

Critical Review of Journal Article

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Kamps, D., Abbott, M., Greenwood, C., Wills, H., Veerkamp, M., & Kaufman, J. (2008). Effects of small-group reading instruction and curriculum differences for students most at risk in kindergarten: Two-year results for secondary- and tertiary-level intervention. *Journal of Learning Disabilities, 41*(2), 101-114. doi: 10.1177/0022219407313412.

Kamps, Abbott, Greenwood, Wills, Veerkamp, and Kaufman (2008) analyzed the effects of four different curriculum interventions, which two were provided within a three-tier model, of early literacy intervention in primary grades for students who had been determined to be most at risk for reading failure in their kindergarten year. This study was of a quasi-experimental design, involving 83 students, selected from a larger longitudinal study investigating the effects of a three-tier model of school-wide intervention in the areas of reading and behaviour, and occurred over a two year period. The authors of this study and article indicated that students in the more directed, explicit intervention groups generally out-performed students in the comparison group; however, since this study was of a quasi-experimental design, the results should be interpreted with caution.

Summary of Curriculum and Measures Used in this Study

Students in this study received intervention in early literacy skills in four schools; two experimental schools and two comparison schools. The three-tier intervention model was used in the experimental schools, and intervention was provided through small group instruction (three to six students) in one of the two different early literacy programs. Thirty-nine students participated in the Direct Instruction program (a curriculum which involves highly directed explicit instruction in early literacy skills), and a total of nine students participated in the Programmed Reading program (a highly structured sequenced curriculum in early literacy skills).

Two students were determined to need tertiary-level services at an early age and participated in the Language Arts Multi-sensory Program (LAMP) during their second-grade year, following Direct Instruction program in their first grade. LAMP was considered a grouping of Direct Instruction curriculum.

In the comparison schools, the three-tier intervention model was not used, and students were placed in intervention based on the recommendations of their teachers and academic performance. A total of 10 students received intervention through small to medium groupings (3-10 students) in the Open Court curriculum (less structured instruction in phonemic awareness and decoding skills), and a total of 25 students received intervention through larger group instruction (10-12 students) in Guided Reading (a less structured curriculum which combined word study, group readings of leveled reading passages and stories, writing activities, and the development of expressive language skills).

Data for early literacy skill development was collected from two assessments: the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and the Woodcock Reading Mastery Test (WRMT-R). Two subtests within DIBELS were used to measure early literacy; Nonsense Word Fluency (NWF), which was administered in three intervals between the middle of kindergarten and the middle of grade one, and Oral Reading Fluency (ORF), which was administered in three intervals between the middle of grade one and the end of grade two. Three subtests within the WRMT-R were used to measure early literacy; Word Attach and Word Identification at the grade one level, and Word Identification and Passage Comprehension throughout grade two.

Summary of the Results

The findings for this study indicated that the 48% of the students who participated in the Direct Instruction group and 40% of the students who participated in the Open Court group met the grade one benchmark for NWF; however, none of the students in either the Programmed Reading or Guided Reading groups were able to meet the expectations of this benchmark for this subtest at the end of their grade one year. Results from the ORF subtest indicated that none of the students from any of the four curriculum groups met the benchmark of reading 90 words per minute by the end of grade two; however, students in Direct Instruction demonstrated the largest mean increase of 15.8 to 74.3 words per minute and students in the Guided Reading group demonstrated the least mean increase of 7.1 to 52.0 words per minute.

All students in the Direct Instruction group met every benchmark level on the grade one and grade two subtests of the WRMT-R. At the end of grade one Word Attack benchmark, 86% percent of the students in the Open Court group and 75% of the students in the Programmed Reading group met the expected benchmark, and 100% of the students in the Programmed Reading group and 71% of the students in Open Court met benchmark levels in the Word Identification subtest. However, at the end of grade two, only 55% of the students in Programmed Reading and 100% Open Court met the benchmark for Word Identification, and 100% of the students in Programmed Reading and 25% of the students in Open Court met the benchmark for the Passage Comprehension. Ranges across the subtests for the Guided Reading group indicated that 50% to 64% of the students were at benchmark across the measures.

