

Getting It Right from the Start

The Case for Early Parenthood Education



BY THOMAS G. STICHT

One hundred fifty-three thousand words per week. That's the difference between the 215,000 words per week that the average child in a privileged home hears and the 62,000 words per week that the average child in a family on welfare hears. I'll explain the research behind these numbers later; for now, just consider how staggering the difference is. And consider the implications. Hearing language is the first step in learning to read and write and make sense of the world.

The language gap that results in the achievement gap begins

Thomas G. Sticht is an international consultant in adult education, recipient of UNESCO's Mahatma Gandhi Medal, and author of hundreds of scholarly articles. Previously, he has served as the president of Applied Behavioral and Cognitive Sciences Inc., associate director of the National Institute of Education, visiting associate professor at the Harvard Graduate School of Education, and visiting noted scholar at the University of British Columbia in Canada.

at home. Schools can and should do their part to close this gap, but parents, by reading to their children and interacting with them in positive and encouraging ways, need to do their part, too.

The idea that families need to provide enriching educational activities is not new. In 1908, Edmund Burke Huey, regarded as "one of the foremost leaders" in educating children with learning disabilities,¹ wrote, "The school of the future will have as one of its important duties the instruction of parents in the means of assisting the child's natural learning in the home."² This insight was just one of many in his classic work *The Psychology and Pedagogy of Reading*, a 500-page book so highly regarded that it was reprinted by the MIT Press in 1968 and again by the International Reading Association in 2009.

Today, a substantial body of scientific evidence supports Huey's call for the instruction of parents in the means of improving children's learning at home, and therefore their learning at school. Much of this evidence comes from the best research in early childhood education and, in particular, one recurring find-

ing: the most effective early childhood education programs include *early parenthood education*. The results of studies of major early childhood education programs suggest that some of the long-term academic and social outcomes of early childhood education result not so much from the direct education of the children, but rather from education provided to highly disadvantaged parents. Changes in parenting help explain why relatively short-term education programs for children could sustain them through school, and into adulthood. Better parenting provides a long-term educational intervention for children.

Before diving into the relevant research from effective early childhood programs, let's take a closer look at why Huey concluded that schools would need to teach many parents to facilitate learning at home. As Huey understood—and cognitive scientists have since demonstrated—literacy follows oracy, so parents who foster their young children's listening, speaking, vocabulary, and knowledge are also fostering success in school.

The Intergenerational Transfer of Literacy

In *The Psychology and Pedagogy of Reading*, Huey reflected on the role of speech in reading. Drawing from the scholarly literature on reading and from teachers' observations, he concluded, "The child comes to his first reader with his habits of spoken language fairly well formed, and these habits grow more deeply set with every year. His meanings inhere in this spoken language and belong but secondarily to the printed symbols."³

Sixty-six years later, my colleagues and I recast Huey's statement as a simple three-part model of the development of literacy. We asserted that:

1. People are born with information processing skills and the capacity for storing knowledge in memory.
2. By means of these information processing skills, when exposed to oral language people acquire the oracy skills of listening comprehension and speech, and use both to construct meaning and store knowledge.
3. With proper support in literate societies, people acquire the skills of reading and writing, which draw upon the same language and knowledge base that is used for listening and speaking.⁴

My colleagues and I call this the oracy-to-literacy transfer effect.

Of course, we developed this simple transfer model not based on Huey alone, but on a large body of studies. For example, our model is supported by research conducted in the 1960s by Walter Loban, whose longitudinal work on the development of language and literacy has been internationally recognized. He assessed children's oral language ability before they started first grade, and then tested their reading skills at grades 4 through 8. He found that those with high oral language skills before the first grade became high-ability readers and those with low oral language skills became low-ability readers.

