design—from lower-order to higher-order inquiries—facilitates reflection, questioning, and hypothesis formulation, subtly fostering skills in articulating questions [1]. When educators highlight logical connections between narrative events and sequential relationships among illustrations, children leverage story-provided clues to express understanding, igniting imagination and critical thinking [1]. Incorporating role-playing games based on engaging story characters further activates cognition, enhancing vocabulary acquisition, sentence construction, and cooperative inquiry skills [1].

Reading comprehension involves a psychological process of transforming written symbols into linguistic meaning, encompassing text decoding, content interpretation, and self-monitoring [2]. Literacy entails both word recognition and comprehension, with recognition serving as the foundation, underpinned by requisite skills and knowledge [3]. During reading, individuals organize textual content to construct meaning, accurately structuring the author's intended message [4]. Proficiency in reading comprehension hinges on vocabulary, prior knowledge, and strategic application, enabling accurate interpretation of sentences and texts [5]. In the broader curriculum, reading skills hold a pivotal role in early education [6].

Early reading marks a transition from oral to written language, preparing children for subsequent literacy development. This preparation includes recognizing the value of books and text, demonstrating willingness to engage with reading materials, and mastering foundational reading and writing skills [7]. Language proficiency in this stage extends beyond oral communication to encompass listening and expressive capacities, with comprehension and articulation building upon auditory engagement [7]. Initially, comprehension relies heavily on illustrations due to limited word recognition, emphasizing visual thinking. Listening guidance gradually reveals logical narrative connections, enabling children to draw upon existing knowledge and experience to interpret story meaning [7]. This process of observing, describing, and interpreting illustrations deepens comprehension of picture-based reading [7]. Engaging content and visuals in storytelling stimulate interest in text, enhancing recognition of vocabulary, grammar, oral-written correspondence, and overall linguistic competence [8].

Historical research underscores the significance of storybook exposure. Familiarity with written language structures and intonation emerges through such engagement, laying essential groundwork for formal reading comprehension in later education [9]. Cultivating genuine readership among young children thus emerges as a critical educational priority [10].

The interactive teaching method, developed by Palincsar and Brown (1984) and rooted in Vygotsky's (1978) concepts of the Zone of Proximal Development and expert scaffolding, offers a structured approach to reading comprehension [11]. Development progresses through interactions with adults or capable peers, who guide learners toward independence [11]. This method employs teacher modeling and dialogic exchanges to narrow the potential developmental gap, fostering autonomous reading completion [12]. Such strategies not only bolster reading proficiency but also enable self-monitoring of learning and cognition [13]. Interactive techniques further support the progression of latent developmental zones, empowering readers to regulate their reading processes and achieve autonomous learning [14].

In question formulation, diverse scaffolding feedback addresses errors or incomplete expressions during story engagement, enhancing inquiry skills [15]. Confidence in posing questions within classroom settings strengthens through these strategies [16]. The potency of interactive teaching lies in its capacity to serve as an effective comprehension builder, guiding deeper textual exploration as questions arise [17]. Accordingly, this study adopts four reading strategies—prediction, questioning, clarification, and summarization—to facilitate storytelling instruction.

METHODOLOGY:

This study employs an experimental design, dividing two classes of young children into an experimental group and a control group. All participants undergo pre- and post-testing. Following the pre-test, the experimental group receives instruction through an interactive teaching strategy involving picture storybook narration, while the control group experiences a conventional storytelling approach. The study population consists of 32 children aged five to six from two senior kindergarten classes in a Hualien City kindergarten (see Table 1).

Group	Pre-Test	Experimental Teaching	Post-Test
Experimental Group	E1	X	E2
Control Group	E3		E4

Research instruments include the Peabody Picture Vocabulary Test, a tool with intellectual screening capabilities, revised by Lu and Liu (1988) from the original compilation by Dunn and Dunn (1981) [1]. The "Young Children's Reading Ability Assessment Form," adapted from Huang's (1997) tables in *Courses of Emergent Literacy in Early Childhood*, evaluates the capacity of children to orally recount story content [2]. This assessment elucidates authentic literacy performance and knowledge [2], facilitating tailored guidance for individual children and the planning of related language activities [3]. Anecdotal record sheets capture observed actions, events, and conversations, aiding data presentation and analysis [4]. Six existing picture storybooks, selected based on relevance to the children's life experiences and suitability for their age and ability, serve as instructional materials;

books deemed inappropriate are excluded. Video and photographic equipment document tangible elements, offering richer data for subsequent analysis than text alone [5].

