The Impact of Blended Learning on Encoding Skills

A Review of the Literature

By

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April 27, 2025

Introduction

Blended learning in our schools is a practice that is becoming increasingly popular. Over the past few years, I have begun implementing a blended learning environment in my elementary school classrooms in fourth and second grades. In being a part of the ADL program, I have gained deeper knowledge of what blended learning truly is. It is not simply offering your students instruction using digital tools but also supports student engagement while improving student motivation. Students are able to take ownership of their learning by participating in personalized learning experiences (Contaoi, 2024). I have specifically chosen this topic because of our campus participation in a grant for Raising Blended Learners. Although I have been implementing this model for a few years, I would like to improve the quality of instruction and experiences that my students engage in, more specifically, in the area of reading. I currently teach second grade and have noticed that although my students have been making gains in their literacy with decoding skills, encoding continues to show up as an area of weakness. Noticing an area of instruction needing improvement, I have decided to ask the question, "In what ways does adding UFLI-aligned practice into blended learning playlists impact encoding skills of second-grade students?"

Review of the Literature

Definition of Blended Learning

Blended learning is a mix of face-to-face learning and digital instruction that works together to allow students personal agency and control over the pace and place of their learning while giving learners ownership of their growth and success (Horn & Staker, 2015). Students are also able to enjoy the flexibility of accessing digital tools from different locations and at various times, while educators can leverage online activities to tailor instruction to the specific needs of

each student. Teachers are also able to utilize real-time data provided by digital platforms to continue to make necessary adjustments for personalized learning (Macaruso et al., 2020).

Station Rotation Model in Blended Learning

Many elementary school classrooms follow a station-rotation model since students and teachers are used to following a station set-up. In this model, students participate in a series of stations and rotate through them. They might engage in small group lessons with their instructor, complete independent practice activities, or practice skills in a digital setting (Horn & Staker, 2015). As time has passed, educators have found ways to modify how they implement their station-rotation model. In one organization, educators have found success in including stations like a teacher-led station, an online station, an offline station, and an extension station. Students are able to receive teacher feedback and support for obstacles they experience in their learning. The online station offers various ways to receive personalized instruction with varied digital tools. The offline station allows students to collaborate with others and engage in hands-on experiences. When children are finished with other tasks, they are able to move onto the extension station for continued learning while exploring their passionate interests (Seitova & Khalmatova, 2025).

Individual Rotation Model in Blended Learning

Similar to the station rotation model, students rotate through various tasks in the individual rotation model. These two frameworks differ in that learners are able to follow their own customized playlist schedule without having a set time where the whole class rotates to the next activity (Horn & Staker, 2015). In this model, student control over the path and pace of their own learning is highlighted. Students who need to spend more time practicing a skill to mastery

are able to do this while others are able to move on to other activities where they can extend their learning (Tucker, 2018).

Flipped Classroom Model in Blended Learning

In settings where students may have equitable access to technology outside of the classroom, teachers are able to utilize the flipped classroom model. Students are given instruction through digital platforms in a different setting outside of the brick-and-mortar environment then engage in student-centered learning and practice when they come back to school (Eltahir & Alsalhi, 2025). With resources like Nearpod, even elementary school teachers are able to allow their students to experience interactive and engaging lessons where they might even be introduced to different historical time periods, locations, or phenomena (Sukma et al., 2024).

Advantages of Using Blended Learning in Literacy

Engagement tends to be an enticing benefit in implementing blended learning in classrooms. Students are more engaged when they are given opportunities to gain confidence in their learning, can practice their skills in a gamified format, and are able to receive immediate feedback. With encoding skills, students are working on different levels of skills that have been identified as an area of growth. As students work on skills they need, they develop a sense of mastery, which increases their confidence (Schechter et al., 2017). In another study, researchers have learned that students are more likely to stay engaged when using gamified quizzes where they can compete against peers. Students are more eager to participate in these tasks since they are interactive and display a playful nature (Contaoi, 2024).

An additional benefit to blended learning is the ability to provide immediate, corrective feedback. An effective teaching practice is ensuring that students are practicing skills correctly.

At times, students do not like to engage in tasks where they fear they will continue to make mistakes. When students are able to reinforce their learning by receiving immediate feedback, students are motivated to continue to improve (Persada et al., 2020). This is especially important when students are practicing new encoding skills. In a recent study, researchers took what they knew about adults and the benefits of corrective feedback to study the outcomes of corrective feedback on young children. The data supported the importance of feedback, especially for young learners who have lower prior knowledge in the skills being assessed (Fyfe et al., 2023).

Blended learning also offers the opportunity for 21st-century learners to engage in learning that supports necessary skills like collaboration and creativity (Kharback, 2025). One study highlights how collaboration among students was able to create an environment where students felt like they belonged and were able to contribute to each other's learning. Learners were able to view each other's perspectives while sharing their ideas (Espiritu Bersamin et al, 2024). Quotes from another study highlighted the importance of collaboration in learning. Students thrived when feeling support from their peers who were also experiencing similar obstacles or struggles. As a learning group, they were able to overcome while also learning to respect differing views or opinions (Loots et al., 2023). Yonwilad and Sinlapaninman (2022) learned that blended learning allowed learners to develop their creativity while also increasing math achievement. Students built a foundation of knowledge then applied what they learned in identifying and attempting to solve authentic problems related to math.