Some 20 years later, Loban's work on the relationship of oracy to literacy was greatly expanded by researchers Betty Hart and Todd Risley.⁵ Over two and a half years, they observed and recorded 42 families for an hour each month. At the beginning of the study, each family had a 7- to 9-month-old infant. Knowing that preschoolers from low-income families tended to have smaller vocabularies and overall weaker oral language than their peers from higher-income families, they wanted to see what happened before preschool—to determine the quality and quantity of language to which these children were exposed as they learned to talk. The 42 families spanned the income range, with 13 professional families, 23 working-class families, and 6 families on welfare. It took years to transcribe the tapes and analyze the data, but eventually they found extraordinary differences in the extent to which parents spoke to their children. Hart and Risley wrote, "Simply in words heard, the average child on welfare was having half as much experience per hour (616 words per hour) as the average working-class child (1,251 words per hour) and less than

one-third that of the average child in a professional family (2,153 words per hour)."⁶ Extrapolating these hourly findings to weekly totals (assuming 100 hours awake per week), they came up with the numbers with which I opened this article: 215,000 words heard by children in professional families and 62,000 words in welfare families. The weekly total for working-class families was 125,000. Extrapolating these hourly findings across early childhood, they estimated that from birth to age 4,

Parents who foster their young children's listening, speaking, vocabulary, and knowledge are also fostering success in school.

welfare children would experience some 13 million words of oral language; working-class children, around 26 million words; and children of professional parents, some 45 million words!

According to the oracy-to-literacy transfer effect, the children hearing the most words would develop the largest oral language vocabulary, and those hearing the fewest words would develop the smallest oral language vocabulary. Furthermore, once these children learn to decode, their oral vocabulary would determine their reading and writing vocabulary. Indeed, when Hart and Risley tested the children's oral vocabulary at age 3, the professional, working-class, and welfare children ranked highest, middle, and lowest, respectively. Six years later, 29 of the children were tested again, and their oral language skills at age 3 were highly correlated with their reading vocabulary and comprehension in third grade.

While we may hope that the early oral language gap would be closed in the first few years in school, the fact is that children spend very little time in school. The primary influence on their language development remains the home environment. Moreover, by the time children start school—even preschool—the differences in the language experiences they have had are staggering. Huey was right: many parents need to be taught how to support learning at home.

The strong oracy-to-literacy transfer effects found by Loban and Hart and Risley (and many others) explain to a large extent

the ubiquitous finding in industrialized nations that parents' educational level is a strong predictor of children's literacy level. Significantly, the oracy-to-literacy transfer effect suggests that it is not parents' education level per se that produces an intergenerational transfer of literacy, but rather what better-educated parents *do* with their children using oral language and literacy skills.

Discussing the ways children of educated parents may acquire a strong foundation for reading, Huey wrote: "The secret of it all lies in the parents' reading aloud to and with the child.... The child should long continue to hear far more reading than he does for himself.... Oral work is certain to displace much of the present written work in the school of the future, at least in the earlier years; and at home there is scarcely a more commendable and useful practice than that of reading much of good things aloud to the children."⁷ Decades of research support Huey yet again: on average, children's listening comprehension surpasses their reading comprehension until seventh or eighth grade. Especially in the early years, and continuing up through middle school (and for some students, even into high school), learning through oral work is indeed essential.⁸

Listening to text read aloud is especially important: researchers have found that texts use much more advanced vocabulary and grammar than spoken language. A recent summary of that research stated, "Regardless of the source or situation and without exception, the richness and complexity of the words used in the oral language samples paled in comparison with the written texts. Indeed, of all the oral language samples evaluated, the only one that exceeded even preschool books in lexical range was expert witness testimony."⁹ Addressing the extraordinary differences that Hart and Risley found would not be as easy as encouraging low-income parents to read to and speak with their children as much as possible—but that would be a good start.

The Intergenerational Transfer of Character

Literacy is not the only essential ability that is strongly influenced by parenting; character traits like motivation and persistence are also transferred from one generation to the next. And, like literacy, these traits have a substantial impact on student achievement. For example, researchers have found that "Parental beliefs, values, aspirations, and attitudes ... are very important, as is parental

well-being.... Parenting skills in terms of warmth, discipline, and educational behaviours are all major factors in the formation of school success."¹⁰

Hart and Risley's research provides some insights into how parents differ along these lines: not only were there large differences in the *quantity* of oral language in the 42 homes, but also in the *quality* of the language. Children in professional families heard far more encouraging comments, and far fewer discouraging

ones, than children in families on welfare. Specifically, in a professional family, the average child heard 32 affirmatives and 5 prohibitions per hour; in a working-class family, the average child heard 12 affirmatives and 7 prohibitions per hour; and in a welfare family, the average child heard 5 affirmatives and 11 prohibitions per hour. Recalling the data on the quantity of language, we can see that children in professional families heard a lot of language—and much of it was positive. But children in welfare families heard relatively little language—and much of it was negative. These findings suggest that the feelings conveyed through oral language may influence the development of noncognitive traits such as motivation and persistence in learning.

