

WHIMISICAL WONDERS OR DIGITAL DANGERS: EXPLORING THE INFLUENCE OF AI DURING STORY READING IN AN EARLY YEARS CLASSROOM

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Meaningful opportunities for **learning about, with and through digital technology** to enhance the development of responsible multi-literacy communicative repertoires enabling **children's successful participation in a digital society.**

Early Years education should foster creativity in children by allowing them to **create their own digital stories**, drawings or animations using **age-appropriate tools**. Further to this early childhood education shall create a **safe digital environment** where children can share and discuss their creations to enhance communication skills.

(Digital Education Strategy 2024-2030, p. 32)



THE IMPACT OF AI ON YOUNG CHILDREN

... a future where children grow up not just as digital natives, but as **AI natives** who will have **fundamentally different relationships with technology** than prior generations.

(Williams et al., 2019)



Learning Outcome 4 - Children who are effective communicators.

Related Achievements: Children who interact and engage with varieties of text and printed material increasing their awareness of purposes/functions.

- 1] I have discovered **the joy of books** and other printed material, including popular culture.
- 2] I **show interest in books** and print in my environment.
- 3] I **handle books** and printed material with care.
- 4] I ask for **stories to be read and read again**.
- 5] I **relate to favourite stories** and rhymes.
- 6] I **handle books appropriately**.

Interactive Story Reading Contributes to

- ▶ language competence
- ▶ vocabulary learning and word meaning
- ▶ listening comprehension skills – story comprehension
- ▶ ability to produce well-structured narratives
- ▶ children's casual reasoning
- ▶ development of social-emotional skills
- ▶ knowledge of handling books
- ▶ the enhancement of children's imagination

RESEARCH QUESTION

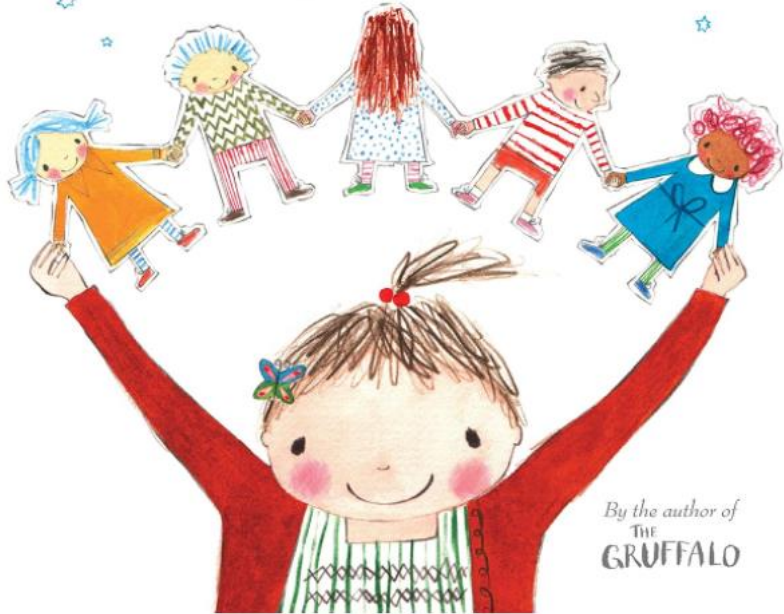
What strategies can educators employ to integrate AI technology into story reading sessions effectively, ensuring a balance between technological innovation and the preservation of traditional story reading elements?

METHODOLOGY

- ▶ A case study in a kindergarten classroom
- ▶ 5 observations during story reading
- ▶ 2 meetings
 - 1 meeting before the observations
 - 1 reflective meeting after the observations

Julia Donaldson Rebecca Cobb

THE PAPER DOLLS



By the author of
THE GRUFFALO



Scribble to Art

Turn your sketches into art with AI magic!



Paper doll

Re-generate

Scribble to Art

Turn your sketches into art with AI magic!



