Save the Children US Department of Education and Child Development

Emergent Literacy Investing Early for Exponential Outcomes





I. OVERVIEW

Learning to read and write is fundamental to children's success in school and to their optimal life trajectory, regardless of their background, socio-economic status or opportunities.

Over the last several years, the global education discourse has shifted its emphasis from improving educational access to a stronger focus on improving learning outcomes. Unfortunately, many current reading initiatives focus exclusively on supporting reading skills in the early primary grades, without acknowledging the importance of foundational emergent literacy skills children develop in the early years that set them on a positive reading trajectory in school.

A critical analysis of the research base on language development and literacy suggests that the foundations for learning to read and write are set long before a child enters primary school. The timing at which this process starts is crucial to underscore. A strong body of research documents the crucial links between emergent literacy skills and later reading outcomes and clearly shows that reading and the process of becoming literate is intertwined with the experiences children have with language and print from birth onwards.ⁱ

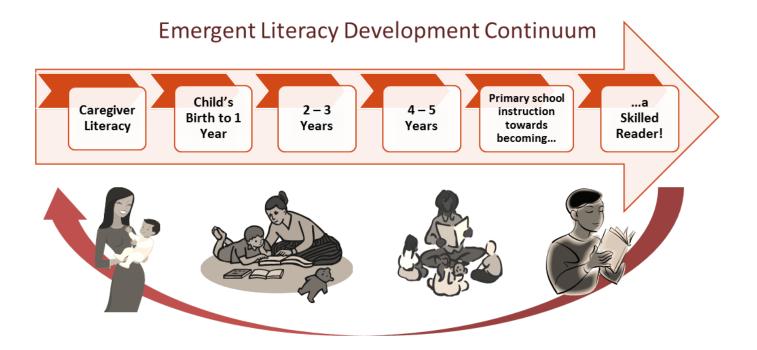


Preschool students Santoshi Sunar (age 4, foreground-right) and Anjali Luhar (age 5, behind her-left) are learning to write alphabet letters in the early childhood development center in Simalphanta village, Nepal. Photo by: Save the Children

This white paper outlines how Save the Children defines emergent literacy, describes how the research base links emergent literacy experiences to reading success, and emphasizes the need to include this often overlooked, yet critical, stage in a child's journey toward literacy in global reading investments and programs. The white paper also highlights two program settings where Save the Children effectively supports emergent literacy skills- the home and the early childhood center (where it exists) – as well as the important role of parents, early childhood professionals, and communities in providing the conditions and experiences necessary for all children to develop a sound literacy foundation prior to school entry. Overall, this paper presents a vision for effective programming and an agenda for extending the evidence base to benefit both advocacy and implementation.

What is Emergent Literacy?

Emergent literacy encompasses the knowledge, skills, and attitudes that a child develops in relation to reading and writing throughout the early childhood period, starting at birth and before the onset of conventional reading and writing instruction (usually at school entry). Emergent literacy includes such aspects as oral language (both speaking and listening), understanding that print can carry meaning, as well as basic alphabet knowledge, and early phonological awareness. ⁱⁱ



Emergent literacy is often described as the first stage in reading development en route to literacy acquisition. The developmental continuum, shown in Figure 1 above, illustrates the origins of reading early in the life of a child, such as having a literate mother or father, and emphasizes that very young learners, even as young as a few months old, are already acquiring the skills and tools necessary for reading. Furthermore, like any other developmental process, mastery of emergent literacy skills paves the way for later mastery of more complex literacy skills in early primary grades and eventually reading with comprehension. This process is otherwise coined as "skill begets skill" (Center for the Developing Child), in which skills mastered at earlier points in time lay the foundation for the acquisition of more complex skills. Save the Children's emergent literacy approach highlights the continuity and fluidity between emergent literacy skills and literacy acquisition. We focus on five knowledge areas that are a part of the broader emergent literacy construct.

Oral Language: children's ability to understand and use language through listening, speaking and acquiring of new vocabulary

Print Awareness: children's understanding of the functions of printed symbols (letters, words & pictures) and of printed text, and how it relates to meaning

Book Knowledge: children's understanding of what a book is and how it is to be used or read (relates to having exposure to books and print-rich environments)

Alphabet knowledge: children's ability to identify and say the names of letters in an alphabet. This skill paves the way for phonological awareness.

