This essay advances a definition of language disadvantage and applies Cummins' theory of language acquisition to a model of assessment designed to determine the existence and degree of language disadvantage. Language disadvantage is defined as the difference between a person's ability to learn a language compared to that same person's actual amount of learned language. Language disadvantage in second language learners and persons from lower socioeconomic strata is emphasized. Specific tests and their application to this assessment are discussed, as are preventive measures such as oral language expansion. A two-sided approach to preventing language disadvantage would consist of a curriculum that included both formal and informal oral language instruction. (MDM)
Preventing Language Disadvantage in the Child During the Process of Language Acquisition
by Ron Anderson-1994
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When children enter first grade, society assumes that each child has the prerequisite skills necessary to begin reading instruction. In fact, many children do not have all of these skills. The incidence of such slower learners would be approximately 25%, as this is the statistical figure one uses to represent the quantity of "below average" learners in any given population of learners. Therefore, some students will be confronted with learning tasks which are too hard for them to complete successfully, and may become discouraged.

Remedial and Special Education classes have been created for the purpose of having the student avoid the discouragement of being confronted with required tasks which are impossible to complete without further training. The problem with these classes is that they too often continue the practice of having the student work on tasks which are beyond the existing skill level of the learner. The goals mentioned in such classes almost always address written language and omit oral language, a critical prerequisite to written language mastery. As a result, they act as an alternative source for discouragement, not as a source of encouragement.

The impact of not having average oral language skills on the lower socio-economic population is significant. The average student from the lower socio-economic areas is below average compared to the general norm in oral language. It is assumed that the average student from these areas is at the 16th percentile (minus one Standard Deviation) when compared to the average student overall. As grade level tasks are directed at the 50th percentile student, 84 percent of the students from these areas will be confronted with tasks which are too difficult for them throughout their educational careers. It is no wonder that the high educational dropout rate and cycles of discouragement continue from generation to generation.

To consider Language disadvantage, a definition is needed. Many possible areas of concern could be used, and the author is not prepared to satisfy the concerns of all groups who have been considered "culturally disadvantaged" in the past. Instead, a more practical definition is needed. The following educational definition is suggested: Language disadvantage is the difference between one's ability to learn the Language compared to that same person's actual amount of learned language. In the Verbal area, this is measurable no matter what the level of language skill and this difference acts as a barrier to grade level functioning. In the case of the Spanish Speaker, we can measure the Language disadvantage in both Spanish and English.

The students who speak a language different than the mainstream language include second language students, obviously, but also include people who have regional variations from the dominant Language. For example, a farmer who is a native Mississippian may be Language disadvantaged when educated in New York City. Students who are raised in
the lower socio-economic areas of the cities could also be included in this group.

To quantitatively consider Language disadvantage, the recommended procedure is to look at a comparison between the student's BICS (Basic Informal Communication Skills, or conversational language level which is also related to the ability to learn language) and CALP (Cognitive Academic Language Processing or more formal academic language or Verbal IQ level which is the measure of actually learned, more formal, language) (Cummins, 1984). Traditionally, Verbal IQ has been assumed to be the measure of the verbal ability of the student. The Language disadvantaged generally have lower CALP than BICS, though the student who does not have BICS in the given language would not necessarily demonstrate this pattern.

Educational measures should be compared to the CALP rather than BICS. For example, Reading comprehension levels can not be expected to exceed CALP, though reading decoding skill may or may not relate at all to CALP level in the given language (depends on existing reading skills in other languages or, given no reading skills otherwise, could depend on BICS level in the given language). To illustrate the effect of Language disadvantage, compare the students' measured BICS to measured CALP. If there is a difference, this difference is attributed to Language disadvantage, and academic language deficits which are below the level of BICS, are due to Language disadvantage.

