The Impact of Explicit Phonics Instruction on Emergent Literacy

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Abstract: Popular narratives around beginning reading, propelled by the Science of Reading movement, currently focus on phonics-centered teaching practices. This literature review explores the role of explicit phonics instruction in early years education classrooms, and how these practices impact children's attainment of emergent literacy skills by examining research findings on the use of systematic phonics approaches in early years learning environments. The role of teacher attitudes towards, and personal understanding of, phonics is an area of limited study that can have an effect on what practices are used in the classroom. Findings suggest that the rate in which grapheme-phoneme correspondences are taught, as well as students' phonemic awareness, are significant indicators of early literacy learning that can be supported with phonics instruction. Children today are increasingly familiar with technology, and educational apps offer exciting opportunities for young readers to engage in phonics activities, however this is an area that requires additional research. The results of these studies suggest that explicit phonics instruction is a valuable component of emergent literacy, however it is imperative that curriculum creators continue to explore the role that decodable books and authentic literature experiences offer to round out literacy instruction.

Keywords: Explicit Phonics, Systematic Phonics, Emergent Literacy, Early Years Education

One of the purposes of early years education programs is to provide young children with foundational skills for learning (Ehri & Flugman, 2018). The best methods for helping emergent readers to gain these skills has long been under debate. This foundation includes a child's emergent literacy skills: the early reading and writing behaviours, knowledge of books, and attitudes towards reading held by children between the ages of three and six (International Literacy Association, n.d.). Since the beginning of public education in North America, the reading wars have raged on in a cyclical battle between whole language, balanced literacy, and phonics-based instruction (Kim, 2008). "There is now a firmly rooted popular narrative of a national crisis in reading achievement supposedly linked to inadequate phonics instruction and unequivocally supported by a science of reading" (Strauss, 2023, para. 8). Whether inspired by the science of reading movement or built upon the five pillars of reading, the sights of teachers are once again on phonics-centered practices emphasized by curricula mandates from states and provinces putting phonics front and center for reading instruction (Neuman et al., 2023).

While government groups direct teachers to employ direct instruction of phonics in the classroom, the question remains among educators, is this the best course of action for teaching children to read? Gabriel (2021) argues against the popular narrative and suggests that this forced shift in teaching approaches may not be beneficial to students and that a return to a more balanced approach, one that allows teachers the flexibility to discern which instructional approaches are best suited to their student's specific needs, is preferable. No where has this debate been more heated than with the introduction of a new English Language Arts and Literature curriculum in Alberta. With few school districts agreeing to pilot the new curriculum before its implementation, teachers and families across the province have spoken out about concerns that the curriculum is flawed (Aukerman, 2022). One such change in the curriculum is a renewed emphasis on phonics-centered instruction.

As a teacher of early education students in Alberta this author set out to explore the potential value that adding explicit instruction of phonics can offer to emergent readers and writers. Research and academic literature around the use of phonics in the contemporary classroom varies vastly, from implicit learning through play to intentional, direct instruction from the teacher. This review explores the role of explicit phonics instruction in early years education classrooms, with a specific inquiry into how these practices impact children's attainment of emergent literacy skills.

Methods

With phonics programs being mandated for young learners in many English-speaking countries–including Canada, the United States, Australia, and the United Kingdom–the use of related terms being used interchangeably has resulted in some confusion for educators (Ball & Blachman, 1991; Campbell, 2020; Lane et al., 2002). For the purposes of this review the term phonics refers to instructional approaches that help children make connections between written letters and the spoken sounds they represent, while phonemic awareness more specifically refers to a child's ability to manipulate the individual sounds, or phonemes, within a word (Lane et al., 2002). Both of these complimentary terms are relevant to this review but offer different insights into student understanding.

Additionally, for the purposes of this review, emergent literacy refers to the introductory and foundational skills associated with reading and writing in a variety of forms (International Literacy Association, n.d.). While the term emergent literacy is singular in nature the results garnered through the use of this search term supported the contemporary multiliteracies approach to language instruction in early years classroom settings. Studies that explore concepts of literacy beyond the printed page such as visual, digital, and textual literacies were eligible for inclusion in this review.

