Small-Group Reading Instruction and Mastery Learning: The Missing Practices for Effective and Equitable Foundational Skills Instruction

by Linda Diamond

"Our basic task in education is to find strategies which will take individual differences into consideration but which will do so in such a way as to promote the fullest development of the individual." (Bloom, 1968)

INTRODUCTION

To ensure effective elementary reading instruction that supports educational equity, it is important to recognize and implement two research-supported practices: small-group instruction and mastery learning.

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This white paper unpacks the research behind each of these practices and explores how small-group, mastery-based instruction is a crucial missing ingredient in many core reading curricula.

A PERSISTENT ISSUE: WHOLE-CLASS INSTRUCTION FOR WORD RECOGNITION

Too often all elements of reading instruction are taught in a whole-class setting, regardless of individual student needs. While whole-class instruction is useful for building knowledge and for reading comprehension, it is markedly less effective and less equitable when it comes to developing word recognition skills.

Unfortunately, in most new Tier 1 reading curricula, word recognition instruction is still designed to be

whole-class. This whole-class setting also precludes all students from learning to mastery. Students move inexorably on to the next lesson when some, but not all, have learned what was taught.

Proponents of whole-class instruction for word recognition do advise educators to incorporate differentiated instruction. However, that instruction occurs ineffectively and can foster a lack of equity: differentiated instruction happens only *after* students who still need additional time and intensity have already experienced failure or *after* students who previously mastered the specific decoding skills taught to the whole class experience boredom.

In contrast, a core reading curriculum that employs a combination of mastery learning and small-group instruction from the start can help educators avoid these issues.

EXAMINING THE RESEARCH

Mastery Learning

In the 1960s, Benjamin Bloom proposed that with the right learning environment and classroom support, most students could master any content. Siegfried Engelmann designed Direct Instruction with the same belief.

Between 1968 and 1982 about 1,000 articles assessed mastery learning as it applied to multiple content areas. In 279 completed studies, 90% showed mastery learning worked well within a classroom setting—and notably most of those studies involved small groups. The sample size was about 22,373 students from kindergarten through college (Kulik et. al, 1990).

Appropriate Placement

The research stressed the importance of appropriate placement when teaching to mastery. If students are placed with material that is too difficult for them, the amount that students have to learn is too great.

According to Engelmann (originally published 1999, republished 2007), students should be placed at a lesson where they can achieve "at least 70% correct on anything introduced for the first time" and "90% correct on the parts of a lesson that deal with skills and information introduced earlier" (2007, p. 51). If students have many first-time correct responses, they will be positioned to learn the smaller amount of content they did not master the first time by the end of a lesson.

Immediate Corrective Feedback

Feedback through immediate correction is central to mastery learning. Multiple researchers cite the importance of feedback to acquire new knowledge and new skills (Ericsson, Krampe, & Tesche-Römer, 1993; Shute, 2008; TeachingWorks; Butler & Winne, 1995; Hattie & Timperley, 2007). The small-group setting provides an environment where teachers can provide immediate corrective feedback.

Small-Group Instruction

Teachers face the challenge of ensuring that student learning is equitable and that achievement gaps close. Quality instruction in small, focused groups overcomes this challenge.

Equity and Small-Group Instruction

Stavroula Valiandes recognized that some may assume that having students working at different skills is inequitable, so she investigated the equity of differentiated instruction. Valiandes found that while students may work at different levels on different skills, focused work at their skill need provided higher-quality learning as measured by year-end growth than did traditional whole-class instruction (Valiandes, 2015). Through small-group instruction, teachers targeted students' strengths and needs, scaffolding learning where students most needed support.

Such targeting cannot be done easily in a whole-class setting. Too often instruction provided to the whole class can result in advanced students not reaching their full potential and struggling students feeling like failures.

Valiandes pointed out that "equity comes into play through the high expectations and opportunity for challenge that differentiated instruction affords each student" (2015, p. 18). Valiandes was even more explicit in the value of differentiated small-group instruction as the vehicle for equity (2015, p. 18):

Within the context of differentiated instruction, equity is the opportunity that all groups of students have in a mixed ability classroom to fulfill the curriculum's goals to the maximum, according to their personal abilities and competences, ensuring thus equal access to knowledge for all.

Using a Small-Group Approach for Foundational Skills

Hoover and Tunmer described the problem with curriculum that follows the same sequence and skills for all children regardless of their individual needs (2020, p. 202):

Such an approach to teaching beginning reading conflicts with the basic principles of differentiated instruction and is either inefficient or ineffective for many children depending on their specific levels of reading development across the set of reading component skills.

Hoover and Tunmer (2020, p. 242) go on to explain that some beginning readers grasp orthographic-phonologic relationships after having only "a few letter-sound correspondences" taught explicitly to them, but others require a structured approach over a longer span of time.

Vaughn et al. (2001) referred to a meta-analytic study that found small groups provided the highest effect sizes, especially for struggling readers. This finding was substantiated by a meta-analysis of small-group instruction for students without disabilities (Lou et al., 1996). The researchers found that students instructed in small groups learned much more than students who were not instructed in small groups.

