

Reading Aloud as a Recreational Educational Measure: A Case Study on the Implementation of a Picture Book App in institutionalized extended education

Noémie Gfeller*

Abstract: This case study examines the integration of a picture book app in an after-school program in Switzerland, focusing on challenges, benefits and chances of promoting reading as part of the after-school program through the perspectives of caregivers. The study explores the potential of digital media, particularly picture book apps, to enhance children's language skills within institutionalized extended education settings. Through semi-structured interviews with the caregivers, key themes emerged regarding the challenges, strategies, and benefits of using digital tools in educational environments. The findings suggest that while picture book apps can support autonomy and language development, effective implementation requires careful consideration of timing, environment, and the specific needs of children. Additionally, the study highlights the importance of media literacy among caregivers and parents to maximize the educational benefits of digital tools.

Keywords: Digital media, Picture book app, Language development, After-school programs, Media literacy, Extended education

Introduction

An increasing number of children are spending more time in institutionalized forms of extended education (i.e. after-school programs) which are continually expanding in Switzerland and are expected to play an even more significant role in the future (Baader, 2016). An increase in full-day education and care offerings is also being observed internationally (Bae et al., 2019; Klerfelt & Stecher, 2018; Kunze & Reh, 2020). A question that must be asked is whether and to what extent children can be supported in developing their language skills in extended education and how digital media can be used for achieving this goal. Based on existing research, it can be assumed that reading books enhances children's vocabulary and can have positive effects on their development. This case-study examines the extent to which a picture book app can support reading aloud in extended education to promote children's vocabulary and what perceived challenges and benefits are identified by the caregivers in the particular institution of the after-school program in integrating a picture book app in extended education.

* University of Vienna, Department for Teacher Education

Theoretical Framework

Language competence is considered a crucial factor for educational success in educational research (Barrett et al., 2012; Kempert et al., 2016; Prevoo et al., 2016) — and thereby indirectly also for later economic success (Becker & Hadjar, 2009; Koopmans, 2017). A key finding of international school performance studies has shown that academic success and the acquisition of competencies, even in mathematical and scientific subjects, are significantly related to mastery of the language of education (Czepl, 2019; Schlager, 2019). Linguistic deficits frequently occur in children with a migration background, but they can also appear in children who have no migration experience themselves. This affects both children from second and third-generation migrant families as well as indigenous children from educationally disadvantaged and socioeconomically deprived families (Kreuzer, 2004). An effective tool to support children's language development is reading books. Preschool children who cannot yet read themselves benefit when a caregiver reads to them (Raikes et al., 2006); (Bus et al., 1995; Mol et al., 2009; Sénéchal & LeFevre, 2002; Whitehurst & Lonigan, 1998). Early reading abilities contribute significantly to children's overall development, including language, cognitive, emotional, and imaginative growth (Dickinson & Porche, 2011). Proficiency in reading picture books is particularly important for children's future learning and development (Cunningham & Stanovich, 1997; Dodici et al., 2003). A picture book format aligns with the multimedia learning principle that people learn better from words and pictures than words alone (Mayer & Pilegard, 2005). When eBooks are designed well, preschool-aged children can learn just as effectively, if not more so, than from print books. Reich et al.'s (2016) findings support this, showing that children are equally emotionally engaged with a story whether it is presented in print or digital format, and they comprehend similar amounts of the story regardless of whether it is read by an adult or a voice-over. However, it is important to note that enhanced eBooks, which include features like sounds, animations, and games, can distract children and reduce their learning by drawing attention away from the narrative itself. The studies by Caserta-Henry (1996), Flint (2010), Mathes et al. (1998), Sáenz et al. (2005), Vaughn et al. (2001) and Shamir (2009) collectively highlight the educational benefits of children reading picture books together. These studies generally conclude that shared reading activities, especially when involving peers or a more knowledgeable partner, can significantly enhance children's language development, comprehension, and overall reading strategies. In particular, the interactions during shared reading—such as discussing the content, asking questions, and jointly negotiating meaning—are critical for promoting deeper understanding and engagement with the text. This leads to the conclusion, that children in extended education can benefit from reading together with other children there.

