Early literacy approaches aim to improve young children’s skills, knowledge or understanding related to reading or writing. Common approaches include:

- storytelling and group reading;
- activities that aim to develop letter knowledge, knowledge of sounds and early phonics; and
- introductions to different kinds of writing.

Early literacy strategies may have components in common with Communication and language approaches and may also involve parental engagement.

How effective is it?
Early literacy approaches have been consistently found to have a positive effect on early learning outcomes. The early literacy approaches evaluated to date led to an average impact of four additional months’ progress, with the most effective approaches improving learning by as much as six months.

All children appear to benefit from early literacy approaches, but there is some evidence that certain strategies, particularly those involving targeted small group interaction, may have particularly positive effects on children from disadvantaged backgrounds. However, early literacy approaches should not be seen as a panacea. Though long-term positive effects have been detected in some studies, for a majority of strategies these benefits appear to fade over time, suggesting that a single intervention is unlikely to be enough to close the attainment gap.

There is evidence that a combination of early literacy approaches is likely to be more effective than any single approach. For example, some studies suggest that it is possible to develop certain aspects of literacy, such as knowledge of the alphabet or letter names and sounds, without improving all aspects of early literacy. It is likely to be beneficial to put a range of activities in place, and to use these in combination with regular assessments of early literacy skills across both reading and writing capabilities.

Studies indicate that involving parents in developing early literacy strategies can be beneficial, and ensuring that training and professional development is provided for staff when new approaches are introduced is likely to increase impact.

How secure is the evidence?
There is moderate evidence related to the impact of early literacy approaches, including a number of meta-analyses and high quality individual studies. The majority focus on reading. One challenge with the evidence base is that early literacy approaches are often only one part of multi-component interventions or curricula, which can make it hard to attribute changes to the early literacy approach, or to identify which aspects of that approach are most important.

In common with a number of areas of early years education, the most robust evidence collected to date has been collected in the USA. Testing some of the most promising early literacy approaches from overseas in the UK would be valuable.

What are the costs?
Overall, the costs of early literacy approaches are estimated as very low. Research indicates that knowledge of children’s development and current understanding are an important precursor to putting an early literacy strategy in place, and using professional development to support the introduction of new early literacy interventions is associated with increased learning. As a result, some assessment and professional development costs are included in this estimate. Other resources such as books and other print materials are also likely to be necessary.
Early literacy approaches: What should I consider?

Before you implement this strategy in your learning environment, consider the following:

1. How will you ensure that your early literacy strategy is well-balanced, and combines approaches that will support the development of skills, knowledge and understanding?
2. Do you use assessments to identify children’s current level of development, and monitor learning?
3. When you introduce new early literacy approaches, do staff receive sufficient training and professional development?
4. How do you use targeted small group support to help areas of challenge for disadvantaged children?
Technical Appendix

Definition

Early literacy approaches aim to improve young children’s skills, knowledge or understanding related to reading or writing. Common approaches include: storytelling and group reading, activities that aim to develop letter knowledge, knowledge of sounds and early phonics, or introductions to different kinds of writing. Early literacy strategies may have components in common with Communication and language approaches and may also involve Parental engagement.

Search Terms: early intervention, developmental intervention, preschool education, early literacy, early childhood development, literacy development, literacy intervention

Evidence Rating

There are eight meta-analyses and one systematic review with quantitative data suggesting overall a moderate impact of early literacy approaches. Seven have been published in the last 10 years. Some of these include correlational studies which indicate the strength of the relationship, but not necessarily a causal pathway. In addition, a wide range of both standardised and researcher-designed outcomes are used to indicate progress in early literacy, across reading, writing and oracy. Overall causal inference is therefore limited by these characteristics. A further challenge with the evidence base is that early literacy approaches are often only one part of multi-component interventions or curricula, which can make it hard to attribute changes to the early literacy approach, or to identify which aspects of that approach are most important. In addition, in common with a number of areas of early years education, the most robust evidence collected to date has been collected in the USA.