Multiple research studies have also concluded that whole-class instruction does not afford students sufficient engaged reading opportunities (Gelzheiser & Meyers, 1991; O'Sullivan, Ysseldyke, Christenson, & Thurlow, 1990; Simmons, Fuchs, Fuchs, Mathes, & Hodge, 1995).

In school effectiveness research, Foorman and Torgesen (2001) cited the finding that the strongest student outcomes resulted from increased engagement and time on academic tasks and a greater number of teacher-student interactions (Soar, 1973; Stallings, et al., 1986). Small groups enable more teacher-student interactions and therefore more engaged academic time.

Furthermore, Foorman and Torgesen (2001) reiterated the National Reading Panel findings that for students with reading difficulties, phonemic awareness and phonics instruction conducted in small groups was most effective.

Additionally, teachers using small groups provide more repetitions and greater opportunity for feedback and corrections because they can observe students, modify promptly, and adjust pacing—all benefits that also align with mastery learning. By working with a small group, teachers can listen to each child, notice articulation and pronunciation challenges, and speed up or slow down as needed. Lastly, within a small group, students have more opportunities to receive encouragement and to have their successes acknowledged.

By utilizing small groups, teachers provide greater or less intensity and explicitness as indicated by the child. Some children can be accelerated through word recognition learning, and English learners and multilingual learners are more likely to have their assets and strengths from their first language recognized. With small groups, according to Hoover and Tunmer, teachers can determine the reading skills that have already been demonstrated in the first language. If both languages are alphabetic, then the skills acquired under one language system can assist in learning those skills in a second language system. For example, if a student has already developed awareness of phonemes in one language, learning phonemes in a second language will be easier (Hoover & Tunmer, 2020, p. 125).

PUTTING IT TOGETHER: SMALL-GROUP, MASTERY-BASED INSTRUCTION

Targeted and Accelerative

With a small-group, mastery-based approach in the early grades, teachers can more quickly progress those children who already demonstrate basic word recognition skills while intensifying word recognition instruction for children who are just beginning to develop these skills. Small-group instruction also supports multilingual learners who bring with them L1 knowledge that may enable acceleration in L2 word recognition skills.

Small-group, mastery-based instruction accelerates learning by grouping students around their common skills and facilitates targeted communication between teacher and student. To optimize learning, students need to be placed appropriately. This requires assessment to identify the word recognition skills children already possess. For example, children who enter kindergarten already reading C-V-C words do not need to begin instruction with basic sound-spelling. Instead, they may be able to move to long vowel patterns.

Children who are just beginning to learn to decode will benefit from small-group instruction that starts with phonemic awareness and basic sound-spelling correspondences. Such differentiation is not fully feasible in whole-class instruction but can be achieved with small-group instruction.

Addressing the Challenges of Implementing a Small-Group Approach

One difficulty with a small-group approach is often management. Nonetheless, leaders who are implementing curricula with a small-group, mastery approach have successfully addressed management issues by utilizing additional staff and a "walk-to-reading" regrouping approach.

These strategies reduce the number of small groups any one teacher must manage while also providing guidance for children working independently. By regrouping outside the individual classroom walls, students have the opportunity to get instruction that matches their instructional need, while teachers have fewer students to manage in a single classroom.

CONSIDERATIONS FOR EVALUATING READING CURRICULA

In selecting curriculum programs to teach reading, it is advantageous to identify those that utilize a small-group approach for the development of word recognition skills that includes assessment and appropriate placement of students, grouping them at their precise point of instructional need. Only a few commercial programs start word recognition instruction from a small-group approach; many of these same programs utilize direct instruction and mastery learning.

To avoid the "one-size-fits-all" approach of whole-class instruction, educators must consider whether the curricula that currently exist, even those with strong ratings, really meet the need for significantly differentiated word recognition instruction for struggling readers, young children already advanced in word recognition skills, and English and multilingual learners.

Educational equity is not achieved when all children are treated "equally" by receiving the same instruction, the same resources, and the same allocation of time. Instead we support equity and best ensure student success when each learner receives the instruction they need when they need it.

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ABOUT THE AUTHOR

Linda Diamond has dedicated her career to teaching children to read, particularly those with word reading difficulties like dyslexia. Diamond co-founded the Consortium on Reaching Excellence in Education (CORE) alongside former California Superintendent of Public Instruction Bill Honig in 1995. After serving as CORE's president for 26 years, she stepped down from that role in 2020 but continues to serve on CORE's Advisory Board.

Diamond has also worked as a public school teacher, principal, Director of Curriculum and Instruction for a K–12 school district, and Senior Policy Analyst with an emphasis on school-to-career, charter schools, and school reform.

Linda Diamond is the co-author of the textbooks *Teaching Reading Sourcebook*, *Assessing Reading: Multiple Measures* and *Vocabulary Handbook*. **Learn more about her work**.

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