Current State of Research

The importance of extracurricular activities, including the use of libraries and reading promotion programs during extended education, has been highlighted in previous studies, which have demonstrated a significant correlation between these activities and the development of children's vocabulary (Pedro et al., 2021). The impact of extended education offerings on

reading achievement has been explored, revealing that while general utilization may not significantly enhance outcomes, the quality of such programs plays a crucial role in improving reading skills, especially for long-term participants (Allmen et al., 2019). The period from ages 3 to 8 is crucial for developing reading skills (Wang, 2023). An emphasis on the importance of using books, artwork, and similar methods to spark children's interest in reading and writing, thereby fostering early literacy skills seem to be imperative (Ibid, p.1).

A recent study by Undheim (2022) found that technology may only provide good learning opportunities under certain circumstances. She cites studies, such as the one by Hoel and Jernes (2020) who found that when digital picture book apps were used in group dialogue-based reading sessions, the interactive features of the app hindered meaningful dialogue between the children and teachers, particularly during the first reading. The children were primarily focused on interacting with the hotspots and taking turns, which created a conflict between the teachers' educational goals and the app's interactive elements. This study suggests that when reading digital books with groups of children, less interactive features in the book are preferable if the goal is to encourage shared dialogue and focus on the narrative.

Another study by Lim & Toh (2020) explored how interactive picture book apps, which combine text with multimedia elements like sound, in the reading aloud function, can enhance young children's reading comprehension. The findings suggest that digital enhancements like this engage children more deeply and support their understanding of narrative structures, vocabulary, and language patterns.

Furthermore, interventions designed to train caregivers in sharing picture books with the children have a positive effect on child language development. Additionally, the study found a large effect size ($d = 1.01$) for improving caregiver book-sharing competence, which is crucial for the success of these interventions. So, by training a care giver on book-reading competence (for example give a training on the dialogic reading method), the positive effects of book reading can be enhanced.

Furthermore, a recent study by Zhang, Xu and Zhang (2024) suggests that creative activities, including potentially creative reading activities, embedded within after-school programs can have a significant positive impact on students' creativity. After-school programs can be particularly effective when they incorporate elements of creativity and student engagement, such as interactive reading sessions, discussions, and storytelling. However, the success of these programs often depends on the quality of instruction and the consistency of student participation. In addition to those findings, Yao et al. (2023) emphasize that after-school programs can positively influence academic performance, which includes reading abilities. Specifically, the study highlights that after-school programs that are academically oriented, including those focusing on reading, have a more substantial impact on students' cognitive development compared to those focused solely on social-emotional skills or other activities.

Research Question

Reading aloud to children in extended education/after-school programs can be an effective way to promote children's development. As discussed in the theoretical framework, the

success of these interventions depends on how they are implemented. This leads to the central research question of this study:

How do caregivers in the after-school program implement the integration of a picture book app in extended education to promote reading to children; i.e. what strategies and approaches are chosen and what challenges and benefits do they identify?

Research Design and Methods

The methodological choices in this study are rooted in the desire to gain an in-depth understanding of the integration of a picture book app within an extended education setting, specifically within an after-school program. A qualitative case study approach was chosen because it allows for a detailed exploration of complex phenomena within their real-life context, which is particularly important when examining the nuanced experiences of caregivers as they implement digital tools in educational environments.

The extended education institution A is located in the canton of Bern, Switzerland. It offers care and instruction outside of regular school hours and is aimed at children and adolescents who need a structured and supervised environment. The program is divided into care units (modules), which can be booked individually. This can include care in the morning, over lunch, and in the afternoon. The students receive meals, have time for homework, and can participate in various recreational activities.

The extended education institution A currently employs 10 caregivers under the leadership of one principal. Those 10 caregivers are distributed into three Groups. Group one takes care of all children in kindergarten. Group two takes care of the children in Grade 1–2 and Group three takes care of all children in Grade 3 and upwards. 110 children were enrolled in the extended education program during the data collection phase.

