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What the Research Says About Intensive, Small-Group Instruction

The question driving most research and intervention activities in education is how to improve outcomes for children, particularly those who face barriers to achievement or who have risk factors for academic failure. This is what drives the Lawrence Acceleration Academies, and there is evidence that they, and the Boston Acceleration Academies that preceded them, are effective in achieving their goals. While there are several key components of these academies, including additional instructional time, extensive use of student data, substantial teacher professional development, student incentives, and a competitive teacher selection process, the programs' use of intensive, small-group instruction as a mechanism for accelerating learning is seen as a central component of their success.

In an important study of the results of the Lawrence Public Schools' turnaround efforts published in the National Bureau of Economic Research (NBER) and several other prominent journals, the authors conclude, "While the LPS [Lawrence Public Schools] turnaround was a package of interventions that cannot be fully separated, we find evidence that intensive small-group instruction led to particularly large achievement gains for participating students" (Schueler, *et al.,* 2016, abstract). This study found substantial and lasting gains for participants in the reading and math academies; in fact, the overall positive results of the broader LPS turnaround effort are largely attributable to the gains of students participating in the Acceleration Academies.

Other research, often using randomized controlled trials (RCTs), also shows small-group instruction to have positive effects on student achievement in both reading and math; this research has particularly focused on students with specific needs or challenges. A panel of researchers exploring effective literacy practices for elementary English language learners concluded that there is strong evidence to support intensive, small-group reading interventions in a report for the Institute of Education Sciences (Gersten *et al.,*2007) as part of the What Works Clearinghouse. The authors based their findings on an analysis of four RCTs of reading interventions that utilized small-group instruction for English learners struggling with literacy.

Students who are struggling academically also benefit from small-group instruction. An intervention for first-grade students struggling to learn to read showed that students who participated in group tutoring had significantly higher reading gains than students who did not receive group tutoring (Gilbert *et al.,* 2013). In another RCT, researchers in Canada found that elementary and middle-school students in foster-care who were assigned to small-group tutoring improved their standardized test scores in math and the reading skills of decoding and spelling, although there were not significant effects on reading comprehension (Harper & Schmidt, 2016). A large meta-analysis examining effective academic interventions for low-income children in OECD and EU countries also determined that group tutoring had a positive association with improving student achievement (Dietrichson *et al.,* 2017). Similarly, the

authors of a practice guide on interventions for struggling students produced by the Center on Instruction argue that "one of the most practical methods for intensifying intervention for highly at-risk students is providing small-group instruction" (Vaughn *et al.,* 2007, p. 27).

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