The search for literature for this inquiry into the impact of phonics instruction in early years education began with the University of Alberta Library's EBSCO Discovery Service academic search engine. This search generated results from the following databases: Australian Education Index, Education Research Complete, ERIC, JSTOR Journals, Social Sciences Citation Index, and SCOPUS. The search was further expanded through ProQuest Dissertation and Theses Global. Results from these databases were culled using combinations of the keywords "*phonic*," "*phonemic*," "*grapheme*," "*phoneme*," "*emergent literacy*," "*early years education*," "*kindergarten*," and "*explicit instruction*". Of the resulting articles, only those published in English, from peer-reviewed journals, presenting studies conducted with English-speaking participants, and conducted after the year 2000, with participants aged seven or younger, were considered. As studies were identified to support the inquiry around explicit phonics instruction with students in early years education programs, backward chaining of references was also utilized to identify other potential studies for inclusion. These key terms, exclusion criteria, and reference chaining resulted in the inclusion of seventeen articles for this literature review.

Of the included articles, the majority were published in the United States with four being printed in Australia and one from the UK. These regions have reported similar trends in compulsory phonics instruction as is currently being promoted in Canadian provinces and thereby the results from these studies were deemed appropriate for the purposes of this review (Department of Education, 2014; NSW Government, 2020; Zhu, 2024). The research methods in the included studies relied primarily on quantitative data with five studies citing mixed-methods approaches and nine being solely quantitative in design. The researchers in the included studies utilized popular language and reading assessments such as the Gates MacGinitie Reading Test, Peabody Picture Vocabulary Test, Phonological Awareness Screener for Intervention (PASI), and Dynamic Indicator of Basic Early Literacy Skills (DIBELS) to collect empirical data on students' phonics abilities and to measure the effects of teaching practices on students' emergent literacy skills.

Findings

The current movement in English language arts curricula surrounding reading and writing practices calls for the inclusion of explicit phonics instruction for students, particularly in the early years, but the question remains, does the evidence support this phonics-focused direction of learning (Gabriel, 2021)? This review explores empirical evidence to answer the inquiry presented.

Explicit/Systematic Phonics Instruction

The utilization of explicit phonics instruction in early years classrooms offers students the skills necessary to shift from pre-reader, unaware of the connection between letters and sounds, to reader. Phonics instruction can be implicit, taught indirectly during other learning activities, or explicit, taught intentionally and through direct instruction from a knowledgeable educator (Campbell, 2020; Ehri et al., 2001). While children can gain some letter-sound skills through implicit phonics activities, explicit phonics instruction offers greater potential growth for reading and writing skills (Beverly et al., 2009; Dilgard et al., 2022; Ehri et al., 2001). The size of the learning group was not found to be a contributing factor for the success of explicit phonics instruction as students who engaged in one-on-one tutoring, small group intervention, and whole-group instruction were all found to make notable gains (Beverly et al., 2009; Ehri et al., 2001). In these studies phonics-centered learning was reported to have the greatest potential for young children in kindergarten and grade one, as well as some positive results reported for English language learners and older students at-risk for reading disabilities (Dilgard et al., 2022; Ehri et al., 2001). The findings of these studies support the use of phonics instruction in early childhood classrooms.

Explicit phonics instruction can take many forms, but teachers who follow a systematic approach experience the most success. Phonics learning that is intentionally planned for targeted instruction of specific learning outcomes can

help students to increase their grapheme-phoneme knowledge which, in turn, results in improvement in their recall of words, as well as their ability to decode unfamiliar words (Cuccia, 2023; Dilgard et al., 2022; Noltemeyer et al., 2013). Cuccia's (2023) case study of three kindergarten children found that the children gained an increased ability to identify the separate beginning, middle, and ending sounds of dictated words when compared to their pre-phonics instruction writing. Noltemeyer et al.'s (2013) mixed methods study "indicated that the phonics instruction was effective at improving words recalled immediately following the instructional period compared to pre-test and control word performance" (p. 128). The findings from these studies suggest that the frequency of phonics instruction is a more significant predictor of student success than the size of the learning group, with phonics learning occurring multiple times a week being the most impactful in these examples as observed through student's improvement on reading assessments (Beverly et al., 2009; Noltemeyer et al., 2013). Explicit phonics instruction, that follows an intentional and systematic approach, provides emergent readers with the opportunity to connect letters to sounds, establish their reader identity, and decode words with accuracy.