Data Collection

In this case study, data collection was carried out through a series of five in-depth interviews with the caregivers from Group one and two of the institution in extended education A. Given the exploratory nature of this study, the qualitative approach is well-suited to uncover the subtle dynamics and contextual factors that quantitative methods might overlook, particularly in understanding how caregivers perceive and navigate the integration of digital media in their educational practices. Each interview was semi-structured, allowing for a guided conversation that also provided flexibility for the participants to share detailed and nuanced information. The collected data was then transcribed with the help of the software NoScribe and analyzed using the software MAXQDA to identify patterns and draw conclusions relevant to the research objectives. This will be further elaborated in the next paragraph.

Data Analysis

The results of the interviews are being systematically analyzed via thematic analysis (Braun & Clarke, 2012). Statements are grouped thematically and interpreted in a suitable form. For the evaluation, the statements of the caregivers were assigned to specific thematic areas (so-called codes): previous media experience, previous experience with reading books during after-school program, challenges, approaches/strategies, benefits/opportunities and further development/statements for improvement. Each category was clearly defined and illustrated with examples as displayed in table 1.

Table 1. Coding System

Code	Definition	Example
previous digital media experience	The caregivers state what kind of digital media they have been using until now and how.	"The only thing we need is Spotify. There we have a subscription and something to listen to the music. But nothing else really." (caregiver1, Pos. 50)
previous experience with reading books during after-school program	The caregivers elaborate on the previous experiences they had with reading aloud to the children.	" So, reading aloud is always an important topic because the children actually still enjoy it when you read to them. But now sometimes the problem with us is that you probably need individual care or at most two or three children at the same time and then sometimes you just don't have enough time for that." (caregiver4, Pos. 19)
challenges	The caregivers explain the challenges they faced when using the picture book app to read to the children.	"But if you only have one tablet in the group, you can't do the reading with too many children at the same time." (.....) (caregiver3, Pos. 47)
approaches/strategies	The caregivers present their different approaches and strategies to implement the usage of the picture book app to read to the children in an effective way.	"...and a good time to read aloud is a little bit towards the evening. (..) Because yes, they are a bit tired from playing and stuff. And then they are ready to listen. Yes, after snack time. Yes, they are perhaps a little tired. Where they like to sit and listen for a while." (caregiver5, Pos. 12)
benefits/opportunities	The caregivers specify the benefits and opportunities that	"Every now and then I used it with them. I used the picture

Code	Definition	Example
	arise from using the picture book app in contrast to a printed picture book.	book app. (.) We usually chose a book together. Sometimes they had an idea about a topic. (.) At the moment the topic of snakes is very exciting for the boys. We then looked to see if there was a book on the subject. (.) I then read the text out loud and asked questions in between.” (caregiver2, Pos. 20)
development/state-ments for improvement	The caregivers give insight on possible strategies for further development and improvement of using a picture book app to promote children’s development.	“Parents or society in general lack a differentiated awareness of what kind of media might be helpful and what might not. So, media literacy is missing. Yes, I have the feeling that parents sometimes don’t have enough of that. That’s where you have to start. Inform and train parents.” (caregiver5, Pos. 12)

Results

In the following section, the findings of the qualitative case study are presented. The results are organized around the key themes (i.e. codes) from the previously displayed table 1 that emerged from the data analysis, offering a detailed understanding of the subject of this study. Each theme is supported by direct quotes from the participants of this study (i.e. the five caregivers), which provide deeper insights into their experiences and perspectives.

Previous Digital Media Experience

It was noted that digital media, such as music and specific educational games, are used occasionally. As one caregiver mentioned, “The digital media that I actually use is often for listening to music.”. Some interviewees expressed unfamiliarity with certain formats of digital media, such as digital books, indicating that these were new to them. A caregiver reflected, “I have never used a digital book for reading aloud; it’s something new for me.”

Despite the limited access to digital media in day-to-day activities, there are instances where children are allowed to use tablets for specific purposes, like homework. The use of digital devices is generally restricted and highly regulated. One caregiver described the process: “We have tablets that are used mainly for administrative purposes or to assist with homework, but this is very limited and always with a clear objective in mind.”. Some ac-

tivities, like watching educational YouTube videos or using outdated gaming consoles, are allowed under strict conditions, but these are exceptions rather than the norm.