Within subjects effect sizes were moderate to large for all grouping sizes when comparing pre-scores to post-NWF scores for each curriculum group: Direct Instruction (ES=1.22), Open Court (ES=.958), Programmed Reading (ES=.656), and Guided Reading (ES=.567). Within group effect sizes for all grouping sizes for ORF were large across all groups.

The authors of this study indicated that 39% of the students did not make sufficient progress by the end of their second grade. This occurred for 21% of the Direct Instruction group, 50% of the Open Court group, 22% of the Programmed Reading group, and 68% of the Guided Reading Group. Out of this group of 32 students, 10 had a disability, seven were English Language Learners, 15 were of low socioeconomic status, and 18 were of minority status.

Critique of Article Findings

The findings in this study support other studies which have depicted that students in the most directed, explicit intervention generally had a higher percentage rate of meeting benchmark standards in the early literacy skills being assessed lesser structured and explicit interventions in early literacy skills (Santi, Menchetti, & Edwards, 2004; Vaughn, Hughes, Moody, & Elbaum, 2001; Wang & Haskell, 2009); However, the authors had reported, but not stressed, that Programmed Reading did not meet DIBELS and WRMT-R benchmarks for all the decoding and phonemic awareness development subtests, but did for in reading fluency and passage comprehension. The less structured Open Court curriculum met the benchmarks for phonemic awareness and decoding, but not in the areas of reading fluency and passage comprehension. Therefore, it would seem that in the two lesser structured curriculums demonstrated strengths in two different areas of early literacy.

The authors did make note that Guided Reading curriculum focused more on writing and expressive language activities, rather than just solely on phonemic awareness, decoding, and reading fluency, whereas the other three curriculums focused mainly on phonemic awareness, decoding, and reading fluency skills. The subtest of the assessments used in study focused only on phonemic awareness, decoding, reading fluency, and reading comprehension, not on written

and expressive language; therefore, perhaps Guided Reading should not have been included in this study as the focus and measurement was not on the same early literacy skills as the other three curriculums.

Within the limitations section of the article, the authors did point out that the results of this study should be interpreted with caution as the sample sizes were uneven and not all the students took the WRMT-R at the end of their second year. Approximately 47% of the total sample population participated in the Direct Instruction, 28% were in Guided Reading, 11% were in Open Court, and 10% were in Programmed Reading. This occurred because this study was of a quasi-experimental design; however, results can be greatly affected by sample size.

The total number of minutes in intervention differed between each curriculum. The students within Guided Reading average 9079 minutes of intervention throughout grades one and two. The students within Direct Instruction averaged 8840 minutes of intervention, with 31% of these students beginning in the middle of kindergarten, with remaining of the students beginning in grade one or two. The students within Programmed Reading averaged 7356 minutes of intervention, with some students beginning in kindergarten, grade one, or grade two. The students within the Open Court averaged 7205 minutes throughout grades one and two. Students had the opportunity to begin intervention for early literacy skills six months early when they were in kindergarten in Direct Instruction and Programmed Reading, the two intervention programs provided in the experimental schools and considered the more direct explicit in instruction.

The group sizes used for each curriculum were small for Direct Instruction, Programmed Reading, and for some of the Open Court; whereas the grouping size for Guided Reading is

considered large. Other research findings have indicated that smaller more explicit direct instruction of skills have deemed a more success rate of obtainment of early literacy skills for at-risk students than larger or whole group instruction (Santi, Menchetti, & Edwards, 2004; Vaughn et al., 2001).

Conclusion

The purpose of this study was to determine the effects of early literacy intervention in primary grades. Students within the less structured Guided Reading program did demonstrate improvement in their early literacy skills, just not at the same level or consistency as students in the Directed Instruction, which provided explicit instruction in reading skills, and provided intervention for children in the middle of kindergarten throughout to grade two, whereas Guided Reading only provided intervention for children in grades one and two. The Guided Reading program focused more on leveled reading, writing, and expressive language; whereas the other three curriculums focused solely on phonemic awareness, decoding, and fluency development. The measures used to assess early literacy skills did not evaluate the writing and expressive language skills of the students within this study, just the reading skills of early literacy; therefore, it is questionable on whether Guided Reading should have been compared to the other curriculum for this study. Overall, the more direct explicit instructional style of Direct Instruction did consistently meet the expected benchmarks of the subtests used to assess the early literacy skills assessed in this study.

References

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