Teacher Knowledge of Phonics

Effective systematic phonics instruction implies that teachers are knowledgeable and encouraging of phonics-based literacy learning. During their review of phonics instruction in early literacy settings, Dilgard et al. (2022) explored the role that professional development plays in explicit phonics instruction. They determined that training and professional resources aid teachers in implementing effective phonics practices in the classroom. In order for teachers to provide explicit phonics instruction, it is imperative that they have an adequate understanding of phonics and its applications to reading and writing (Campbell, 2020; Ehri & Flugman, 2018; Fielding-Barnsley, 2010). A lack of understanding of phonics can lead to a hesitancy in utilizing it as a teaching method, or literacy strategy, with early learners. Teachers' beliefs about the effectiveness of phonics, and their ability to teach phonics concepts, plays a significant role in whether phonics instruction will happen in a classroom setting (Campbell, 2020; Fielding-Barnsley, 2010). Campbell's (2020) findings suggest that some preschool teachers choose not to teach phonics explicitly, feeling that such learning is the prerogative of later, more formal educational years. In contrast, Fielding-Barnsley (2010) found that the majority of early childhood preservice teachers in their study had a positive attitude towards phonics and felt better prepared to teach beginning reading than their primary years counterparts. While there was contrast in whether teachers reported a positive attitude towards phonics instruction, participants in both studies reported a reluctance to implement explicit phonics practices due to a lack of training or experience in teaching phonics to beginning readers (Campbell, 2020; Fielding-Barnsley, 2010).

Commercially developed phonics programs can offer teachers guidance and, in some cases, training for implementing phonics practices. These scripted, systematic programs have been widely encouraged in areas where phonics learning as a part of the literacy curriculum has been mandated (Campbell, 2020; Ehri & Flugman, 2018). When teachers have the opportunity to be trained in methods of how to teach phonics, and to successfully use prepared phonics programs, students are able to achieve greater gains in their reading skills according to results from standardized testing (Ehri & Flugman, 2018). While teachers having a positive attitude about the role that explicit phonics instruction plays in emergent literacy is helpful, it is essential that teacher training programs provide instruction for using phonics methods if educators are to successfully employ these practices in the classroom.

Grapheme-Phoneme Correspondences

Just as teachers' knowledge about phonics is prerequisite to their ability to teach phonics to students, students need a foundational understanding of phonemic units, the components that make up a word, if they are to be successful readers. While kindergarten classrooms have long fostered experiences with the English alphabet, the current shift towards phonics-centered instruction provides the opportunity for explicit instruction and direct modeling of a wider range of English letter sounds which can support reading development. The connection between oral sounds in words and the written representation of that sound are referred to as grapheme-phoneme correspondences, or GPCs. Unlike other languages that utilize a Latin alphabet, "alphabetic and early word reading skills are more difficult to learn in the English orthography than in languages with more regular orthographies" (Vadasy & Sanders, 2021, p. 110). This difficulty is due in part to the complexity of letters, such as vowels with multiple sounds, and multi-letter graphemes, combinations of letters that make sounds different than the sound made by the individual letters (Larsen et al., 2020; Vadasy & Sanders, 2021).

The explicit teaching of GPCs is a core component of phonics instruction and is of the most benefit to emergent readers (Vadasy & Sanders, 2021). When explicitly introducing phonemic units, a mix of single- and multi-letter GPCs showed greater gains in student reading when compared to groups of students that were only exposed to single-letter GPCs (Larsen et al., 2020; Vadasy & Sanders, 2021; Vadasy & Sanders, 2023). By intentionally introducing a variety of complexities of GPCs, concentrating first on those that are encountered more frequently in early literacy texts, children were better equipped to independently decode words in books being read (Larsen et al., 2020). In addition to the consideration of the complexity of GPCs being introduced to young readers, the rate at which these GPCs were taught played a role in the children's successful recall, and application, of these word units. A faster rate, with three to four GPCs being introduced each week, proved to be more effective for young learners than slower methods (Vadasy & Sanders, 2021; Vadasy & Sanders, 2023). Building upon these understandings of the complexity and rate of GPC introduction can help teachers plan effective, systematic phonics instruction for emergent literacy learning.