Previous Experience with Reading Books during After-School Program

Participants in the interviews expressed mixed experiences and opinions regarding the practice of reading books during after-school programs. Some caregivers value reading as an essential activity, both in the context of the school day and during after-school care. One participant stated, “I am very much a picture book person. Whenever I have time, it’s always reading time.” This reflects a broader belief among some caregivers that reading aloud should be a part of after-school programs, not just formal education. As one interviewee noted, “Reading is sometimes seen as something that belongs in school, but it also has a place in leisure education.”

However, the implementation of regular reading sessions in after-school care is often hindered by practical constraints. Several participants highlighted the issue of resources, explaining that reading aloud often requires one-on-one attention or small groups, which can be difficult to manage with limited staff and time. One caregiver pointed out, “It’s sometimes a bit of a resource problem, either you don’t have the time or reading aloud requires very intensive supervision.”

Furthermore, children’s individual preferences and the availability of digital alternatives also influence the extent to which reading is integrated into after-school activities. Some children express a strong desire to have books read to them, while others prefer to do other things. As one interviewee described, “Some children really like it when you go to them and read aloud, especially since they can’t read themselves yet.”

The caregivers also noted the importance of adapting reading activities to the children’s energy levels and interests, particularly since many children come to the after-school program tired from a full day of school. As one participant mentioned, “We have a quiet room with lots of books where children can go when they need a break, and sometimes we read to them there.”

Challenges

The interviews revealed several challenges related to the integration of media and educational activities within after-school programs. A recurring theme was the difficulty in maintaining children’s attention during longer activities, whether watching a movie or listening to a story. One caregiver noted, “I sometimes feel, and I notice this when we watch a movie, that the children no longer have the competence to immerse themselves in a story.” This observation was linked to the prevalence of short, fast-paced videos, which seem to have conditioned children to expect quick entertainment, making it harder for them to engage with longer narratives or activities.

Participants also discussed the broader challenges of managing media exposure outside of the after-school environment. Some noted that many children already have substantial exposure to media at home, sometimes to an extent that caregivers felt was excessive. One caregiver mentioned having conversations with parents about the appropriateness of the content their children were consuming, particularly regarding violent or age-inappropriate material. This highlights the ongoing effort to encourage a balanced and age-appropriate media diet, not just within the program but also in collaboration with families.

Another significant challenge identified was the limited resources, particularly in terms of available digital devices. As one participant mentioned, “But when you only have one tablet in the group, you can’t have multiple children using it at the same time. It’s only one child and no other.” This limitation often necessitates careful planning and prioritization of activities, which can be restrictive.

The complexity of implementing media-related activities was further underscored by the need for guidance and supervision. As one caregiver put it, “You can’t just assume that a child will take to an app or a game and manage on their own. It requires guidance, sometimes intense at first, then more passive, but always present.” This reflects a broader understanding that children need support to engage meaningfully with educational content, whether digital or traditional, and that such activities cannot be left entirely to the children’s discretion.

Approaches and Strategies

Caregivers emphasized the importance of creating an environment conducive to reading and listening activities. This includes setting up quiet spaces, often a challenge in extended education settings, but essential for encouraging children to pick up books or listen to stories. One interviewee noted, “It’s crucial to establish zones that are relatively quiet. If we create a book corner, we increase the chances that a child will pick up a book.”

Timing and structure were also identified as key factors in effectively using the app. The app is typically integrated into the daily routine during quieter times, such as after lunch or in the afternoon after snack time. One caregiver explained, “We usually do it after lunch when the children need some downtime. It’s also a good activity before starting our afternoon program.” and another stated that “... a good time to read aloud is a little bit towards the evening. (...) Because yes, they are a bit tired from playing and stuff. (...) they like to sit and listen for a while.”. The timing is flexible and depends on the children’s schedule and energy levels, with some caregivers preferring to use the app after afternoon snacks, when children are more relaxed and receptive.

The approach to using the app is tailored to the individual needs and preferences of the children. Caregivers pointed out that the success of reading sessions often depends on the number of children involved and their ability to stay focused. One interviewee shared, “We found that it’s manageable with one to three children. But with more children, it becomes difficult as they tend to lose focus, especially when they start commenting on the pictures instead of listening to the story.”

