

Effects of Upper Elementary Grade Reading Buddies on Literacy Skill Concepts Development in At Risk Preschool Students

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Abstract

The purpose of this study was to determine the effect of peer reading buddies on early literacy skill acquisition in preschool students. Data was collected over an eight-week period. Following a four-week period of general classroom instruction, a reading buddy partnership was developed with a fifth-grade class. Peers from fifth grade read with preschool students twice a week over a four-week period for a total of eight sessions. Following the treatment period, quantitative data was collected and analyzed. Analysis suggests that peer reading buddies enhances literacy skills in preschool students—especially in the areas involving the use and appreciation of books.

Introduction

Often, students from poverty situations lack exposure to books and literacy concepts and as a result lack experiences with these skills, thus creating a deficit when they arrive to a school setting. (Vernon-Faegans, Hammer, Miccio, & Manlove, 2002). With increased exposure to literature, students are provided the opportunity to develop skills previously lacking (Vernon-Faegans et al., 2002).

Part of this deficit or lack of exposure is addressed by the State of Iowa voluntary four-year-old preschool program. This program is designed to address some of the issues schools are seeing with students starting kindergarten with a lack of exposure to necessary skills.

At risk students, are students who are at risk of failing academically, or who have a higher risk of dropping out of school. These students often demonstrate decreased academic skills (especially literacy) in lower grades. This relates to several factors, and many theories exist to explain why skills are diminished, or slowly acquired in these students. Historically in Prescott Elementary School, students are at a lower achievement on literacy skills compared to their district counterparts within the same program. Many within the program are identified as struggling or in need of interceptive services.

In search of potential solutions to this issue, early intervention seems to be key. Many questions arise as to possible solutions to a lack of exposure for students. Beyond typical classroom exposure, is there a way to provide whole class intervention that increases exposure to literacy concepts? In what ways can meaningful, early positive literacy experiences be introduced to students? In what ways can peer relationships be used to develop not only community within a building, but literacy skills in students? However, one question narrows down the big questions into a possible solution. Would providing the opportunity for preschool students to read with an older 'buddy' increase both interest in literacy concepts, and rate of acquisition of literacy concepts?

Materials & Methods

Methods

The focus of this project was to determine if a biweekly program, involving older students rather than teachers had a positive effect on the development of literacy skills. Data was collected on eight specific skills in literacy. These skills include: demonstrating phonological awareness, phonics skills, and word recognition through rhyme discrimination, noticing and discrimination alliteration, noticing and discrimination of units of sound; demonstrating knowledge of the alphabet with letter identification; demonstrating knowledge of print and its uses by using and appreciating books and text, using print concepts; comprehending books and other texts through interaction of read aloud, book conversations, using emergent reading skills, and retelling stories (Heroman et al., 2010).

Qualitative data methods were chosen, given the age of the students considered in the study. Using interviewing techniques with young children can skew results as often answers are based on the immediate feelings rather than long-term beliefs. Qualitative methods will yield a more concrete result of potential growth related to the treatment.

The data was collected over an eight-week period occurring from September 2017 to November 2017. This data came in performance-based observations in each area of literacy. Observation of skills in literacy occurred in large and small group settings, as well as during independent play during three observation periods. The first period was a baseline period at the start of the preschool year (September) to determine what skills the preschool students had at the start of the school year. The second period was observed at the beginning of October, after four weeks of no treatment to determine normal patterns of growth under typical classroom conditions. The third observation period was conducted during the last week of October/beginning of November, four weeks after start of treatment with reading buddy program. Students received four weeks' total, or eight, twenty-minute sessions.

Participants

Prescott Elementary School is a charter elementary school in Northeast Iowa. Prescott is also recognized as an expeditionary learning academy for the arts. Expeditionary learning is based on the principles of outward bound, a program developed for at risk youth. Prescott also has the designation of a title 1 school. This designation indicates much of the enrolled population is of low socioeconomic status. The total student enrollment in preschool is seventeen, divided into two sections. This study takes place within a fully inclusive early childhood program, with one certified special education/regular classroom teacher and two-para professionals.

Ten of the seventeen total preschool students will be considered for this study. Eight excluded for lack of participation in the treatment, due to being in the morning section of preschool. Two of the afternoon section students were excluded from data collection due to lack of attendance. Of these students considered, three are female and seven male. Two of these students are entitled in speech and academics. Of these students, six identify as Caucasian, two as African American, and two as mixed race. Two students are enrolled all day, while the remaining ten are half-day students.