Phonemic Awareness

The desired result of phonics instruction is for students to gain phonemic awareness, that is, to obtain the ability to manipulate the individual phonemes, or sounds, within a word (Lane et al., 2002). Early phonological skills may be causally related to the development of reading proficiency and thereby, phonemic awareness is an excellent predictor of early reading skills (Hulme, 2002). Intentional, and explicit, phonics instruction can help students to build understanding beyond the larger units of onset and rime, and target the individual phonemic units of words (Hulme, 2022). In their article, Lane at al. (2002) determine that children need phonological awareness to become successful readers and writers, however they further explain that "instruction in phonological skills can be conducted as formal, structured lessons, as an integrated part of ongoing reading instruction, or as fun activities throughout the school day" (p. 104). This finding serves as a reminder that multiple strategies, not only systematic instruction, are valuable methods for attaining phonological awareness.

One method studied for its potential in supporting children in building phonemic awareness is articulation placement (Becker & Sylvan, 2021; Boyer & Ehri, 2011). Articulation refers to the body mechanics required to produce sounds in oral speech. By connecting the physical movement of producing sounds to the written representation in letters, children were better able to segment and decode both unfamiliar words and non-words than children who did not receive such instruction (Becker & Sylvan, 2021; Boyer & Ehri, 2011). Becker and Sylvan (2021) explored how this work in classrooms can be supported through collaboration with speech language pathologists. In this author's experience, district employed speech pathologists are limited in the amount of time they are able to spend in early childhood classrooms. For this reason, matching photographs of mouths while making phoneme sounds and explicit modeling by the classroom teacher, as Boyer and Ehri (2011) propose, is a more accessible approach for teachers to support phonemic awareness through articulatory placement instruction.

Technology Supported Phonics

Modern phonics instruction has the potential to benefit from updated practices that utilize technology in addition to traditional print resources. As technology becomes more prevalent in our classrooms the implications of how technology can support systematic phonics instruction should be considered. The use of touchscreen tablets by young children across the Western world provides opportunities for educators to capitalize on the multimodal phonics learning offered by such technology (Neumann, 2014; Parry et al., 2024). Game elements in apps encourage children's participation in independent learning activities and offer the opportunity for self-paced exploration of targeted phonemic skills (Neumann, 2014; Parry et al., 2024). This combination of gamification and independent technology-supported learning offers teachers the opportunity to maximize direct instruction and active phonics practice time by providing easy to implement, high-engagement activities that support students in achieving mastery of phonics-related reading skills (Neumann, 2014; Shifflet et al., 2020).

While the use of technology in emergent literacy is a newer area of study, the introduction of educational apps like Reading Eggs' Fast Phonics, which offers systematic phonics learning that is advertised as being based on scientific research, suggests that this is an area of phonics learning that needs further research (3P Learning, n.d.).

Conclusion

Explicit, systematic phonics instruction is a valuable approach for teaching emergent literacy skills in early years classrooms. The positive impact on students' beginning reading and writing skills, when receiving direct instruction of phonics concepts, suggests that there is a place for phonics-focused learning for young children. The author asserts that a positive teacher attitude towards phonics learning, one that is built upon adequate knowledge of phonics gained through teacher training and professional development opportunities, is imperative if teachers are to provide valuable instruction that meets the requirement of a phonics-centric shift in language arts curricula.

Implications for Classroom Practice

While phonics instruction provides foundational skills that are essential for emergent readers and writers, it is critical that curriculum developers, and educators, understand that phonics is only one component of an effective literacy program (Beverly et al., 2009; Campbell, 2020; Ehri et al., 2001; Hulme, 2002). The use of rich literature, authentic writing experiences, and multimodal learning opportunities are all necessary components of a modern, well-rounded literacy curriculum (Dilgard et al., 2022; Noltemeyer et al., 2013; Shifflet et al., 2020). The research supports that emergent literacy programs must incorporate multiple components of literacy experience, not only phonics, if children are to make the shift from pre-readers to readers.