Additionally, there is a recognition that while the app is a valuable resource, it should complement rather than replace traditional reading methods. One caregiver emphasized, “The app can be an addition, but it shouldn’t replace books.”

Benefits and Opportunities

The interviews highlighted several benefits of using a picture book app in after-school programs, particularly in enhancing children’s autonomy and engagement with reading. One significant advantage noted by caregivers is the app’s ability to empower children to explore stories independently, even if they do not yet have strong reading skills. As one participant

mentioned, “The advantage is definitely that they can do a lot on their own. If they have the vocabulary, they can manage without constant assistance.” This autonomy is particularly beneficial for children who might be less inclined to read or who find traditional picture books too challenging. Additionally, several caregivers noted the great advantage of having such a wide variety of books readily available: “It’s like having a small library always at your fingertips.”

Additionally, the app has been noted for its versatility in catering to different children’s needs and preferences. For instance, some children appreciate the ability to choose what they want to read or listen to, which fosters a sense of independence and personal interest in reading. One caregiver observed, “What I’ve noticed is that by reading with the tablet, they become more independent and can choose what they want to read.”

The app’s ability to support language development, particularly for children who are not native speakers, was also frequently mentioned. The use of the app allows children to hear stories in their mother tongue or in standard German, which can reinforce their language skills. One caregiver highlighted this benefit: “The book app is really supportive, especially because children can hear their native language spoken correctly, and later they can switch to the German version once they know the content.”

Further Development and Statements for Improvement

The interviews revealed several areas for further development in the use of picture book apps in after-school programs. A recurring theme was the need for greater media literacy among both parents and caregivers. One participant emphasized the importance of understanding which media are beneficial and which are not, stating, “There is perhaps a lack of awareness among parents and society in general about what constitutes helpful versus less helpful media. A bit more media competence might be necessary.” This suggests that both parents and caregivers could benefit from training to better guide children’s media use, ensuring it is both educational and appropriate.

One caregiver suggested that the issue of only being able to read to 2–3 children at a time could be resolved by using digital media. By connecting a picture book app to a projector, the book’s images could be displayed in a way that allows all the children to see them.

Moreover, the integration of the app into language learning was identified as an area with potential for further development. One caregiver suggested that short training sessions for after-school staff on the possibilities of using the app for language support could be beneficial. For instance, understanding how to leverage the app’s features to enhance language learning could significantly improve its effectiveness.

Discussion

The results arising from the data highlight both the potential benefits and the challenges associated with integrating digital tools into educational settings for young children. In this discussion, these findings will be contextualized within the broader literature on digital media in education, address the implications for practice, and suggest avenues for further research.

Potential Benefits and Challenges

The use of a picture book app in after-school programs was found to offer several significant benefits, particularly in terms of fostering children's autonomy and supporting language development. These findings align with previous research that suggests digital media can enhance children's learning experiences by providing interactive and engaging content (Marsh et al., 2015; Neumann, 2015). The app's ability to allow children to choose stories, engage with the content independently, and reinforce language skills, especially for non-native speakers, highlights its educational value. Moreover, the app's interactive features, such as audio narration and visual aids, can make reading more accessible and enjoyable for children who might struggle with traditional books.

However, the study also identified several challenges that caregivers face when integrating digital media into after-school programs. One of the primary concerns is maintaining children's attention and focus, particularly in an environment where they are accustomed to quick, fast-paced entertainment. This challenge is consistent with existing literature that points to the potential negative impact of rapid digital consumption on children's attention spans (King et al., 2009; Lillard & Peterson, 2011). Additionally, the limited availability of resources, such as tablets, and the need for structured guidance to ensure effective use of the app were highlighted as significant hurdles. These challenges underscore the importance of thoughtful and intentional implementation of digital tools in educational settings.

The Role of Media Literacy

A critical theme that emerged from the interviews is the need for greater media literacy among both parents and caregivers. The findings suggest that while digital media can be a powerful educational tool, its effectiveness depends heavily on how it is used. This echoes the broader discourse in educational research, which emphasizes the importance of media literacy as a key component of modern education (Buckingham, 2007; Hobbs, 2010). By enhancing media literacy, caregivers and parents can better guide children in making informed choices about their media consumption, ensuring that digital tools are used in ways that support rather than hinder their development.