Barriers to Implementing Blended Learning

It is important to consider and anticipate any obstacles that might interfere with the implementation of a new method. For one, some argue that there is not sufficient curriculum provided for teachers to pull from. Teachers are given curriculum resources, but these educators

must transform these resources into high-quality tasks that would allow them to create a blended learning environment with fidelity without necessary professional development (Arnab et. al., 2021).

Another challenge educators must overcome is their proficiency in using technology. One study on blended learning shows us that teachers feeling competent and confident in using digital tools was a key factor in learning success (Taggart et al., 2023). Other teachers reported that technology, more specifically navigating an LMS, could present a barrier for teachers (Alvarez, 2020).

Lastly, many teachers have limited time to commit to extra planning when it comes to implementing new practices. Antwi-Boampong (2021) shared that some educators have concerns with the amount of time and the increased workload that comes with creating instruction for learning in a blended model. The workload challenges are highlighted in another article where an educator shares that there is already so much on teachers' plates. Other teachers hesitate because they already feel overwhelmed as new teachers and must also learn these new approaches (Shin, 2021).

A Systematic Approach to Phonics Instruction

There are proven positive effects of using a systematic approach to teaching phonics to children in second grade. It is important to build a solid literacy foundation so that students do not experience long-term negative impacts. UFLI is an early literacy program that follows a systematic and explicit teaching approach. The scope and sequence have been created to help students apply decoding and encoding skills with confidence in a progression that makes sense. Resources for this program include hands-on manipulatives as well as web-based apps that both

help support encoding skills and can be easily adapted to meet the various levels of student learning (Lane et al., 2025).

Summary

Blended learning is a model that schools are able to more easily utilize with the increase of technological devices in the classroom. With blended learning, educators can elevate their ability to create a student-centered environment by increasing student engagement, motivation, and allowing students to become self-directed learners. With these benefits, teachers should also be able to support literacy skills such as encoding by developing personalized learning experiences. Blended learning blends face-to-face learning and digital instruction while allowing students to practice flexibility in their learning pace and environment. Teachers are able to personalize instruction and immediately make adjustments by analyzing data in real-time with digital platforms. Three models that are often used are the station rotation model, the individual rotation model, and the flipped classroom model. An advantage of implementing blended learning often includes increased student engagement through gamified tasks and learning that allows immediate feedback. Students also report collaboration with their peers as a source of satisfaction in a blended learning setting. 21st-century learning skills like creativity and innovation are fostered when creating significant learning environments. With all the positives, one must also keep in mind some challenges that may present themselves. Teachers have reported insufficient curriculum resources, a lack of technological proficiency, and limited planning time required when learning a new practice. Many teachers feel overwhelmed by the additional workload they are met with when preparing to implement a blended learning model.

This Review and the Field of Education

This literature review contributes to the field of education by providing an overview of blended learning and how it impacts the learning outcomes of young learners. By highlighting blended learning as a way for students to take control of their learning, this information demonstrates the importance of personal agency. This approach empowers students to control the time, place, and pace of their learning progression while supporting independence and motivation. Sharing various models within blended learning also offers educators various options for how they might implement blended learning in a way that works for them. The specific attention to literacy skills highlights using a systematic program for building a strong foundation of literacy among young learners, which addresses a significant and relevant need in early education. This review highlights several benefits of blended learning, like immediate feedback, collaboration, and creativity, yet also ensures that attention is brought to barriers that educators must problem-solve in the realistic implementation of this model. Understanding challenges like curriculum limitations, technological proficiency, and teacher workload will prompt conversations and reflections on how to support educators in these areas. This exploration of blended learning aims to enhance instructional strategies and improve student outcomes in literacy.

Strengths and Weaknesses of this Body of Literature

There are plenty of resources currently available to learn more about blended learning in general. It seems that there has been a surge of studies completed post-COVID. However, there is limited information studying the outcomes of blended learning in an elementary setting or how blended learning impacts younger learners. Most of the literature focuses on blended learning in higher education. Although some of the information can be generalized to younger learners, elementary students do learn differently, and special considerations must be made when

preparing foundational instruction for these students. There is even less research available on the topic of blended learning and literacy instruction. With literacy practices shifting to align with the science of teaching reading and an increase in blended learning environments in our schools, there is a need to provide more literature and studies on the impact of leveraging digital learning tools to support foundational literacy instruction in primary students.

Focus of the Current Study

There are several key principles in this literature review that will enhance my study of blended learning and its impact on encoding skills in second graders. The text highlights several blended learning models that can be implemented. For my action research, I will reflect on my use of the individual rotation model. By allowing practice opportunities that allow for the use of digital learning tools, hands-on manipulatives, and collaboration, I can cater to diverse learning styles and promote deeper engagement. This review also highlights the importance of student agency in learning. I will utilize the COVA framework mentioned in my action research plan by allowing them to choose tasks that align with their interests and also support the goals they have set for themselves. This ownership is crucial in fostering their motivation and can be assessed through qualitative surveys that gauge their attitudes toward their learning and progress.

This literature also expresses a need for a systematic approach to literacy instruction, particularly through the UFLI program, which aligns with my research focus. I will ensure that the practice opportunities are explicit and systematic, as this has been shown to significantly impact literacy outcomes. In addition to these considerations, I will also encourage collaboration by creating opportunities for students to work together so they will feel a level of support.

By integrating these insights into my research, I aim to create a more engaging and effective blended learning environment that improves the encoding skills of my learners while also empowering them to take ownership of their learning.

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