Paper doll

Re-generate

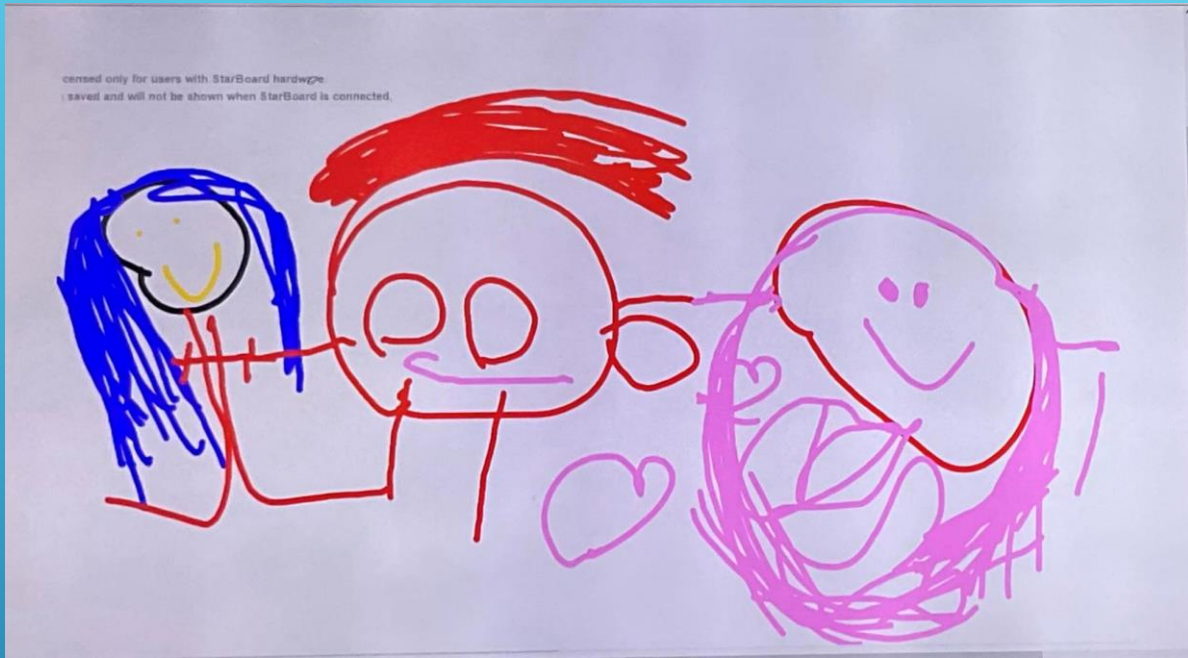
simplified.com –
AI sketch to image generator



simplified.com -
AI text to image
generator



ChatterPix Kids –
App on KGE's mobile phone



Animated Drawings –
sketch.metademolab.com/canvas



OZOBOT

Insights from the Observations

Story Reading Strategies

- ▶ Shared book reading
- ▶ Interactive book reading
- ▶ Dialogic scaffolding
- ▶ Mind mapping
- ▶ Reading aloud



Each session started with the children singing a song about reading, while they settled down around the KGE.

The book cover, book title, author and illustrations were discussed with the pupils.

They recalled what happened in the story.

They predicted what would happen next.

The teacher read the story out loud, starting from the beginning each time, and allowing the children to join in.

While reading they looked at the pictures in the book, used visuals, sang, danced and moved about.

