Is Learning to Read Unnatural?

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At a conference hosted by *Learning & the Brain (*April 2022), cognitive psychologist Daniel Willingham reiterated the notion that in contrast to learning to talk, learning to read is unnatural and thus difficult. In his book, Willingham (2017) writes, "Humans are born with the ability to learn spoken language with ease. Children don't need explicit instruction; exposure to a community of speakers is enough" (p 19). Willingham is essentially correct in regards to learning to talk, although his assertion requires some elaboration. In contrast, the notion that learning to read is unnatural and thus difficult is simplistic and requires a more comprehensive analysis.

The Issue

For more than two decades, numerous individuals in the literacy community have argued that learning to read is unnatural and difficult. (See, for example, Lyon and Moats, 1997; Lyon, 1998; Foorman, et.al., 1998; Cunningham, 2003; Moats and Tolman, 2009.) This notion is well established in present day thinking about literacy. Blau-McCandliss (2021) states, "Humans are born with a natural ability for spoken language; reading is more difficult" and then adds, "The average child normally endowed and normally taught learns to read only with considerable difficulty." This is a surprising statement given the fact that a vast majority of students learn to read quite successfully with minimal difficulty, and appear to enjoy the experience. Nevertheless, her assertion adds to the perception of a large chasm between learning to talk and learning to read.

The noted neuroscientist Stanislas Dehaene (2018) argues that there is no place or mechanism in the brain to accommodate the learning to read process, seemingly adding credence to the reading-is-unnatural assumption. Dehaene and other researchers point out that oral language has been around for 50,000 years, whereas written systems developed much later—a recent 5,000 years ago—and that many languages in the world, even today, have no written system. These facts are interpreted as buttressing the argument that learning to read and write are not natural and are thus much more difficult to learn. However, the argument is frankly not entirely persuasive. Simply because a behavior emerges later in human development does not necessarily make it more "unnatural" nor more difficult or daunting to learn. Children today quite readily figure out on their own how to use recently-invented electronic devices that regularly flummox older people. Adults not only acknowledge children's easy mastery of the hardware and software of phones, tablets, and computers but refer to their children as "digital natives" and often rely on them as troubleshooters, but do not consider this learning to be somehow unnatural. Labeling reading, and other behaviors, as "natural" or "unnatural" involves highly subjective judgments that may reveal more about the ones doing the labeling than the behaviors themselves.

Yet in today's culture, numerous articles, podcasts, and blogs regularly lament how difficult and daunting it is for children to learn to read because it is an unnatural process. One might be led to believe that this notion is settled science. It is not.

A Few Words About Learning To Talk

It is true, as Willingham (2017) asserts, that humans are born with the ability to learn oral language. One should add that humans are also born with the *disposition* to talk—a tendency to communicate that, under ordinary conditions, leads to speech. Language scholars have recognized these human characteristics for many years. (See, for example, Brown, 1974.) Human infants can talk, want to talk, and will talk if those around them expect them to talk, talk to them, and respond to their attempts to talk. However, it is not enough merely to learn to talk. Talking well is also critically important, and we know from Hart and Risley (1995) that the richer the language of the community, the richer the language of the child. Having a good command of vocabulary, sentence structure, nuances of expression, and other aspects of language usage makes children more competent speakers and listeners and ultimately more capable learners. That's why children who enter school with strong oral language abilities developed through their interactions with others, tend to read more easily and quickly and maintain these advantages over the long term (Loban, 1976).

In addition, language development is closely connected to cognitive development. Wells (1986) captures this concept very well in his book, *The Meaning Makers*: *Learning Language and Using Language to Learn*. Wells posits, as do others, that the disposition to learn language in young children is driven by a desire to understand and make sense of their world and that language, in turn, feeds this cognitive activity. In other words, early language learning and making sense are recursive and complementary, not sequential: Language facilitates thinking; thoughts are expressed in language. Thinking and early language development are inextricably tied together, and are a manifestation of children's dispositions to understand and learn about all aspects of their environment, including the language they hear all around them.

It is well established that the language process of learning to talk, given the right conditions, appears relatively easy. However, oral language is incredibly complex in its syntax, grammar, and vocabulary, and yet very young children learn the complex rules quite readily. How do they accomplish this?