All children appear to benefit from early literacy approaches, but there is some evidence that certain strategies, particularly those involving targeted small group interaction, may have particularly positive effects on children from disadvantaged backgrounds. However, early literacy approaches should not be seen as a panacea. Though long-term positive effects have been detected in some studies, for a majority of strategies these benefits appear to fade over time, suggesting that a single intervention is unlikely to be enough to close the gap. Overall, the evidence is rated as moderate.

Additional Cost Information

Overall, the costs of early literacy approaches are estimated as very low. Research indicates that knowledge of children’s development and current understanding are an important precursor to putting an early literacy strategy in place, and using professional development to support the introduction of new early literacy interventions is associated with increased learning. As a result, some assessment and professional development costs are included in this estimate. Other resources such as books and other print materials are also likely to be necessary.
References

   The effectiveness of early childhood development programs: A systematic review

2. Barnett, W. S. (Abstract)
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   Meta-analysis of the effects of early education interventions on cognitive and social development
   The Teachers College Record, 112(3): 579-620 (2010)

   Literacy and language outcomes of comprehensive and developmental-constructivist approaches to early childhood education: A systematic review

   Relationship between child participation in everyday activities and early literacy and language development
   Center for Early Literacy Learning (CELL) Reviews, 6(1) (2013)

7. Klock, K. L.
   Examining the impact of early childhood education on the acquisition of early literacy skills

8. Lewis, R. J., & Vosburgh, W. T. (Abstract)
   Effectiveness of kindergarten intervention programs a meta-analysis

9. Manning, M., Hommel, E. & Smith
   A meta-analysis of the effects of early years developmental prevention programs in at-risk populations on non-health outcomes in adolescence

    Developing Early Literacy Skills: A Meta-Analysis of Alphabet Learning and Instruction
    Reading Research Quarterly, 45(1), 8-38 (2010)

Repeated book reading and preschoolers' early literacy development

Center for Early Literacy Learning (CELL) Reviews 5(5), 1-13 (2012)
## Summary of effects

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The right hand column provides detail on the specific outcome measures or, if in brackets, details of the intervention or control group.
Meta-analyses abstracts


Early childhood development is influenced by characteristics of the child, the family, and the broader social environment. Physical health, cognition, language, and social and emotional development underpin school readiness. Publicly funded, center-based, comprehensive early childhood development programs are a community resource that promotes the well-being of young children. Programs such as Head Start are designed to close the gap in readiness to learn between poor children and their more economically advantaged peers. Systematic reviews of the scientific literature demonstrate effectiveness of these programs in preventing developmental delay, as assessed by reductions in retention in grade and placement in special education.


Background/Context: There is much current interest in the impact of early childhood education programs on preschoolers and, in particular, on the magnitude of cognitive and affective gains. Purpose/Objective/Research Question/Focus of Study: Because this new segment of public education requires significant funding, accurate descriptions are required of the potential benefits and costs of implementing specific preschool programs. To address this issue comprehensively, a meta-analysis was conducted for the purpose of synthesizing the outcomes of comparative studies in this area. Population/Participants/Subjects: A total of 123 comparative studies of early childhood interventions were analyzed. Each study provided a number of contrasts, where a contrast is defined as the comparison of an intervention group of children with an alternative intervention or no intervention group. Intervention/Program/Practice: A prevalent pedagogical approach in these studies was direct instruction, but inquiry-based pedagogical approaches also occurred in some interventions. No assumption was made that nominally similar interventions were equivalent. Research Design: The meta-analytic database included both quasi-experimental and randomized studies. A coding strategy was developed to record information for computing study effects, study design, sample characteristics, and program characteristics. Findings/Results: Consistent with the accrued research base on the effects of preschool education, significant effects were found in this study for children who attend a preschool program prior to entering kindergarten. Although the largest effect sizes were observed for cognitive outcomes, a preschool education was also found to impact children’s social skills and school progress. Specific aspects of the treatments that positively correlated with gains included teacher-directed instruction and small-group instruction, but provision of additional services tended to be associated with smaller gains. Conclusions/Recommendations: Given the current state of research on the efficacy of early childhood interventions, there is both good and bad news. The good news is that a host of original and synthetic studies have found positive effects for a range of outcomes, and this pattern is clearest for outcomes relating to cognitive development. Moreover, many promising variables for program design have been identified and linked to outcomes, though little more can be said of the link than that it is positive. The bad news is that there is much less empirical information available for designing interventions at multiple levels with multiple components.