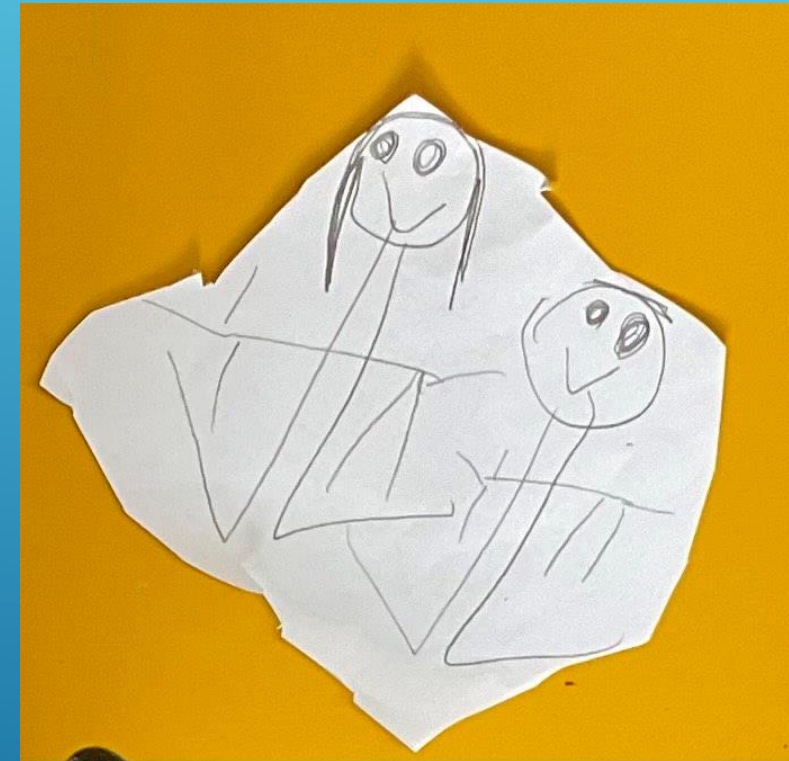
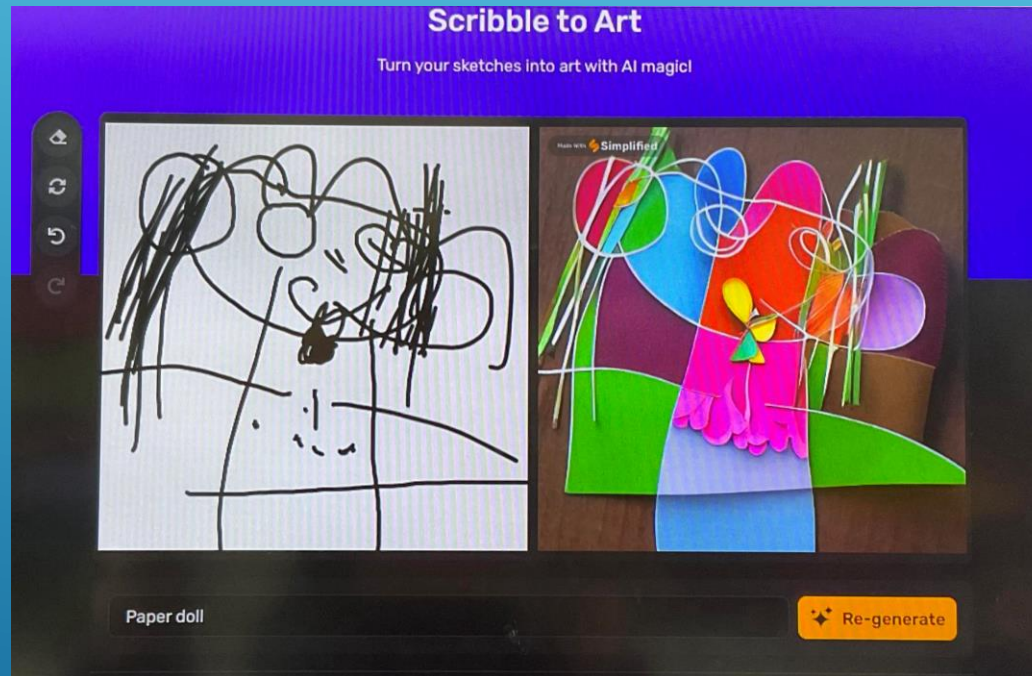
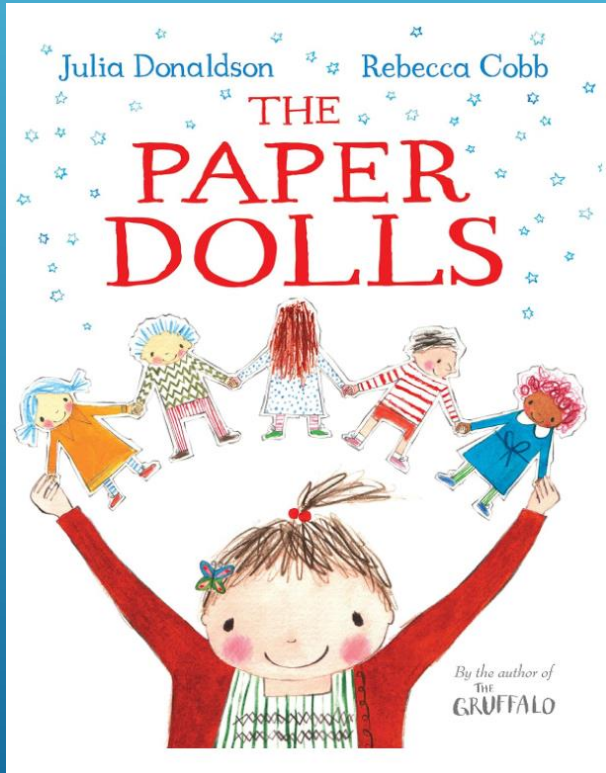
AI activity followed the reading part of the session.