Moreover, the suggestion to provide short training sessions for after-school staff on the educational potential of digital media highlights the need for professional development in this area. Such training could equip caregivers with the skills and knowledge necessary to maximize the benefits of digital tools like the picture book app, while also addressing the challenges of maintaining children's focus and engagement.

Further Development of Digital Tools

The study also points to opportunities for further development of digital tools to better meet the needs of diverse learners. One of the most promising suggestions is the enhancement of

bilingual features within the app, allowing children to engage with stories in both their native language and the language of instruction. This approach could support bilingual education and help bridge the gap for children who are still developing proficiency in the dominant language. The potential for such tools to support language acquisition and cultural inclusivity is well-documented in the literature (Cummins, 2021; Pahl & Rowsell, 2012), and the findings of this study provide further evidence of their value in educational settings.

Additionally, the results suggest that while the app is a useful tool, it should complement rather than replace traditional reading methods. The importance of maintaining a balance between digital and analog resources is a recurring theme in educational research (Flores, 2017), and this study reinforces the notion that digital media should be integrated into a broader, holistic approach to education that includes physical books and face-to-face interactions.

Implications for Practice

The findings of this study have several implications for practice in after-school programs and other educational settings. First, it is crucial to provide caregivers with the necessary training and resources to effectively integrate digital tools into their programs. This includes not only technical training on how to use the apps but also guidance on how to incorporate them into a balanced educational approach that includes both digital and traditional methods, as well as training staff on effective language skill promoting reading techniques such as dialogic reading (Zevenbergen & Whitehurst, 2003; Mol, Bus, De Jong & Smeets, 2008).

Second, there is a need for ongoing dialogue between caregivers and parents regarding children's media consumption. Caregivers can play a key role in fostering media literacy among parents, helping them to understand the importance of monitoring and guiding their children's use of digital media at home. This partnership between caregivers and parents is essential for ensuring that children benefit from digital tools in a way that supports their overall development.

Continued research and dialogue in this area are essential for maximizing the potential of digital media in education and ensuring that it serves as a positive force in children's development.

References

- Allmen, B. von, Schüpbach, M., Frei, L. & Nieuwenboom, W. (2019). The effect of utilization of extended education offerings and of their quality on reading achievement at open-attendance all-day schools. *IJREE–International Journal for Research on Extended Education*, 7(1), 5–6.
- Baader, M. S. (2016). Tracing and contextualising childhood agency and generational order from historical and systematic perspectives. In *Reconceptualising agency and childhood* (S. 135–149). Routledge.
- Bae, S. H., Park, H., Kwak, E. J., Cho, E. & Jung, H. (2019). Global Pattern of Extended Education and Its Impact on Educational Outcomes: The Case of Science Education. *International Journal for*