Although oral language development does not require explicit instruction as commonly defined, there is a form of instruction involved. Parents and significant others act in certain ways or manifest certain behaviors that facilitate language learning. For example, they talk directly to their child, providing models of how language is used. They explain objects and events, introducing words and concepts in context. They answer questions. They continuously encourage conversation in phrases and sentences. When the child produces an anomaly, the parent usually restates the utterance as a means of promoting their child's language development. In some form this is instruction. It is not unlike what skilled teachers often do in school by responding in certain ways and setting up conditions that lead to learning and intellectual growth. The important point is that *nurture* is as important as *nature* when it comes to developing oral language. Saying that exposure to other speakers is the key, as some assert, glosses over the vital details of the nurturing that goes on in the process of language growth.

At the same time, children's brains readily respond to patterns, enabling them to make inferences about language usage. For example, they hear *dog/dogs, cat/cats*, and *horse/horses* and conclude that the

plural of *mouse* must be *mouses*. They negotiate much of their way through the complexities by making inferences based on detected patterns and then modifying their responses based on the feedback they get from those around them. Complexity is not the issue. The child's ability and disposition to learn and the child's cognitive capacities, combined with the adults' expectations and mentoring, result in the child mastering the complexities with what seems to be relative ease.

From Oral Language to Language in Print

This insight into oral language development, namely that it occurs easily under ordinary conditions—in a way that is quite natural in the course of a child's overall growth and development—raises the inevitable question of whether some of what we know about oral language development can be applied to the process of learning to read, given the proposition that both talking and reading are language processes.

This is not to argue that learning to talk and learning to read are essentially the same process. Nor is it to suggest that children learn to read as naturally as they learned to talk—although some appear to do so. Rather it is to suggest that the two are not totally different. Putting learning to talk in opposition to learning to read is unfortunate because it dismisses important shared characteristics that are useful to consider and dismisses important theoretical and pedagogical issues.

There is yet another issue that requires our attention. If learning to read appears to be complex and a daunting task, the question is, for whom? Though cognitive researchers may see reading as a complex process, young children usually do not. They see reading as mysterious when done by others, such as parents and older siblings. However, they see it as doable and they want to do it for themselves. Of course, they may begin to think of it as difficult and complex if they are told that it is, so to suggest to the young child that reading is really hard serves no useful purpose. They may also begin to think of reading as difficult if they are not successful with the instruction they receive or are made to feel they are not doing well. But their initial response to reading is ordinarily eager, open, and confident.

Young children by age four or five have recently demonstrated a tremendous capacity for language learning. Now they are embarking on a new quest, namely to learn another language process. Is it not reasonable to ask how the learning of one can inform us about the learning of the other?

There are several conditions for learning to talk that, when met, make the process appear to be natural and easy. Without these in place, however, the process would almost certainly be difficult, even daunting. We can apply this insight to the process of learning to read in the beginning stages, which is facilitated by the same conditions:

1. **Learning to talk is meaning driven from the very beginning.** Children have an insatiable drive to understand and be understood from the earliest months of their young life. (See, for example, Wells 1986.) When children become aware of language in print, especially when they are in a print rich environment, they also have a strong drive to understand it and to use it to express their own thoughts.

2**. Learning to talk is more than learning individual words**. When young children are first learning to talk, it appears they are just learning words because they typically utter individual words (*Mama, doggie*), but they are expressing much more. A child's first words often convey complete thoughts: *Mama* can mean *Mama, I'm hungry* or *Mama, pick me up* and more. The first communications are rudimentary on the surface but actually reflect the more substantive meanings the child understands and wants to convey. Learning to read also involves much more than the mere learning of words, or the letters and sounds that make up words. It, too, involves the intelligent processing of meaning if the instruction allows the child to go beyond letters and words.

3. **Learning to talk is facilitated by a rich language environment**. As listeners, children make numerous inferences about how language works—sentence structure, grammar, semantics, and more. They take in the complexities of the language they hear around them and internalize language as a system of numerous interconnected parts, all of which are eventually reflected in their speech. They benefit enormously by observing and participating in the interactions of those around them and by witnessing language used in other contexts, e.g., in television programs, casual exchanges in shops and on the street, library story time, and bedtime reading. They take in how people express themselves and how they interact with each other while also being exposed to specific words, phrases, and sentences the speakers use. (See, for example, Hart and Risley, 1995). So too is the learning to read process facilitated when children encounter print in many forms, from printed words, phrases, and logos in their immediate environment to rhymes, chants, poetry, captioned illustrations, periodicals, and an extensive variety of engaging books and other reading material with rich and relevant language.