Results

Potential for researcher bias exists, as the evaluator is the teacher in the classroom. However, this is addressed with the evaluation tool selected. Teaching Strategies GOLD is based on observations of a trained teacher, who has been through interrater reliability training. This is a program offered through Teaching Strategies GOLD, to ensure the reliability of the persons utilizing the tool. All persons involved with the assessment and evaluation have been through this process to validate the ability to reliably use the tool. Additionally, an entire team of people makes any decisions regarding the program, to address potential for bias within the study. All students will receive the same treatment, under the supervision of this team to reduce bias.

The data was gathered at the beginning of the school year to determine baseline levels, and then assigned a level according to the levels in Teaching Strategies GOLD. At the beginning of the study, students were proficient in a mean of 1.6 of the eight skills. This means the assessed level was below the age expectation by one or more levels. No students were proficient in all areas. In the four observed areas concerning use of books, 9 out of 10 students were below proficient in all areas concerning knowledge and use of books.

Number of literacy skills proficient					
	Number of Proficient Students at Benchmark	Number of Proficient Students Before Treatment	Number of Proficient Students After Treatment	Number of Students Proficient Increase	Percent Increase in Proficient Students
1pkc	2	1	5	4	50%
2pkc	6	6	8	2	25%
3pkc	2	3	7	4	50%
4pkc	0	0	5	5	63%
5pkc	1	1	6	5	63%
6pkc	0	1	4	3	38%
7pkc	2	4	7	3	38%
8pkc	0	0	0	0	0%
9pkc	3	2	7	5	63%
10pkc	0	0	0	0	0%

At the end of four weeks, students were again assessed to determine growth within a typical classroom setting. Following this period, the mean of proficient skills increased to 1.8, which is a mean of 23% of students achieving proficiency in one or more areas. This is a 3% increase of proficiency in skills. While not scoring proficient in the skills assessed, students increased levels within all eight skills. Students during this time increased a mean of 2.9 levels throughout the skills assessed.

Number of skills increased			
	Number of Skills Increased-Before Treatment	Number of Skills Increased-After Treatment	Percent Increase Skills Increase
1pkc	1	7	75%
2pkc	0	7	88%
3pkc	3	6	38%
4pkc	4	7	38%
5pkc	4	7	38%
6pkc	6	6	0%
7pkc	5	7	25%
8pkc	2	3	13%
9pkc	2	6	50%
10pkc	2	0	-25%

After treatment, students were assessed a final time in all eight areas, and these scores were then again applied to the levels within Teaching Strategies GOLD. Students were proficient in a mean of 4.9 of the eight skills. This is a mean increase of 39% when compared to the gains without treatment. When looking at the number of skills students made gains in—while achieving proficiency or not—the mean number of skills that show increase of one level or more is 5.6 skills per student. This is a 34% increase from the levels before treatment.

Conclusion

In conclusion, reading buddies has a positive effect on students. The data collected and analyzed suggests that student's skills increase, or are acquired at a higher rate of gain than without the program. The biggest gains are found in the skills that pertain to using and appreciating books, using print concepts, interacting during read a louds and book conversations, and using emergent reading. These skills increase faster than with typical classroom instruction when paired with an older student reading books, when compared to all literacy skills studied. While the rate of growth in skills gained were not necessarily statistically significant, there is enough of a gain in a broad range of skills to justify a reading buddies program in at-risk preschool students. Additionally, while not studied, peer relationships formed during reading buddies program could also be beneficial for students at all grade levels.

Discussion

The findings show that reading buddies can have a positive effect on at risk student's literacy skills. The student's rankings on the developmental continuum increased more while engaged in reading activities with older students, than with regular classroom instruction. The greatest areas of improvement were in the areas related to using books. The largest gains were made in using and appreciating books, using print concepts, interacting during read a louds and book conversations, and using emergent reading skills. While these gains were not statistically significant when compared to the standard deviation, gains were more rapid following the program than before it, which would suggest that the program is beneficial to students who are at risk.

Conversely, the highest gains before reading buddies program was in letter identification. These areas did not develop as rapidly with the reading buddies program. The areas of rhyming, alliteration, and noticing smaller units of sound (words within sentences, syllables within words) also made smaller gains. While these areas gained, they were not as rapid gains in the areas related to the proper use of books.

Limitations

The first limitation is relationship vs. treatment. Because of unstudied factors, such as relationships between students and reading buddies, results from this study could potentially be from either variable. Another potential limitation for the proposed research is student attendance. Students may not be subject to the proposed benefits of the treatment, if they are not in attendance for the treatment. One in five students at school are considered at risk for attendance, or miss more than 20% of the school year. This has been a limitation, as two students were excluded from the study due to lack of attendance to gather data. An additional two students missed much of the treatment (greater than 75% or 6 of 8 days of the program).

Sources

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