- Research on Extended Education*, 7(1), 86–106. <https://eric.ed.gov/?q=extended+education&id=EJ1250856>
- Barrett, A. N., Barile, J. P., Malm, E. K. & Weaver, S. R. (2012). English proficiency and peer interethnic relations as predictors of math achievement among Latino and Asian immigrant students. *Journal of adolescence*, 35(6), 1619–1628.
- Becker, R. & Hadjar, A. (2009). Meritokratie–Zur gesellschaftlichen Legitimation ungleicher Bildungs-, Erwerbs- und Einkommenschancen in modernen Gesellschaften. *Lehrbuch der Bildungssoziologie: Für Caterina*, 35–59.
- Braun, V. & Clarke, V. (2012). *Thematic analysis*. American Psychological Association.
- Buckingham, D. (2007). Digital Media Literacies: rethinking media education in the age of the Internet. *Research in comparative and international education*, 2(1), 43–55.
- Bus, A. G., van Ijzendoorn, M. H. & Pellegrini, A. D. (1995). Joint book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy. *Review of Educational Research*, 65(1), 1–21.
- Caserta-Henry, C. (1996). Reading buddies: A first-grade intervention program. *The Reading Teacher*, 49(6), 500–503.
- Cummins, J. (2021). *Rethinking the education of multilingual learners: A critical analysis of theoretical concepts* (Bd. 19). Multilingual Matters.
- Cunningham, A. E. & Stanovich, K. E. (1997). Early reading acquisition and its relation to reading experience and ability 10 years later. *Developmental psychology*, 33(6), 934.
- Czepl, M. (2019). "... wir sagen immer das ernste und nicht das kinderische Wort!" – Sprachbildung in der Primarstufe aus der Perspektive von Schüler_innen. *ÖDaF-Mitteilungen*, 35(1+ 2), 260–270.
- Dickinson, D. K. & Porche, M. V. (2011). Relation between language experiences in preschool classrooms and children's kindergarten and fourth-grade language and reading abilities. *Child development*, 82(3), 870–886.
- Dodici, B. J., Draper, D. C. & Peterson, C. A. (2003). Early parent—child interactions and early literacy development. *Topics in Early Childhood Special Education*, 23(3), 124–136.
- Flint, T. K. (2010). Making meaning together: Buddy reading in a first grade classroom. *Early Childhood Education Journal*, 38(4), 289–297.
- Flores, N. (2017). Bilingual Education. In *The Oxford Handbook of Language and Society*. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780190212896.013.26>
- Hobbs, R. (2010). Digital and media literacy: A plan of action. *New York: The Aspen Institute*.
- Hoel, T. & Jernes, M. (2020). Samtalebasert lesing av bildebok-apper: barnehagelærere versus hotspotere. *Norsk pedagogisk tidsskrift*, 104(2), 121–133.
- Kempert, S., Edele, A., Rauch, D., Wolf, K. M., Paetsch, J., Darsow, A., Maluch, J. & Stanat, P. (2016). Die Rolle der Sprache für zuwanderungsbezogene Ungleichheiten im Bildungserfolg. *Ethnische Ungleichheiten im Bildungsverlauf: Mechanismen, Befunde, Debatten*, 157–241.
- King, K., Martynenko, M., Bergman, M. H., Liu, Y.-H., Winickoff, J. P. & Weitzman, M. (2009). Family composition and children's exposure to adult smokers in their homes. *Pediatrics*, 123(4), e559–e564.
- Klerfelt & Stecher (2018). Swedish School-age Educare Centres and German All-day Schools – A Bi-national Comparison of Two Prototypes of Extended Education. *IJREE – International Journal for Research on Extended Education*.
- Koopmans, R. (2017). *Assimilation oder Multikulturalismus? Bedingungen gelungener Integration*. LIT Verlag Münster.
- Kreuzer, C. (2004). Sprachförderung für Kinder und Jugendliche mit Migrationshintergrund. *RdJB Recht der Jugend und des Bildungswesens*, 52(1), 69–81.
- Kunze, K. & Reh, S. (2020). Kooperation unter Pädagog*innen. In P. Bollweg, J. Buchna, T. Coelen & H.-U. Otto (Hrsg.), *Handbuch Ganztagsbildung* (S. 1439–1452). Springer Fachmedien. https://doi.org/10.1007/978-3-658-23230-6_106