Phonological Awareness: children's ability to identify and manipulate sounds and the understanding that sounds (and letters) are combined to make words.

A critical aspect of emergent literacy, not necessarily implicit in the knowledge areas described above, is the attitude towards reading and writing that children acquire in the early years by interacting with language, books and print. **Emergent literacy experiences** form a foundation upon which children will gauge their future reading.[™] In other words, if early experiences with books and reading are fun, exciting, and enjoyable for a child, that child is likely to continue to feel that way about reading throughout life

A Note on Emergent Math: Among young learners, early reading, writing and math skills develop concurrently and in an intertwined manner. Children do not first learn to read and then learn to count, sort or do patterns—these skills are often developed in parallel and are interrelated. Many of the issues discussed in the context of emergent literacy are relevant to how emergent math skills are developed and the way they pave the way to more complex math competencies in the early primary grades and beyond.



Seto Gurans Bal Batika Early Childhood Development Centre, Four-year-old Manisha works on a puzzle during her Early childhood Development program in Baglung, Nepal. Photo by: Save the Children



Ridhwan, a 5 year old boy from Padalarang Bandung Barat, Indonesia sharing a light-hearted moment with his mom Susi in the PAUD Mawar, ECD center, Indonesia. Photo by: Save the Children

II. What Research Tells Us about the Direct and Explicit Links between Emergent Literacy and Later Reading Outcomes

A significant body of research across multiple sectors has demonstrated a strong and consistent relationship between emergent literacy skills, supportive early learning environments, and the eventual development of literacy skills. **This research raises five key points for practice:**



1. Start Talking: Oral Language Matters

The early experiences of babies and toddlers with language have a considerable impact on their future reading development. Oral language skills develop in the context of responsive environments and consistent language interactions between children and their significant caregivers. The sheer quantity of parental talk is highly associated with vocabulary size in the early years. ^{iv} Disparities in vocabulary can be seen as early as 18 months of age and the gap between children from homes where language interactions abound (often wealthier homes) and their peers from homes where language interactions are limited only widens as children grow. Globally, by age 3, children of wealthier parents have vocabularies 2 to 3



Nurjaha plays with her 9-month old baby boy, Shipon, and his sisters in Khanpura Village, Bangladesh. Photo by: Save the Children

times larger than their more disadvantaged peers. Even more astounding is the long lasting and cumulative impact of these early disparities: language development before age 3 predicted differences in vocabulary size and reading comprehension scores at age 9, even after controlling for other factors.^v

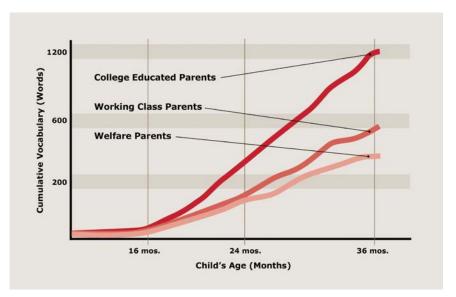


Figure 1: Disparities in Vocabulary Gains along Lines of Home Environment

2. Start Reading- the Earlier the Better: Early exposure to print and books is critical for reading success and frames lifelong attitudes about reading

Myriad studies have looked into the value of print and literacy-rich environments for future reading skills. Access to books and print is critical, but even more important is reading to and with children. This is perhaps the single most important activity for building the knowledge required for eventual reading success. ^{vi vii} If reading begins in the early years (as early as possible), long before children enter Grade 1 or kindergarten, children are far more likely to become skilled readers.^{viii} Even more important, literacyrich home environments, in which parents engage in reading and sharing books with children, can override some of the educational disadvantages that lower-income families often face. ^{ix x}



A mother reads with her children in El Salvador. Photo by: Save the Children.