The study spans mid-November 2018 to mid-January 2019. The control and experimental groups participate in classroom sessions on Tuesdays and Fridays, respectively, with each group observed weekly over six weeks. The control group engages in conventional storytelling, while the experimental group utilizes an interactive teaching strategy for picture storybook narration. Table 2 outlines the phases, dates, storybook titles, teaching modes, and strategies employed. Each session lasts approximately 30 minutes, structured across three experimental stages: pre-test, instructional intervention, and post-test. A two-week suspension occurs during the mid-December Christmas break to organize records from the initial four weeks, resuming in early January 2019 upon completion of the school holiday.

RESULT

Direct observations from anecdotal cases reveal initial engagement patterns. The teacher begins by presenting the storybook *The Music Concert*, reading the title aloud to spark interest, followed by narration and subsequent questioning about the story content. Without scaffolding support, comprehension of certain textual elements proves challenging for the children, leading to a rapid decline in interest. Pre-test observations (20/11/2009) highlight the following behaviors:

Example 1: A child holds a picture storybook, examines the cover, points to the title with the right index finger, attempts to read it aloud, then declares, “Teacher, I’m done,” before selecting another book.

Example 2: Some children recognize text directionality from left to right and top to bottom, flipping pages with the left hand and attentively viewing colorful illustrations. While aware of the connection between images and text, limited understanding of content and words results in frequent abandonment or interruption of reading.

Example 3: A child opens a book, engages intently with large illustrations, muttering and smiling to oneself, yet remains uncertain about where to begin reading.

Example 4: A child rests head on the desk; when asked why, the response is, “Don’t know the words... can’t read.”

Pre-test assessment indicate baseline reading abilities for the experimental group (E1) and control group (E3) prior to intervention. Scores across categories—“Attitude Toward Reading and Spontaneous Reading Behavior” (4.69 vs. 5), “Book Concepts” (9.25 vs. 9.13), “Text/Story Comprehension” (9.38 vs. 9.69), and “Word Concepts” (4.63 vs. 5)—show minimal differences in mean values between groups (Table 2).

Table 2. Comparison of Average Performance in Reading Ability Items of Preschoolers in Pre-Test

Performance Item	Experimental Group Average (n=16)	Control Group Average (n=16)	Difference Between Groups
1. Attitude Toward Reading and Voluntary Reading Behavior	4.69	5.00	0.31
2. Concept of Books	9.25	9.13	0.12
3. Understanding Text in Books (Story Comprehension)	9.38	9.69	0.31
4. Concept of Words	4.63	5.00	0.37

Following six instructional sessions, post-tests assess both groups. The experimental group demonstrates improvement across all domains—“Attitude Toward Reading and Spontaneous Reading Behavior,” “Book/Text Concepts,” “Text/Story Comprehension,” and “Word Concepts”—outperforming pre-test results. Opportunities for interaction with books, self-directed reading, and connections to personal experiences foster heightened interest and capability in authentic contexts. Overall, the experimental group exhibits enhanced reading comprehension of picture storybooks, displaying increased enthusiasm for group discussions and peer contributions. During the “summarization strategy,” key story elements are grasped, encouraging bolder participation and reducing response wait times.

Table 3. Comparison of Average Performance in Reading Ability Items of Control Group (E4) and Experimental Group (E2) in Post-Test

Performance Item	Experimental Group Average (n=16)	Control Group Average (n=16)	Difference
1. Attitude Toward Reading and Voluntary Reading Behavior	7.94	4.50	3.44
2. Concept of Books	15.81	9.13	6.68
3. Understanding Text in Books (Story Comprehension)	15.50	9.44	6.06
4. Concept of Words	7.94	4.81	3.13

Post-test results (Table 3) reflect gains in reading frequency and scores for both the experimental group (E2) and control group (E4). Notable advancements occur in “Book Concepts” and “Story Comprehension,” with score differences of 6.68 (15.81 vs. 9.13) and 6.06 (15.5 vs. 9.44), respectively. The experimental group surpasses the control group in “Attitude Toward Reading and Behavior” and “Word Concepts,” with differences of 3.44 (7.94 vs. 4.5) and 3.13 (7.94 vs. 4.81), respectively. Mean score comparisons and differences across all post-test categories appear in Table 3.