- Lillard, A. S. & Peterson, J. (2011). The immediate impact of different types of television on young children's executive function. *Pediatrics*, 128(4), 644–649.
- Lim, F. V. & Toh, W. (2020). Children's digital multimodal composing: Implications for learning and teaching. *Learning, Media and Technology*, 45(4), 422–432.
- Marsh, J., Plowman, L., Yamada-Rice, D., Bishop, J., Lahmar, J., Scott, F., Davenport, A., Davis, S., French, K. & Piras, M. (2015). Exploring Play and Creativity in Pre-schooler's use of apps: Final Project Report.
- Mathes, P. G., Howard, J. K., Allen, S. H. & Fuchs, D. (1998). Peer-assisted learning strategies for first-grade readers: Responding to the needs of diverse learners. *Reading Research Quarterly*, 33(1), 62–94.
- Mayer, R. E. & Pilegard, C. (2005). Principles for managing essential processing in multimedia learning: Segmenting, pretraining, and modality principles. *The Cambridge handbook of multimedia learning*, 169–182.
- Mol, S. E., Bus, A. G. & Jong, M. T. de (2009). Interactive book reading in early education: A tool to stimulate print knowledge as well as oral language. *Review of Educational Research*, 79(2), 979–1007.
- Mol, S. E., Bus, A. G., De Jong, M. T., & Smeets, D. J. (2008). Added value of dialogic parent-child book readings: A meta-analysis. *Early education and development*, 19(1), 7–26.
- Neumann, M. M. (2015). Young children and screen time: Creating a mindful approach to digital technology. *Australian educational computing*, 30(2).
- Pahl, K. & Rowsell, J. (2012). Literacy and education.
- Pedro, C., de Freitas, C. A. M., Pascoinho, J., Paulo, E., & Gonçalves, S. (2021). The school library and the promotion of reading and writing: evaluation of the reading and writing project “small readers/future writers”. In *Perspectives and Trends in Education and Technology: Selected Papers from ICITED 2021* (pp. 853-859). Singapore: Springer Singapore.
- Prevo, M. J. L., Malda, M., Mesman, J. & van Ijzendoorn, M. H. (2016). Within-and cross-language relations between oral language proficiency and school outcomes in bilingual children with an immigrant background: A meta-analytical study. *Review of Educational Research*, 86(1), 237–276.
- Raikes, H., Alexander Pan, B., Luze, G., Tamis-LeMonda, C. S., Brooks-Gunn, J., Constantine, J., Banks Tarullo, L., Abigail Raikes, H. & Rodriguez, E. T. (2006). Mother-child bookreading in low-income families: Correlates and outcomes during the first three years of life. *Child development*, 77(4), 924–953.
- Reich, S. M., Yau, J. C. & Warschauer, M. (2016). Tablet-based ebooks for young children: What does the research say? *Journal of Developmental & Behavioral Pediatrics*, 37(7), 585–591.
- Sáenz, L. M., Fuchs, L. S. & Fuchs, D. (2005). Peer-assisted learning strategies for English language learners with learning disabilities. *Exceptional children*, 71(3), 231–247.
- Saville-Troike, M. (1978). *A guide to culture in the classroom*. National Clearinghouse for Bilingual Education Rosslyn, VA.
- Schlager, S. (2019). *Zur Erforschung des Zusammenhangs zwischen Sprachkompetenz und Mathematikleistung*. Springer.
- Sénéchal, M. & LeFevre, J.-A. (2002). Parental involvement in the development of children's reading skill: A five-year longitudinal study. *Child development*, 73(2), 445–460.
- Shamir, A. (2009). Processes and outcomes of joint activity with e-books for promoting kindergarteners' emergent literacy. *Educational Media International*, 46(1), 81–96.
- Stanat, P. & Edele, A. (2016). Language proficiency and the integration of immigrant students in the education system. *Emerging trends in the social and behavioral sciences: An interdisciplinary, searchable, and linkable resource*. Hoboken, NJ: Wiley.
- Undheim, M. (2022). Children and teachers engaging together with digital technology in early childhood education and care institutions: A literature review. *European Early Childhood Education Research Journal*, 30(3), 472–489.

- Vaughn, S., Klingner, J. K. & Bryant, D. P. (2001). Collaborative strategic reading as a means to enhance peer-mediated instruction for reading comprehension and content-area learning. *Remedial and Special Education*, 22(2), 66–74.
- Whitehurst, G. J. & Lonigan, C. J. (1998). Child development and emergent literacy. *Child development*, 69(3), 848–872.
- Yao, J [Jing], Yao, J [Jijun], Li, P., Xu, Y. & Wei, L. (2023). Effects of after-school programs on student cognitive and non-cognitive abilities: A meta-analysis based on 37 experimental and quasi-experimental studies. *Science Insights Education Frontiers*, 17(1), 2627–2649.
- Zevenbergen, A. A., & Whitehurst, G. J. (2003). Dialogic reading: A shared picture book reading intervention for preschoolers. *On reading books to children: Parents and teachers*, 177, 200.
- Zhang, Y., Xu, Q. & Zhang, T. (2024). The impact of after-school programs on K-12 students' creativity: a meta-analysis. *Asia Pacific Education Review*, 1–17.