Early interactions with books and print not only support future reading skills but also frame lifelong attitudes towards reading and writing. If these interactions are positive, fun and enjoyable (like taking part in a read-aloud or listening to a caregiver tell a good night story), children are much more likely to develop strong interest in and motivation for reading as well as a positive attitude towards books in general. Reading interest predicts the amount of future reading a child will do, which in turn predicts future reading skills.^{xi} Research has clearly shown that children who struggle with reading will dislike

reading, read less and fall behind further (known as the Matthew effect). Issues of interest, motivation and persistence are at the heart of this dynamic interplay and can be offset by a focus on positive emergent literacy experiences, acquired in the years prior to school entry.

3. Preschools and Early Learning Programs Can Make a Difference: *Emergent literacy skills developed prior to school entry predict reading achievement over the long term*

Some children come to school better prepared than their peers when it comes to early literacy skills depending on the opportunities they have had to attend an early learning program. Research has demonstrated that students who attend quality ECD programs and start out with optimal literacy foundational skills tend to thrive and grow academically, while students with fewer opportunities for early learning tend to get left behind.^{xii} xiii Oral language, phonological awareness, alphabet knowledge and print awareness are all strong predictors of how quickly and how well children will read once they are exposed to formal reading instruction in Grades 1, 2 or 3.^{xiv} ^{xv} These skills are best supported in the context of quality preschool programs, which also make the crucial link to children's home. For example, a 5-year longitudinal study looking at children's reading achievement demonstrated that emergent literacy skills at the end of preschool directly predicted word reading at the end of grade 1, which in turn predicted reading in grade 3.^{xvi} In fact, emergent literacy skills at grade 1 entry explained more than 50% of the variation in grade 3 reading, controlling for other factors.



4. Caregivers Matter: Caregivers' levels of literacy predict children's future reading performance An important predictor of reading ability among children is the level of education of their caregivers. Children living in households where an adult can read, particularly the mother, enter school better prepared, perform better on reading assessments, tend to attain more years of education, and have a higher level of school achievement overall. Every additional year of a mother's education has a particularly strong impact on the educational attainment of her girl children in particular. Investing in mothers' literacy and girls' education has a positive ripple effect in that the interventions reach mothers and simultaneously young children through mothers' reading to their children, modeling reading skills, and supporting children with homework later on. Literacy levels of fathers and other caregivers are also crucial in that they strengthen the chances that young children will have positive reading role models in the home setting. A caregiver's modeling of literacy conveys the message that reading is a critical element of education and economic opportunity. ^{xvii xviii} Save the Children's research on home literacy environment has shown that when adults engage in reading with children at the home, and the home literacy environment is strengthened, this factor works to minimize the disparities that normally follow and accumulate along lines of social –economic class.

5. Emergent Literacy Skills Help Even the Playing Field: Strengthening emergent literacy skills during the early childhood period can prevent future reading difficulties and reduce disparities

Children who begin school with less prior knowledge and skill in relevant emergent literacy domains, most notably general verbal abilities, basic phonological awareness, familiarity with the basic purposes and mechanisms of reading, and letter knowledge, are particularly likely to have difficulty with learning to read in the primary grades.^{xix} Due to many factors, including inadequate home literacy environment and lack of access to books, as well as a lack of early learning opportunities, children in low-resource settings and from high poverty homes tend to lag behind on these emergent literacy skills compared to their peers from higher-resource homes, which puts these children on a path toward early and enduring difficulties with reading.^{xx xxi} Reducing the number of children who enter school with inadequate early literacy experiences is an important step toward preventing reading difficulties and enabling long-term school success. Though not a magic bullet, this would serve to considerably reduce the magnitude of disparities between strong and weak readers.



A pre-school teacher reads to his ECD students t ictnam. Photo by: Michael Bisceptia



III. How Can We Include Emergent Literacy in Global Literacy Programs?

Two critical environments require special attention from program initiatives to support foundational literacy skills: **the home** and **the preschool /early childhood center**. Save the Children works on promoting emergent literacy skills in both of these settings. Recent program experiences demonstrate the need, feasibility and impact of such initiatives.

At Home

Most children around the world spend considerable time in their early years with their caregivers and relatives at home rather than in preschools or childcare arrangements. Because parents and caregivers in general can provide children with excellent early literacy preparation during these first years (even if parents are themselves illiterate), working with families in supporting children's early literacy is essential.