While at first it may seem that intervening in the emotional aspects of parenting would be quite a challenge, numerous studies have found that the major outcome of adult basic education is improved noncognitive skills. Almost universally, studies of adult basic education

report that adults feel better about themselves, overcome learned helplessness, and feel more motivated to succeed in life; importantly, these positive noncognitive skills often modify adults' behaviors with their children.¹¹

In research with Wider Opportunities for Women (WOW), for example, Sandra Van Fossen (a research associate at WOW) and I found that mothers enrolled in basic-skills programs reported that they spoke with their children about school more, read to them more, took them to the library more, and so forth. In one visit to a single mother's home, the mother's second-grader said, "I do my homework just like Mommy" and thrust his homework into the researcher's hand. This type of emotional, noncognitive development in the child was obtained for free as a spinoff of an adult basic education program.¹²

Adult education focused on improving parenting can also be effective. Longitudinal research on the Prenatal/Early Infancy

Mothers enrolled in basic-skills programs reported that they spoke with their children about school more, read to them more, and took them to the library more.



Project, for example, found many benefits for families in the program as compared with families in the control (nonintervention) group. This project studied two interventions, one more intensive than the other. In the more intensive (and more effective) intervention, young women were visited at home by nurses from about midway through their pregnancy until their children were 2 years old. The nurses addressed everything from prenatal care to child-rearing to employment. When the children were 15 years old, they were less likely to have been arrested, abused, or neglected. Similarly, their mothers were less likely to have been arrested, convicted, or incarcerated, and they reported many fewer episodes of impairment due to alcohol or drugs. Their mothers also had fewer subsequent pregnancies and went a longer time between births, which means they could devote greater attention to each child.¹³

Particularly strong benefits for character development have been found when child and parent education are combined. For instance, the HighScope Perry Preschool Program, a carefully studied preschool program that provided weekly home visits, mainly had character—not cognitive—benefits. Discussing Perry and similar programs, Nobel Prize-winning economist James J. Heckman downplayed their effects on children’s cognitive skills, stating, “Enriched early intervention programs targeted to disadvantaged children have had their biggest effect on noncognitive skills: motivation, self-control, and time preference.... Noncognitive skills are powerfully predictive of a number of socioeconomic measures (crime, teenage pregnancy, education, and the like).... Kids in the Perry Preschool Program ... are much more successful than similar kids without intervention even though their IQs are no higher. And the same is true of many such interventions.”¹⁴

Parenting Power in Preschool Programs

While parent education appears to be an important part of highly effective early childhood programs, such programs have many components, and I have found no research that isolates the effects of the parent education component (or any other single component).^{*} Yet, there are indications that some of the long-term cost-

^{*}Such research would be very helpful to program developers, but it is time consuming and expensive. To determine the effectiveness of each program component, a whole series of studies would have to be done in which one component at a time is changed.

beneficial effects of early childhood programs result in part from the effects that the programs had on changing how the parents interacted with their children.

In a report for the Economic Policy Institute, Robert Lynch (an economics professor at Washington College) provided an analysis of several carefully studied early childhood education programs and concluded that they produce a considerable return on investment.¹⁵ He found that investments in high-quality

early childhood education programs consistently generated more than a \$3 return for every \$1 invested.

As an example of possible early parenthood education activities that may have influenced the preschool children’s development, Lynch reports that in the well-known Abecedarian Early Childhood Intervention program, parents were given special educational materials to help them engage in educational activities with their children. Follow-up research showed that the mothers in the intervention achieved more education than those in the comparison group, and fewer of the intervention mothers had additional births than did the comparison mothers (which, again, means more time is available for each child).