This systematic review of research on early childhood programs seeks to identify effective approaches capable of improving literacy and language outcomes for preschoolers. It applies consistent standards to determine the strength of evidence supporting a variety of approaches, which fell into two main categories: comprehensive approaches, which include phonemic awareness, phonics, and other skills along with child-initiated activities, and developmental-constructivist approaches that focus on child-initiated activities with little direct teaching of early literacy skills. Inclusion criteria included use of randomized or matched control groups, evidence of initial equality, a minimum study duration of 12 weeks, and valid measures of literacy and language. Thirty-two studies evaluating 22 programs found that comprehensive early childhood programs that have a balance of skill-focused and child-initiated activities programs had significant evidence of positive literacy and language outcomes at the end of preschool and on kindergarten follow-up measures. Effects were smaller and not statistically significant for developmental-constructivist programs.


Psychologists and educators continue to design and implement kindergarten intervention programs unsubstantiated by previous research. The present study used meta-analysis procedures to examine the effects of kindergarten intervention programs on variables related to school success. The meta-analysis was performed on 444 effect sizes derived from 65 previous studies involving 3194 kindergarten children. The mean effect size of 0.434 indicated that test scores obtained by the treatment groups were raised from the 50th to the 67th percentile in relation to the control groups. Strong to moderate positive effects were demonstrated on all measured variables related to school success. As predicted the effect sizes from highly structured approaches (M= 0.517) were larger than those from less structured approaches (M= 0.298, t = 4.671, df=386, p< 0.001). In general there was no significant difference found between various levels of parental involvement (F= 0.244, df= 2.385, p= 0.05). However, when only the long-term effects were compared, a significant difference was found between the programs with active parental involvement (M= 0.521) and those without (M= 0.362, t= 2.067, df= 134, p<0.05). Strong effects were found on studies based on behavioral (M= 0.523) psycho-educational (M= 0.497) and stage referenced (M= 0.355) theories. The lack of research to support kindergarten programs based on maturational theories is discussed. The positive results of this meta-analysis should encourage program planners and policy makers to support the widespread implementation of structured early intervention and prevention programs at the kindergarten level.


Alphabet knowledge is a hallmark of early literacy and facilitating its development has become a primary objective of preschool instruction and intervention. However, little agreement exists about how to promote the development of alphabet knowledge effectively. A meta-analysis of the effects of instruction on alphabet outcomes demonstrated that instructional impacts differed by type of alphabet outcome examined and content of instruction provided. School-based instruction yielded larger effects than home-based instruction; small-group instruction yielded larger effects than individual tutoring programs. We found minimal evidence of transfer of alphabet instruction to early phonological, reading, or spelling skills. Implications for research and practice are discussed.
Trivette, C. M., & Dunst, C. J. (2007) This review includes a secondary analysis of three research syntheses produced by the What Works Clearinghouse on the effectiveness of reading instruction with preschoolers. The three methods were dialogic reading, interactive shared book reading, and shared book reading. Individual studies were coded according to the degree of child participation in the reading instruction episodes and variations in participation were related to variations in study outcomes. Results showed that child participation was one factor associated with reading related outcomes. Implications for practice are described.

Trivette, C. M., Simkus, A., Dunst, C. I., & Hamby, D. W. (2012) The effects of repeated book reading on children’s early literacy and language development were examined in a meta-analysis of 16 studies including 466 child participants. Results indicated that repeated book reading influenced both story-related vocabulary and story-related comprehension. Findings also showed that the adults’ use of manipulatives or illustrations related to the story, positive reinforcement of children’s comments, explanation concerning the story when asked, and open-ended questions to prompt child verbal responses were associated with positive child outcomes. Implications for practice are described.