This author suggests that daily phonics instruction is a valuable addition to early years education programs that offer regular opportunities to engage with a variety of literature that is culturally and socially responsive to the student population; frequent, systematic instruction that includes both single- and multi-letter GPCs is highly recommended for kindergarten and grade one classrooms to help develop students' ability to decode more unfamiliar words with accuracy and increase reading abilities.

Limitations and Further Research

The studies and articles considered in this review examined the perspectives of learners in English-speaking countries, with most participants being primarily native English speakers. The effects of phonics instruction in other alphabetic languages were excluded from this review and may offer different results. Further exploration into the impact of phonics instruction in other languages, as well as the specific benefits for English language learners, could expand upon these findings.

The research included in this review shows that explicit phonics instruction does not add to a student's reading comprehension skills (Beverly et al., 2009; Dilgard et al., 2022; Ehri et al., 2001). Whether phonics-centered tools such as decodable books, those written specifically to provide practice applying phonics skills, can offer opportunities for expanding reading comprehension requires additional study.

Technology use in Canadian classrooms is commonplace, including in early years settings (Neumann, 2014; Parry et al., 2024; Shifflet et al., 2020). The effect that technology use can have on supporting phonics learning, and for practicing phonics skills, is an underrepresented area of study and further research in this area is needed.

REFERENCES

3P Learning. (n.d.). *Fast phonics.* https://readingeggs.ca/fast-phonics-games/

Aukerman, M. (2022, January 8). Opinion: Alberta moving forward with a flawed language arts draft curriculum. *The Edmonton Journal.* https://edmontonjournal.com/opinion/columnists/opinion-alberta-moving-forward-with-a-flawed-language-arts-draft-curriculum

Ball, E. W., & Blachman, B. A. (1991). Does phoneme awareness training in kindergarten make a difference in early word recognition and developmental spelling? *Reading Research Quarterly, 26*(1), 49-66. https://www.jstor.org/stable/747731

Becker, R., & Sylvan, L. (2021). Coupling articulatory placement strategies with phonemic awareness instruction to support emergent literacy skills in preschool children: A collaborative approach. *Language, Speech, and Hearing Services in Schools, 52*(2), 661-674. https://doi.org/10.1044/2020_LSHSS-20-00095

Beverly, B. L., Giles, R. M., & Buck, K. L. (2009). First-grade reading gains following enrichment: Phonics plus decodable texts compared to authentic literature read aloud. *Reading Improvement, 46*(4), 191-205.

Boyer, N. & Ehri, L. C. (2011). Contribution of phonemic segmentation instruction with letters and articulation pictures to word reading and spelling in beginners. *Scientific Studies of Reading, 15*(5), 440-470. https://doi.org/10.1080/10888438.2010.520778

Brady, S. (2011). Efficacy of phonics teaching for reading outcomes: Indications from post-NRP research. In S. Brady, D. Braze, & C. Fowler (Eds.), *Explaining individual differences in reading: Theory and evidence* (pp. 69-96). Psychology Press.

Campbell, S. (2020). Teaching phonics without teaching phonics: Early childhood teachers' reported beliefs and practices. *Journal of Early Childhood Literacy, 20*(4), 783-814. https://doi.org/10.1177/1468798418791001

Cuccia, M. (2023). *The effects of supplemental phonemic awareness and phonics instruction on kindergarten students' writing performance* (Publication No. 87427879) [Master's Thesis, William Paterson University]. ProQuest Dissertations and Theses Global.