Analysis of reading ability performance, adjusted for pre-test scores, reveals significant outcomes. Pre-test adjustment yields $F(1,29) = 7.310$, $p < .05$, with an effect size of .021. Post-test scores, analyzed via Analysis of Covariance (ANCOVA), confirm a statistically significant difference in mean scores between the experimental and control groups ($F(1,29) = 613.75$, $p < .05$), with an effect size of .955 (Table 4). These findings affirm the efficacy of using picture storybooks with interactive teaching methods to enhance reading comprehension. However, the small sample size challenges the assumption of variance homogeneity ($F(1,30) = 11.24$, $p = .002$). Despite this, post-adjustment mean scores differ markedly: the experimental group’s 95% confidence interval ranges from 11.64 to 12.12, compared to 6.64 to 7.22 for the control group, indicating superior performance by the experimental group even within this limited sample.

Table 4. ANCOVA Results for Reading Ability of Preschoolers in Experimental and Control Groups

Goup	N	Post-Test Mean Score	Adjusted Post-Test Mean Score	Adjusted Post-Test Standard Error	F	p	η^2
Control Group	16	6.96	6.83	0.14	613.75*	.000	.955
Experimental Group	16	11.89	11.93	0.14			

DISCUSSION

Superior grasp of book ideas and narrative understanding appears in the experimental setting, a trend not seen in control conditions. Collaborative story moments—a mix of joint reading, lively discussion, and an informal introduction of book ideas—seems to boost this effect. Over the course of six storytelling sessions, hints of understanding basic reading features like titles, authors, or even cover details begin to surface among youngsters [1]. In a session where an instructor and pupils explore plot twists, comment on characters, and field questions, story concepts deepen and interest in reading grows—often in unexpected ways [1]. Guidance through listening, retelling, and even a bit of role-play also seems to refine story grasp, which generally benefits senior kindergarten learners [2]. Repeated interactive storytelling further underscores a link between how often listening happens and differences in early academic outcomes [3].

Early exposure to reading often acts as a bridge from oral sound to written word, nurturing a sense for the value of books and printed text while building basic literacy skills [4]. Complete understanding of a text may sometimes remain just out of reach, yet meaning carved from illustrations reflects a consistent, active involvement [5]. In a chain where visual cues line up one after another, bold and imaginative expressions of understanding gradually emerge [5]. Equally, an instructor assuming roles as guide, facilitator, or demonstrator tends to spark a genuine enthusiasm for active reading [6].

uring the investigation, enjoyment of storytelling via interactive teaching strategies becomes fairly clear. Listening to a narration while casually admiring accompanying illustrations—sometimes with a slight mismatch in the pace of auditory and visual cues—helps clear up what the story aims to say and sparks questions that lead to answer-guessing, problem spotting and even surprising new connections [7]. Small-group discussions, with their occasional informal repetitions and minor punctuation lapses, tend to boost expressive feedback and elevate interest in learning [7]. Viewed from a Zone of Proximal Development perspective, a mix of questioning, open dialogue and tailored support nurtures developmental potential, paving the way for mastering new reading concepts and independent learning skills [8]. Meanwhile, language exchanges structured by the teacher not only impart reading knowledge but also help convert that learning into everyday, practical insights [6].

CONCLUSION

Interactive teaching stands out as a method that blends structured instruction with spontaneous engagement. Clear guidance from educators pairs with a lively push from young learners, in most cases gently introducing strategies like making predictions, posing questions, clearing up doubts, and summarizing narratives [1]. Regular exposure to common vocabulary inked into stories helps sharpen word-spotting skills and often lifts reading fluency [1]. At times, careful prompting links the vivid imagery found in illustrations with familiar experiences and bits of background knowledge, slowly merging scattered pictures into one unified tale [1]. This mix of words and visuals generally nurtures a layered development in visual thinking—and, in turn, bolsters overall understanding [1]. When educators become adept at these interactive methods and use picture storybooks as teaching tools, everyday elements naturally get woven into the lesson fabric [2]. Such an approach, quite often, plays a key role in boosting reading comprehension [2]. In enriched settings, lively teacher–child interactions spark a genuine pleasure in

learning, which sometimes raises both motivation and overall effectiveness [3]. As a result, growing interest in reading combined with deeper comprehension lays down a sturdy groundwork for future academic challenges [3].

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Table 1. Research Design.

Table 2. Comparison of Average Performance in Reading Ability Items of Preschoolers in Pre-Test.

Table 3. Comparison of Average Performance in Reading Ability Items of Control Group (E4) and Experimental Group (E2) in Post-Test.

Table 4. ANCOVA Results for Reading Ability of Preschoolers in Experimental and Control Groups.

10] Data Availability:

The data that support the findings of this study are available from the third author.

11] Conflict of interest:

The authors declare that there is no conflict of interest.

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