

Research Note
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The "Scientific" Understanding of Reading and the "Reading Potential" of Adults Assessed by Measuring Listening and Reading Abilities

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The "scientific" work on reading that the National Reading Panel reported and which forms the foundation for most of the Bush administrations approach to literacy development takes its primary focus from the idea that, developmentally, children typically acquire considerable competence in listening and comprehending speech before they develop competence in reading and comprehending the written language. Indeed, the whole idea behind the teaching of "phonemic awareness," "phonics" and other speech-referenced "word attack" techniques is that the learner's main task is considered to be to learn how to "decode" the written language to reconstruct the spoken language which can then be comprehended as usual. This is the idea of reading as a second signaling system for listening to and comprehending the oral language (for more on aspects of literacy that are not second signaling systems for listening see the paper Teaching Reading With Adults under [Full Text documents](#) at www.nald.ca searched by my last name).

The idea that listening competence develops first and that then reading competence permits the learner to understand in writing that which could earlier be understood only in the spoken language leads to the concept of "reading potential." For children, the general notion is that they enter school at the first grade with two types of receptive communication abilities: listening and reading (there are, of course, other communication abilities, but they are not the object of discussion here). Typically, children can comprehend better by listening than by reading in the primary grades. Hypothetically for instance, a child in the first grade may comprehend stories by listening as well as the average third grader can comprehend the same stories by reading. Thus, the average first graders listening score can be said to indicate a "reading potential" of the third grade level, because if the average first grade child could instantly comprehend by reading as well as he or she can by listening, they would have a reading ability comparable to a typical third graders reading ability. The reason parents are encouraged to speak and read a lot to their pre-school children is to develop their children's listening vocabulary and conceptual comprehension and therefore their "reading potential" so that after learning decoding they will comprehend the written language at the higher level of their spoken language comprehension. Some research suggests it may take typical children 6 to 8 years of schooling to become as efficient and proficient at comprehending the written language as they can the spoken language ([see reference below](#)).

The concept of "reading potential" is important for adult literacy educators for at least two reasons. First, whether people are designated as "learning disabled" or not is frequently based on the idea that on some measure, such as an "intelligence" test, the people are at their appropriate age level or above, but on a reading measure they are one, two or more years behind. In other words, they are not reading "up to their potential."

Listening tests are one way of assessing people's "reading potential." In fact, most individually administered intelligence or verbal IQ tests present questions by speaking to the person being examined. The person has to listen to receive the questions and explanations needed to complete the test. Therefore, individual intelligence tests like the Stanford-Binet, the Peabody Picture Vocabulary Test, and Wechsler intelligence scales for children and adults can be thought of largely as listening tests.

The second reason that the concept of "reading potential" is important in adult literacy education is that it is frequently thought that adults in need of literacy education have lived a reasonably long time and developed fairly high levels of competence in oral language, including vocabulary and comprehension ability for listening. Therefore, it is assumed, unlike children, whose oral language skills are not well developed yet and who must acquire higher levels of vocabulary while also learning to read, adults will be able to acquire a fairly high level of literacy in a brief time, relative to that required by children. This leads to the expectation that the adult's literacy problems may be solved fairly quickly with a relatively brief period of training in some form of decoding the written word to utilize the vast amount of competence already possessed in the oral language.

However, when some 2,000 adults were assessed to compare their skills in both listening and reading, the anticipated higher level of listening ability, particularly at the lower levels of reading (down to the 2nd grade) as indicated by the Gates-MacGinitie reading test, did not emerge when listening to comprehend paragraphs.

The data mentioned above were obtained using group administered tests in which the listening and reading measures were equated as closely as possible in content, time to listen or read, and difficulty of the questions, which were all multiple-choice requiring recall of factual information.

The chapter by Sticht and James (1984) provides an extensive review of listening and reading studies with adults. In one study, using the same group test as used to obtain the data given above, an incarcerated prison population of men reading at the 4th grade level showed about 1.5 grade levels of "potential."

Using a different group administered test of listening and reading skills, the Durrell Listening and Reading Series tests, Sticht (1978) reported that for 71 native speakers of English who were in an adult literacy program their average reading level was at the 4.8 grade level, while their reading "potential" was 6.0. Interestingly, for 45 adults with English as a second language, their reading score was 4.8 while their reading "potential" score was at the 4.4 grade level. In other words, their listening skills were lower than their reading skills, so when the listening score was converted to a reading "potential" score, they performed below their actual reading level!

Using the Diagnostic Reading Scales, which are administered one-on-one as an individual test, Sticht & Beck (1976) assessed the reading "potential" of 42 native English speakers and 32 English as a second language speakers in an adult literacy program. The native speakers had an average reading level at the 6.2 grade level and a "potential" at the grade 6.4 level. The non-native English speakers read at an average 4.3 grade level and had a "potential" at the 4.4 grade level.

Generally speaking, the studies cited suggest that adults with lower levels of literacy tend to also have lower levels of oral language (listening) comprehension when assessed using standardized tests (though note the use of the word "tend" because this is not true of all adults). This tends to be true for both vocabulary knowledge and the

comprehension of connected discourse. Of course, there can be important exceptions to these general trend data. But as a rule, these data on listening and reading suggest that adult literacy educators will have to provide the least able adult readers (less than 4th grade abilities) with not only effective instruction in "phonemics", "phonics" and other decoding knowledge, but also extensive opportunities for these adults to develop lots of new vocabulary and content knowledge to improve both their oral and written language comprehension abilities. This can take a considerable amount of time.

Reference

Sources for all of the studies cited above, and many others exploring listening and reading skills of adults, may be found in Thomas G. Sticht & J. H. James (1984). Listening and Reading. In R. Barr, M. Kamil, and P. Mosenthal (Eds.) Handbook of Reading Research. New York: Longmans.

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