Four key strategies for supporting emergent literacy in the home environment include:

1. STRENGTHEN parents' practices around supporting language and literacy development of their children. Encourage parents to talk with their young children (for instance, while doing daily chores or routine activities) and to develop shared storytelling and book reading habits. Support parents to expose children to various forms of print, and to play language games and sing songs.

2. CREATE access to books and reading opportunities for families in low income settings through mobile libraries, book banks and through teaching communities how to make or write their own books. Make sure that books are developmentally appropriate and supportive of emergent literacy skills.

3. ENGAGE in family or community-based literacy models proven to have long lasting effects on intergenerational literacy outcomes.

4. INVEST in maternal literacy programs and girls' education and integrate maternal literacy classes into other kinds of programs and initiatives to ensure childen have maximum possible benefit from their first caregiver in support of language and reading skills.

Initiatives to support parents to help develop children's language and early literacy can begin as early as a birth, or even in the pre-natal period. A recent evaluation of Save the Children's program in rural Bangladesh which focused on very young children (birth to 3 years) and their families clearly demonstrated that it is possible for a development program to successfully modify parenting practices and increase the quality of home literacy environments, in turn improving child outcomes in language and general cognition.

Focusing specifically on strengthening parent-child communication and interaction, Save the Children's Early Years Program in Bangladesh encouraged parents to initiate simple activities with their infants and toddlers. In one example, "start a conversation by copying your infant's sounds and gestures." Children in the intervention group scored significantly higher than controls on both expressive and receptive language as well as the general cognitive scale of a rigorous child development assessment.¹

Similar programs can be easily replicated in other low resource settings with parents and families of younger or older children. In all cases, encouraging talking, shared reading and exposure to print in the family context will have a positive effect on child's reading outcomes later on as well as on child's overall learning trajectory.



Nikita, age 5, learns the alphabet after school with her mother in India. Photo by: Save the Children.

In Preschool/Early Childhood Centers

Although access to preschool is still poor globally, the number of young learners in low-income countries who are enrolled in early learning programs is steadily growing. Participation in early learning programs has been shown to result in stronger foundational literacy skills. However, in order to reap these benefits, programs have to maintain a standard of sufficient quality with teachers who understand how to effectively support language development and create enriching early literacy experiences.



Teachers in ECD school programs read stories to their students to share knowledge and culture while developing children's early literacy skills. (Left: Nepal, photo by Brent Stirton; Right: Vietnam, photo by Michael Bisceglie.)

¹ Effect sizes for language gains range from 0.8 to 1.15 and for cognitive gains from 1.28 to 1.41.

Future reading and early childhood programs can focus on a few key areas of intervention:

1. STRENGTHEN early childhood practitioners' knowledge and practices necessary for supporting early literacy and language skills in classrooms and provide simple classroom resources (in the form of games, books, songs, and others) to help foster language skills in meaningful and enjoyable ways.

2. CREATE access to developmentally appropriate books and make these available to young learners in preschools and early learning programs. Work with early childhood practitioners to promote interactive book reading and storytelling on a daily basis.

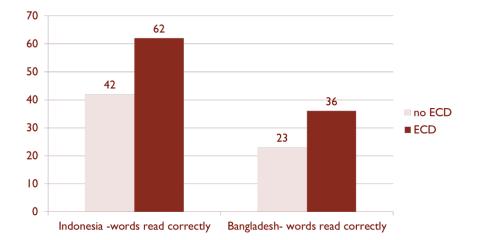
3. INCREASE exposure to various kinds of print in early learning programs. Researchers sometimes refer to 'print littering' the classroom - a much stronger focus on exposing children to print is needed in low income settings, alongside attention to how these print materials can be used effectively.

4. WORK with early childhood practitioners to develop and use simple assessments of early literacy and language skills with young learners and to help them improve over time.

5. LINK preschool programming with what happens in homes through parent education initiatives, book exchange/lending activities and/or maternal literacy classes.

6. IMPROVE transitions between preschools and early primary school classrooms by setting up systems to aid enrollment and progression. Bridge activities started in early childhood programs into the early grades of the formal school classroom. A focus on foundational literacy skills and better access to books and reading materials is often needed in Grades 1 and 2 classrooms given the majority of children's lack of exposure to print and books prior to school entry.