4. **Children's pattern-seeking brains are critical to their ability to learn language.** Because of their capacity for detecting patterns, children are able to develop generalizations and infer the rules of how oral language works. It is the human brains capacity to detect and create patterns that makes thinking and language learning possible. (See Mattson, 2014.) The same is true when they learn to read. Their development of oral language has primed them to infer the rules of print language by detecting patterns in the words, sentences and paragraphs they see on the page.

5. **When children are learning oral language in the early stages, those around them readily tolerate the approximations they utter.** This allows them to experiment with word formation and pronunciation as well as sentence structure, all of which leads to greater language growth as they begin talking. They are seldom reprimanded when they utter unconventional language. Adults either ignore their anomalies or model conventional usage in a way that is accepting and encouraging of the child's efforts. Beginning readers and writers benefit enormously from the same kind of tolerance that accepts their approximations as part of the learning process.

6. **Early language learning tends to be highly relevant to children's personal needs.** Learning to talk in its earliest stages is almost always in a meaningful context and fulfills either a psychological or physiological need. In other words, young children talk and ask questions about things and events that affect them first hand or that are of particular interest to them. Beginning readers benefit enormously from reading highly meaningful, personally relevant texts.

All of these conditions are essential for developing oral language and go a long way in helping make that development appear to be natural. The same conditions also promote learning to read and write in ways that make both seem natural. And yet much of the current research literature on literacy is mostly silent on these issues. (See, for example, The National Reading Panel Report, 2000.)

One additional factor that provides insight into learning to read is the process of learning to write. There is ample evidence that when young children are given the opportunity to write freely and invent their own spellings, they become better spellers and more skilled with sentence structure and language usage (Cramer, 1968; Hammond, 1968). Young students move through very clear stages of spelling development, often with minimal or no direct instruction in the early stages (e.g., Gentry, 1987; Cramer, 1968; Reed, 1975.) These stages are highly predictable. Just as children infer how to produce the speech sounds of their language from hearing those around them and infer the rules of word and sentence formation, they are able to infer many spelling rules by noting the patterns that occur in written words. A reexamination of past research as well as future research should inform us more fully about how early writing relates to the learning to read process.

All of these factors should not preclude nor minimize instruction. Instruction is important for almost all children in learning to read. What is needed is a different perspective on instruction.

An Alternate Perspective

Rather than viewing learning to read inflexibly as either natural or unnatural—as if it must be one or the other—a more fruitful approach is to ask whether learning to read can be made a more natural learning process so that young learners will learn more easily. Years of working in early grade classrooms, coupled with well-accepted research in language and cognitive development of young learners, provide good evidence that classroom instruction can be delivered in a manner that makes learning to read a relatively natural process.

For example:

- In classrooms where teachers build on the language and cognitive strengths that young learners bring with them to school, learning to read seems more natural. Seeing a familiar text in print, such as a favorite rhyme, invokes what children already know and makes the process of reading the text seem natural and easy. In contrast, learning letter-sound associations that in and of themselves have no meaning is an unnatural task that is often confusing and difficult.
- In classrooms where young readers are encouraged to think about what they are reading and whether it makes sense, cognitive behaviors that young learners have been using since their earliest days, learning to read becomes more natural. In contrast, in classrooms where reading is viewed primarily as a decoding process, with a code that is arbitrary, somewhat irregular and unpredictable, learning to read becomes more unnatural. The practice of drilling students on the rapid recognition of nonsense words and syllables, as commonly measured by the DIBELS assessment (Good and Kaminski, 1994), runs counter to how the young meaning-oriented mind works, and thus is unnatural.