Hands-on activity brought the session to an end.

The Structure of the Reading Session

The Integration of AI Tools

The Paper Dolls



The Dinosaur



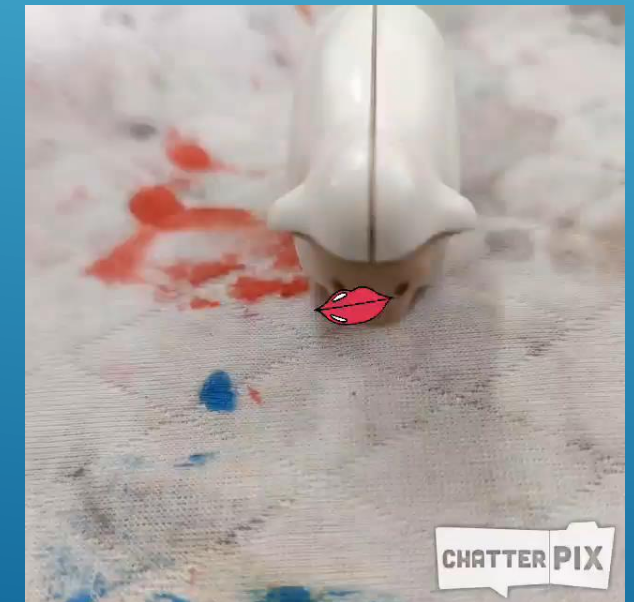
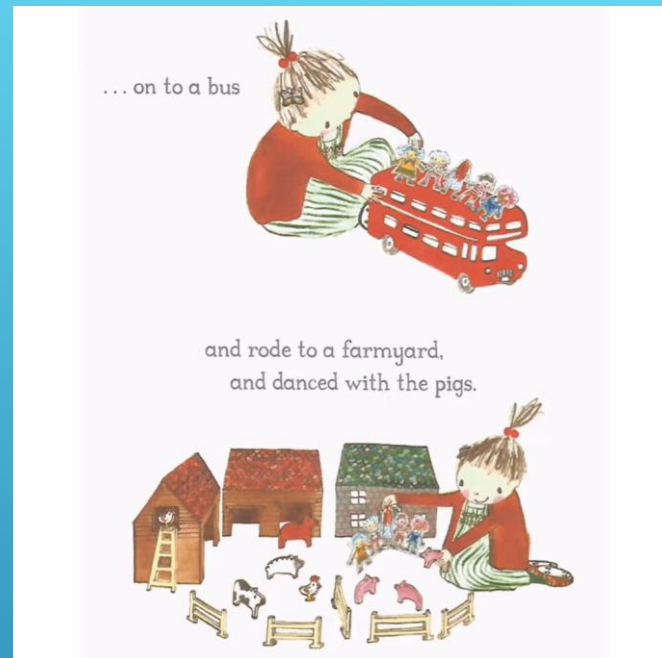
But the paper dolls sang,

"You can't get us. Oh no no no!
We're holding hands and we won't let go.
We're Ticky and Tacky and Jackie the Backie
And Jim with two noses and Jo with the bow!"