Quality preschool programs can significantly increase children's chances of becoming skilled readers in early primary grades. In a recent evaluation of Save the Children's literacy programs in Bangladesh and Indonesia, Save the Children documented impressive differences in words read correctly between children in early primary grades who had participated in early learning experiences as compared to their counterparts without access to these experiences.



In Indonesia, second grade students that did not attend early child development programs could only read 42% of common textbook vocabulary words correctly, significantly less than their peers with early child development program experience who could read 62% of the words correctly.^{xxii} Save the Children found similar patterns in Bangladesh, where Grade 1 children with no early learning exposure were able to read only 23% of words correctly versus 36% of their peers with preschool experiences. Disparities in letter knowledge were even greater--children with no early learning exposure could identify only 54% of the Bangla alphabet compared to their peers with early child development experience who could identify more than 75% of the alphabet.^{xxiii}

IV. Paving the Way for Success in Reading in the Early Grades

Given the potentially severe long-term negative consequences of early reading difficulties on the social, education and economic status of future citizens, the education sector needs to place focus on identifying points on the continuum of learning where interventions may reap the greatest results. For many children, the genesis of their success or failure in acquiring reading with comprehension is determined long before they ever enter through school doors or begin formal reading instruction. Thus, programs and interventions that target children in early years merit special attention if they produce unequivocally greater long-term impacts. Below are summarized key recommendations to ensure that future global investments in reading and literacy are not only more efficient, but also yield better outcomes.

1. Early grade reading and literacy programs need to explicitly call out the linkages between emergent literacy skills developed in the early childhood period and later literacy acquisition, drawing on an overwhelming and irrefutable evidence base.

- 2. Early grade reading and literacy programs can greatly enhance quantifiable outcomes in reading performance by investing in emergent literacy skills development through quality preschool and early home interventions.
- 3. The effectiveness of early grade reading and literacy programs and the prevention of future reading challenges depends on improved access to high-quality preschool programs led by ECD practitioners trained in foundational emergent literacy skills.
- 4. The evidence base clearly demonstrates that in disadvantaged, low-resource communities, in which exposure to print and language is likely to be low, the focus on emergent literacy has an even greater impact on reducing disparities in reading performance and achieving favorable reading outcomes. That early learning opportunities reduce disparities created through socio-economic difference needs to be clearly recognized and incorporated into programming interventions, and additional resources made available for disadvantaged children with few resources in the home literacy environment.
- 5. Reading and education interventions must focus on quality education of early childhood paraprofessionals (including pre-school teachers, child health nurses, community health care professionals, primary school teachers and community volunteers) with specific focus on language development and parent-child language interactions (as well as numeracy where relevant).
- 6. Research designs in early grades reading programs should purposefully track early learning experiences and emergent literacy skills in order to build the evidence base around impact of investment in early intervention in low-resource settings.
- 7. The outcomes of rigorously evaluated programs need to be utilized to strengthen the advocacy platform for a more continuous and balanced investment in education across the life continuum.
- 8. Innovations, out-of-the-box thinking, convincing work at the system-level and work within and between Ministries, are needed to break the stove-piping that segregates the primary formal education system and early childhood education.
- 9. While formal basic education tends to be more systematized and heavily funded, early childhood interventions are usually sporadic, unsystematized and fall between the sectors of Education, Health, Women's Affairs or Social Affairs. Concerted advocacy is needed to strengthen explicit linkages between emergent literacy and formal education outcomes, so that organized action and coordination can occur at the system level.

Through the collaboration of researchers, programmers, governments, investors, early child development professionals and parents, the possibility exists to narrow the gap between young children, to shrink the Mathew effect that has loomed large in reading, in order to allow all children to advance to their fullest potential in reading and learning at large. This advancement in reading has the potential to reap large-scale economic gains in gross domestic product. The timeliness of this potential is augmented by the current youth bulge in global demographics and the high percentage of children under 5. It is imperative for professionals in the education, health, social development, psychology, workforce development and economic sectors to take note of the long-term impact in investing in emergent literacy and to make informed decisions about where scarce development dollars can reap the greatest impact.