- When students are encouraged to search for and discover words and phrases in their environment that are meaningful and interesting to them, reading is more relevant and seems more natural. In contrast when the early focus is on the learning of high frequency words of minimal meaning, reading seems more unnatural.
- When students in the earliest stages are allowed to read age-appropriate texts with skillful teacher support, reading becomes more natural, realistic, and gratifying, In contrast, when young readers are limited to the study of sounds, letters, and words, reading becomes more unnatural, artificial, and confusing.
- When children read texts that are similar to their own language patterns and reflect their culture, reading becomes more natural. Conversely, when young readers are asked to read texts that have been constructed to be phonetically regular, decodable texts, for example, the printed language is more contrived and likely makes reading less natural.
- The pattern-seeking disposition of the young brain may well have implications for phonics instruction. Though not empirically verified as yet, an analytic approach to phonics where young readers look for common patterns of letter combinations across different words, will seem more natural than an individual letter-sound, synthetic approach.
- Young children learn language best in a rich language environment. When this reading environment is rich with easy-to-read books, predictable books, leveled books, student dictated texts, picture books, wordless picture books, chapter books, environmental print, brochures, pamphlets, and a variety of other real world print material, opportunities for reading growth is enhanced and seems more natural to young learners.
- When young children are encouraged in the earliest days of literacy instruction to share their ideas and thinking through writing with their best efforts in invented spellings, students see relevancy in their learning, and reading and writing are enhanced.

The above are selected examples and not a complete list, but they illustrate how different activities can enhance or detract from children's learning to read in ways that seems relatively natural to them. Several points need to be made about these distinctions.

First, the distinctions are substantial and lead to major differences in the type and tone of instruction in classrooms. Second, there are specific instructional practices that align with the different perspectives described. Third, the more natural practices here are not an exercise in romanticism, but deeply rooted in the realities of classroom instruction. Finally, this list has not laid out a comprehensive literacy curriculum. More details can be found in several publications. (See, for example, Nessel and Jones,1981; Hammond, 1999; Hammond and Nessel 2011; Hammond and Nessel, 2023.)

Concluding Thoughts

We return to our original question: Is learning to read an unnatural act? It is perhaps not as natural as learning to talk, although it appears to be just that for some children. And sometimes teaching a child to read can be challenging. However, learning to read is not as unnatural as many contend, and the degree of naturalness depends primarily on the nature of the literacy curriculum children are provided and the skill with which the teacher can deliver this instruction. Frankly, in the present environment, the notion

that learning to read is unnatural has led to a narrowing of curriculum and instruction—a development that is making reading more unnatural and difficult for children and more frustrating for many teachers.

The belief that learning to read is unnatural is due in part to a misinterpretation of what reading is. If one views reading primarily as a letter-by-letter, word-by-word visual/decoding process, then it follows that learning to read may well be viewed as unnatural and daunting because that task actually is difficult. However, if one views reading as primarily a language and thinking process—encompassing much more than mere decoding in the early stages—learning to read can be seen as being built on a foundation of prior successful language-learning experiences and thus considerably more natural. At the very least, it is essential to use the lessons we have learned about oral language development to help inform us about the learning to read process. The profession ignores these lessons at considerable risk.

To some extent, the reading-is-hard perspective may stem from a lack of awareness about the various ways reading can be successfully taught at the earliest stages. For those educators who have first-hand experience with a large variety of instructional practices, learning to read isn't seen as daunting. Rather, knowledgeable teachers understand that under the right conditions and with comprehensive instruction, learning to read will be perceived as quite doable and natural to the vast majority of young students.

Furthermore, the narrative that learning to read is a daunting and unnatural task serves no viable purpose, either for the teachers delivering the instruction, the young learners, or their parents because it introduces an element of anxiety that is not helpful. Such a false notion must also not be used as cover for explaining away why too many young children have difficulty in learning to read. At the present time, the pedagogy that reflects this perspective has not produced better readers, as the national-level tests have repeatedly demonstrated. Despite mandatory implementation in many areas of the country and billions of dollars spent on literacy programs advocated by those who claim that learning to read is unnatural, the achievement needle has not moved to any significant degree in the past two decades. (See Nessel and Hammond, 2021.)

Rather than stubbornly asserting that reading is unnatural, the focus should be on how we can make learning to read as natural as possible, capitalizing on young children's strengths and dispositions to develop language and to make sense of their world. When we recognize reading as the cognitive-language process it truly is and include all of the research available on reading, learning, and language, as well as research on the nature and dispositions of young learners, we then will be able to proclaim legitimately that our reading instruction is based on strong evidence and sound research.

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