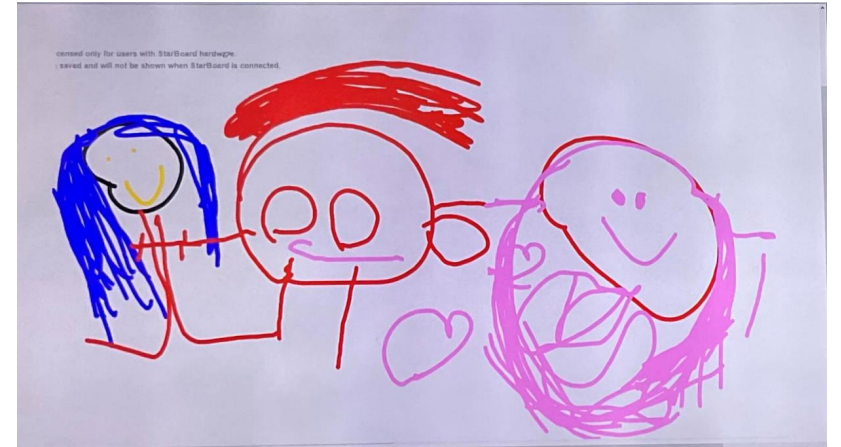
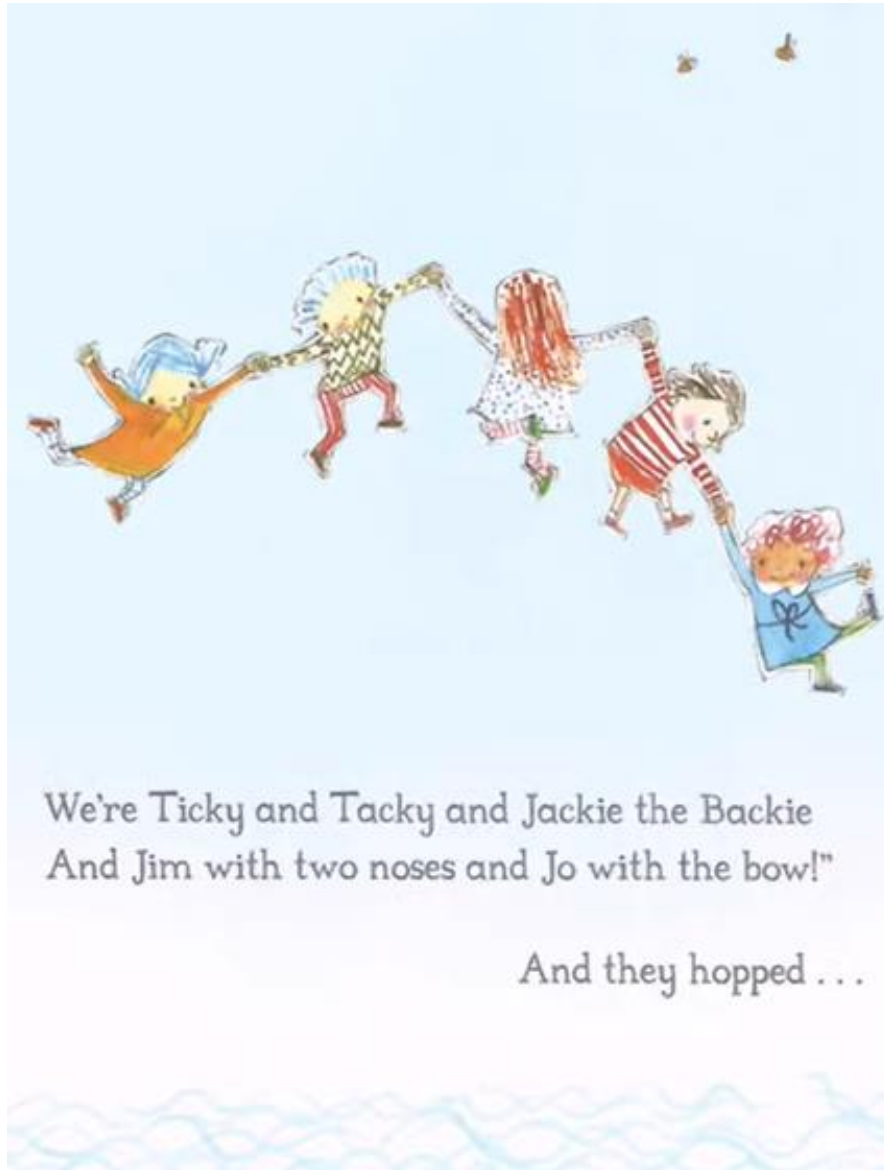
And they jumped . . .