For more information on Save the Children's work in supporting emergent literacy, please contact:

Ivelina Borisova iborisova@savechildren.org

Mullis, I. V. S., Martin, M. O., Kennedy, A. M., & Foy, P. (2007). PIRLS 2006 International Report. IEA's Progress in International Reading Literacy Study in Primary School in 40 countries. Chestnut Hill, MA: Boston College. ⁱⁱ Whitehurst, G. J., & Lonigan, C. J. (1998). Child development and emergent literacy. Child development, 69(3), 848-872. Chicago, IL. ^{III} Schirmer, B. R. (2008). How Effectively Are We Preparing Teacher Educators in Special Education?: The Case of Deaf Education. American annals of the deaf, 153(4), 411-419. ^{iv} Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experience of young American* children. Paul H Brookes Publishing. ^v Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experience of young American* children. Paul H Brookes Publishing. ^{vi} Hargrave, A. C., & Sénéchal, M. (2000). A book reading intervention with preschool children who have limited vocabularies: The benefits of regular reading and dialogic reading. Early Childhood Research Quarterly, 15(1), 75-90. vii Anderson, R. C., Hiebert, E. H., Scott, J. A., & Wilkinson, I. AG (1985). Becoming a nation of readers: the report of the commission on reading. viii Scarborough, H. S., Dobrich, W., & Hager, M. (1991). Preschool literacy experience and later reading achievement. Journal of Learning Disabilities, 24(8), 508-511. Chicago, IL. ^{ix} Purcell-Gates, V. (1996). Stories, coupons, and the TV Guide: Relationships between home literacy experiences and emergent literacy knowledge. Reading Research Quarterly, 31(4), 406-428. ^x Sénéchal, M., LeFevre, J., Hudson, E., & Lawson, P. (1996). Knowledge of storybooks as a predictor of young children's vocabulary. Journal of Educational Psychology, 88, 520-536. ^{xi} Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. Reading research quarterly, 360-407. xii Scarborough, H. S. (1998). Early identification of children at risk for reading disabilities: Phonological awareness and some other promising predictors. Specific reading disability: A view of the spectrum, 75-119. xiii Lonigan, C. J., Schatschneider, C., & Westberg, L. (2008). Identification of children's skills and abilities linked to later outcomes in reading, writing, and spelling. Developing early literacy: Report of the national early literacy panel, 55-106. x^{iv} Lonigan, C. J., Burgess, S. R., & Anthony, J. L. (2000). Development of emergent literacy and early reading skills in preschool children: evidence from a latent-variable longitudinal study. Developmental psychology, 36(5), 596. ^{xv} Wagner, R. K., Torgesen, J. K., Rashotte, C. A., Hecht, S. A., Barker, T. A., Burgess, S. R., ... & Garon, T. (1997). Changing relations between phonological processing abilities and word-level reading as children develop from beginning to skilled readers: a 5-year longitudinal study. Developmental psychology, 33(3), 468. xvi Sénéchal, M., & LeFevre, J. A. (2002). Parental involvement in the development of children's reading skill: A five-year longitudinal study. Child development, 73(2), 445-460. xvii Writing the wrongs: international benchmarks on adult literacy. Global Campaign for Education, 2005. xviii Mullis, I. V. S., Martin, M. O., Kennedy, A. M., & Foy, P. (2007). PIRLS 2006 International Report. IEA's Progress in International Reading Literacy Study in Primary School in 40 countries. Chestnut Hill, MA: Boston College xix Snow, C. E., Burns, M. S., & Griffin, P. (Eds.). (1998). Preventing reading difficulties in young children. National Academies Press. ^{xx} Bowey, J. A. (1995). Socioeconomic status differences in preschool phonological sensitivity and firstgrade reading achievement. Journal of Educational Psychology, 87(3), 476. ^{xxi} Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experience of young American* children. Paul H Brookes Publishing. ^{xxii} Prusinski, E., Bramastyo, W., & Dowd, A.J. (2012) *Literacy Boost Indonesia Baseline Report* October 2012. Washington, DC: Save the Children. xxiii Shin, J., Borisova, I and Ara, Hosne (2012) Investigating the impact of a one year preschool program on the longer term primary school learning outcomes of children in Bangladesh. Washington, DC: Save the Children.