Department of Education. (2014). *National curriculum in England: English programmes of study.* https://www.gov.uk/government/publications/national-curriculum-in-england-english-programmes-of-study/national-curriculum-in-england-english-programmes-of-study

Dilgard, C., Hodges, T. S., & Coleman, J. (2022). Phonics instruction in early literacy: Examining professional learning, instructional resources, and intervention intensity. *Reading Psychology, 43*(8), 541-575. https://doi.org/10.1080/02702711.2022.2126045

Ehri, L. C., Nunes, S. R., Stahl, S. A., & Willows, D. M. (2001). Systematic phonics instruction helps students to read: Evidence from the national reading panel's meta-analysis. *Review of Educational Research, 71*(3), 393-448. https://doi.org/10.3102/00346543071003393

Ehri, L. C., & Flugman, B. (2018). Mentoring teachers in systematic phonics instruction: Effectiveness of an intensive year-long program for kindergarten through 3rd grade teachers and their students. *Reading and Writing, 31*, 425-456. https://doi.org/10.1007/s11145-017-9792-7

Fielding-Barnsley, R. (2010). Australian pre-service teachers' knowledge of phonemic awareness and phonics in the process of learning to read. *Australian Journal of Learning Difficulties, 15*(1), 99-110. https://doi.org/10.1080/19404150903524606

Gabriel, R. (2021). The sciences of reading instruction. *Educational Leadership, 78*(8), 58-64.

Hulme, C., Hatcher, P. J., Nation, K., Brown, A., Adams, J., & Stuart, G. (2002). Phoneme awareness is a better predictor of early reading skills than onset-rime awareness. *Journal of Experimental Child Psychology, 82*, 2-28. https://doi.org/10.1006/jecp.2002.2670

International Literacy Association (n.d.). *Literacy glossary: Emergent literacy.* https://www.literacyworldwide.org/get-resources/literacy-glossary

Kim, J. S. (2008). Research and the reading wars. *Phi Delta Kappa, 89*(5), 372-375. https://doi.org/10.1177/003172170808900514

Lane, H. B., Pullen, P. C., Eisele, M. R., & Jordan, L. (2002). Preventing reading failure: Phonological awareness assessment and instruction. *Preventing School Failure: Alternative Education for Children and Youth, 46*(3), 101-110. https://doi.org/10.1080/10459880209603354

Larsen, L., Schauber, S. K., Kohnen, S., Nickels, L., & McArthur, G. (2020). Children's knowledge of single-and multiple-letter grapheme-phoneme correspondences: An exploratory study. *Early Childhood Research Quarterly, 51*, 379-391. https://doi.org/10.1016/j.ecresq.2019.12.001

Neuman, S. B., Quintero, E., & Reist, K. (2023). Reading reform across America: A survey of state legislation. *Albert Shanker Institute.*

Neumann, M. M. (2014). An examination of touch screen tablets and emergent literacy in Australian pre-school children. *Australian Journal of Education, 58*(2), 109-122. https://doi.org/10.1177/0004944114523368

Noltemeyer, A. L., Joseph, L. M., & Kunesh, C. E. (2013). Effects of supplemental small group phonics instruction on kindergartners' word recognition performance. *Reading Improvement, 50*(3), 121-131.

NSW Government. (2020, December 1). *Phonics compulsory for Year 1 students.* https://education.nsw.gov.au/news/latest-news/phonics-compulsory-for-every-student

Parry, C. L., Kumar, S., & Gallingane, C. (2024). Integration of tablets in phonological awareness and phonics instruction: A systematic review. *Journal of Research in Childhood Education.* https://doi.org/10.1080/02568543.2023.2301110

Shifflet, R., Mattoon, C., & Bates, A. (2020). Using tablets in a prekindergarten classroom to foster phonological awareness. *International Research in Early Childhood Education, 10*(1), 1-20.

Strauss, V. (2023, May 23). On the latest obsession with phonics. *The Washington Post.* https://www.washingtonpost.com/education/2023/05/23/phonics-reading-analysis/

Vadasy, P. F., & Sanders, E. A. (2021). Introducing grapheme-phoneme correspondences (GPCs): Exploring rate and complexity in phonics instruction for kindergarteners with limited literacy skills. *Reading and Writing, 34*(1), 109-138. https://doi.org/10.1007/s11145-020-10064-y

Vadasy, P. F., & Sanders, E. A. (2023). Cognitive flexibility + phonics intervention effects on reading gains. *Reading Psychology, 44*(5), 514-5. https://doi.org/10.1080/02702711.2023.2166636

Zhu, C. (2024, September 6). Low literacy rates in Canada prompt reading curriculum changes. *CBC Radio: The Current.* https://www.cbc.ca/radio/thecurrent/updated-reading-curriculum-1.7313187

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