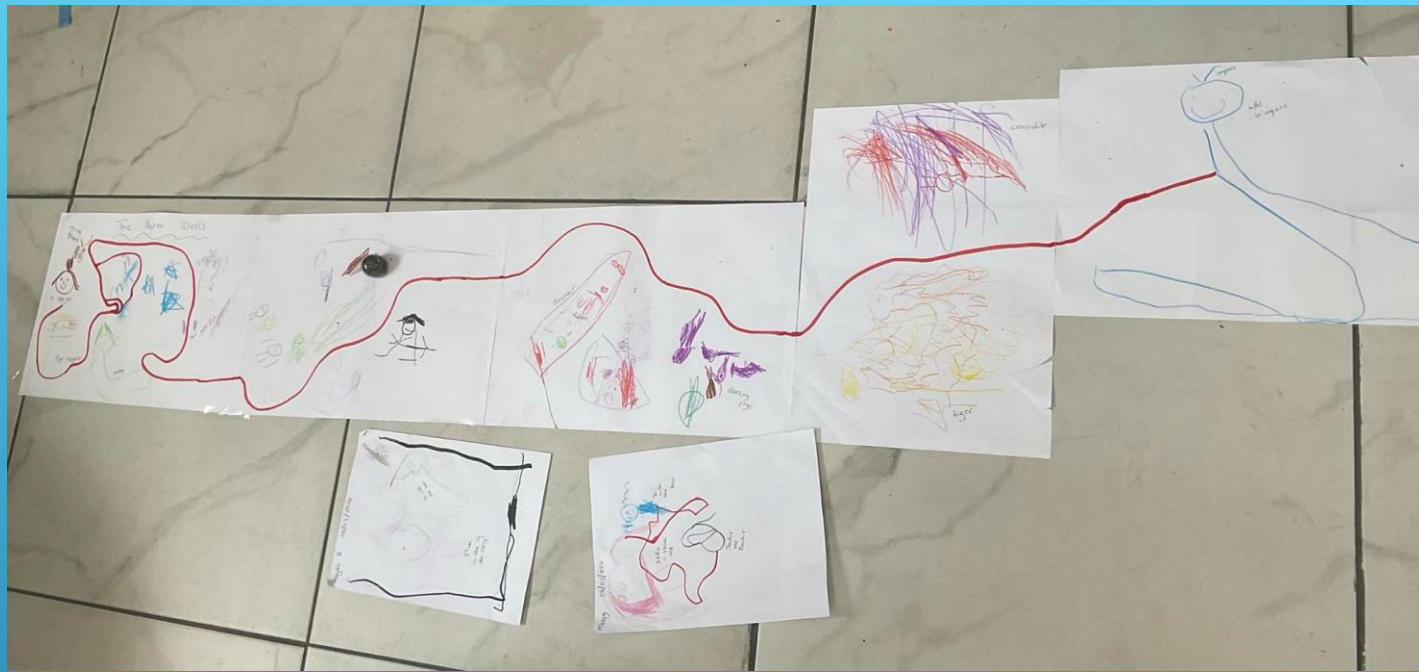


The Farm Animals



The Paper Dolls Holding Hands





Story Mapping



The Children

- ▶ were engaged and enjoyed the reading session,
- ▶ remembered the story from one session to another,
- ▶ enjoyed listening to the teacher reading the story,
- ▶ joined in when the teacher read the repeated parts,
- ▶ remembered the names of the paper dolls,
- ▶ accepted turn-taking,
- ▶ could describe what they were working at,
- ▶ were creative,
- ▶ interacted among themselves.

Insights from the Reflective Meeting

	Story Reading	AI Integration
Preparation	Look for the book that fits within the project.	Research on available tools.
Keeping a balance	The traditional approach is still very important.	Blend in the use of digital technology.
Students' engagement	Reading stories was always engaging and interactive.	The use of AI tools enhanced the experience.
Motivation	It is derived from the students' interest in the project.	Attends training webinars and seminars. Active eTwinner.

I used AI to help me use AI ... I asked about resources to use with Early Years.

We are no longer in a situation where we can ignore AI and its developments. We need to show our children the pros and cons. We need to use it responsibly.

Once you involve yourself in one activity you always want more.

Everything is so connected, all we have to do is give it a go.

Storytelling was always engaging and interactive, AI just enhanced the experience ... holistic development, creativity, oracy, digital competence.

Lack of resources

Lack of space in the classroom

Firewall security

Internet bandwidth

Daily upsetting eg: students from another class

Class population

Constant interruptions

Challenges

The word "Challenges" is written in a large, white, sans-serif font. To its right, there are several white diagonal lines of varying lengths and thicknesses, creating a dynamic, modern graphic element.

Conclusions

- AI technology can be integrated into story reading sessions effectively, ensuring a balance between technological innovation and the preservation of traditional story reading elements.
- AI tools enhanced the learning experience, engaging children and fostering creativity. Berson et al. (2021) suggest there should be strategies for integrating technology into educational practices to enhance learning outcomes.
- Providing children with the opportunity to use AI gives them an understanding of how it should be used. Su et al. (2023) suggest that fostering AI literacy in early childhood education is essential for equipping children with the skills they need to thrive in a technology-driven society.

Recommendations

- Training and support for educators to effectively integrate AI tools into their teaching practices.
- Providing appropriate resources for the effective integration of AI into early childhood education curricula.
- There is still a significant gap in research on the role of AI in early childhood education, which necessitates further investigation into its applications and outcomes.



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