The important role of parent education is supported by Lawrence Schweinhart, who is the president of the HighScope Educational Research Foundation and was the lead researcher on the Perry Preschool longitudinal study. Discussing what he sees as the key ingredients for achieving a good return on investment from

early childhood programs, he recommended that such programs “have teachers spend substantial amounts of time with parents, educating them about their children’s development and how they can extend classroom learning experiences into their homes.” In addition, he noted, “All the programs in the long-term studies worked with parents. In fact, in the HighScope Perry Preschool program, teachers spent half their work time engaged in such activities.”¹⁶ This strongly suggests that some of the success of early childhood programs may be dependent upon educational activities to improve the skills and knowledge of parents.

It has been more than 100 years since Huey set forth a clear and effective path for supporting learning in the home. Educating those who are, or are about to become, parents offers the possibility of obtaining payoffs for future generations even before conception occurs. And, if we focus our limited

If we focus our limited resources on reaching first-time parents, then one “dose” of parenting education could also benefit succeeding children.



resources on reaching first-time parents, then one “dose” of parenting education could also benefit succeeding children. Given the intergenerational nature of literacy and character, that one dose could even benefit future generations. It is time that we move from thinking about education in terms of each child, to thinking about education from a multiple-life-cycles perspective. If we are really serious about attaining long-lasting increases in student achievement, we should look to both the school and the home: early parenthood education should take its place alongside early childhood education as a primary means of getting education right from the start. □

Endnotes

1. See the “Psychological Bulletin” comment in John B. Carroll’s foreword to Edmund Burke Huey, *The Psychology and Pedagogy of Reading* (Cambridge, MA: MIT Press, 1968).
2. Edmund Burke Huey, *The Psychology and Pedagogy of Reading* (Newark, DE: International Reading Association, 2009), 206.
3. Huey, *The Psychology and Pedagogy of Reading* (2009), 81.
4. Thomas G. Sticht, Lawrence J. Beck, Robert N. Hauke, Glenn M. Kleiman, and James H. James, *Auding and Reading: A Developmental Model* (Alexandria, VA: Human Resources Research Organization, 1974).
5. Betty Hart and Todd R. Risley, *Meaningful Differences in the Everyday Experiences of Young American Children* (Baltimore, MD: Paul H. Brookes Publishing, 1995).
6. Betty Hart and Todd R. Risley, “The Early Catastrophe: The 30 Million Word Gap,” *American Educator* 27, no. 1 (Spring 2003): 8.
7. Huey, *The Psychology and Pedagogy of Reading* (2009), 220–221.
8. Andrew Biemiller, “Oral Comprehension Sets the Ceiling on Reading Comprehension,” *American Educator* 27, no. 1 (Spring 2003): 23.
9. Marilyn Jager Adams, “Advancing Our Students’ Language and Literacy: The Challenge of Complex Texts,” *American Educator* 34, no. 4 (Winter 2010–2011): 5.
10. Leon Feinstein, Kathryn Duckworth, and Ricardo Sabates, *A Model of the Inter-Generational Transmission of Educational Success* (London: Centre for Research on the Wider Benefits of Learning, 2004).
11. See, for example, Parkdale Project Read, “I’ve Opened Up”: *Exploring Learners’ Perspectives on Progress* (Toronto, ON: 2006), accessed April 15, 2011, www.nald.ca/library/research/openup/cover.htm; and Mary Beth Bingman and Olga Ebert, “I’ve Come a Long Way”: *Learner-Identified Outcomes of Participation in Adult Literacy Programs* (Cambridge, MA: National Center for the Study of Adult Learning and Literacy, February 2000).
12. Sandra Van Fossen and Thomas G. Sticht, *Teach the Mother and Reach the Child: Results of the Intergenerational Literacy Action Research Project of Wider Opportunities for Women* (Washington, DC: Wider Opportunities for Women, July 1991).
13. Robert Lynch, *Exceptional Returns: Economic, Fiscal, and Social Benefits of Investment in Early Childhood Development* (Washington, DC: Economic Policy Institute, 2004).
14. James Heckman, interview by Douglas Clement, editor of *The Region*, Federal Reserve Bank of Minneapolis, June 2005.
15. Lynch, *Exceptional Returns*.
16. Lawrence J. Schweinhart, “Creating the Best Prekindergartens: Five Ingredients for Long-Term Effects and Returns on Investment,” in *The Obama Education Plan: An Education Week Guide* (San Francisco: Jossey-Bass, 2009), 21–25.

INTENTIONALLY LEFT BLANK