To measure BICS, use an oral language proficiency test which has tasks which are context imbedded. The IDEA Oral Language Proficiency test (IPT I) is such a test. As one is presented with higher levels of oral language difficulty, contextual clues become less prevalent. It is the absence of context imbeddedness that changes the task from BICS to CALP, and makes the evaluation of an appropriate instrument extremely difficult. To illustrate this, for a college graduate, less context is typically needed in order to maintain a conversational level of language than the amount needed for one who has a sixth grade level of education. Obviously, as the level of conversational difficulty increases, the more likely academic language will be present. The absence of opportunities to learn the more abstract, obscure aspects of a language, leads to the presence of language disadvantage.

To measure CALP, almost complete removal of context clues is needed. The verbal IQ test meets this criteria, as subjects are asked to perform verbal tasks based on their own contextual history. Definitions, picture vocabulary, analogies, similarities, and basic fund of information available are all addressed with minimal context in these tests. Comprehension questions tend to provide a context, but some of the more difficult questions require exposure to government and ideas and are too far removed from BICS to be considered in this light.
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There are no known tests of conversational language which quantify the level of skill similar to the Verbal IQ test, so comparing BICS to CALP is difficult. To meet this need, the author has developed a conversion table for the IDEA Oral Language Proficiency Test which allows one to use "Standard Scores" instead of Proficiency, as listed by the publisher.

As an example of language disadvantage, a third grader who has an English BICS measure of proficiency level E (derived standard score of 85 on the IDEA), and a CALP measure of 70 from the K-ABC (Anderson, 1993) would be considered to be Language disadvantaged by one standard deviation. If reading comprehension scores are 65, then the PRIMARY reason for the reading problem could be Language disadvantage, as the reading deficit is only one third of a standard deviation below the expected CALP score of 70. The student with comparable ability and language scores who has reading scores in the low 50's has significantly lower scores in this area than the expected 70, so only part of the problem is Language disadvantage, while a significant portion is due to some other factor. This latter student may qualify as a learning disabled student. The key comparison is the reading ability score (CALP), compared to the actual reading comprehension scores, considered separately from linguistic ability (e.g. K-ABC Sequential Processing score). For Bilingual students it would be necessary to compare the Spanish language CALP score (Bateria oral language cluster) to the Spanish reading comprehension score, as well as the corresponding English language scores, to confirm a learning disability.

For those students who are economically disadvantaged (considered a subset of Language disadvantage) the level of BICS and CALP can be the same. Although there are two separate problems involved, the only unifying factor is the socio-economic status. The problem in the BICS area is related to the level of language used in such a home, paired with limited opportunities to hear and use the variety of language necessary to show full fluency, especially as it relates to the prerequisites in written language. This phenomena occurs with a variety of speakers, such as those who speak black dialect, and in regional speech, such as that found in Appalachia. Concerning CALP, the more obvious limitations of limited opportunities to encounter reading material, experience a variety of situations, and limited parental training time preclude the child from having an equal experiential footing with other children. This problem limits the average child's CALP by an amount of about one standard deviation compared to the norm.

For Bilingual students, a combination of lower socio-economic level and language differences can result in more than the one standard deviation lowering of performance on Verbal tests. However, this two-pronged problem can be addressed educationally the same way that the Language disadvantage alone is addressed. At this time, it is believed that quantification of this problem should be limited to one and one third (1.333...) standard deviations in any case. This should only be applied when family and economic information
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assures that both factors are involved. The type of family considered here is the family that lived on an isolated ranchito in México, are possibly illiterate, and have immigrated to the United States.

To overcome this problem with the youngest of our school age children, it is suggested that their oral (or manual if deaf) language proficiency be measured prior to entering school. Those who do not have the Oral language prerequisites for reading should receive training in oral language, and others will begin the reading task immediately. For those who need oral language training, a curriculum needs to be available.

There are many in the language acquisition field who claim that there is no way to implement an oral language training program due to the nature of language acquisition, that language growth is a natural process and can not be taught. In any event, it would seem that we educators should at least know how to provide situations which would encourage language growth. In order to know which situations are right for a given child, we would then need to have a sense of order, or a sense of scope and sequence (curriculum). A possible conclusion then, is that there exists a curriculum for oral language which is a necessary prerequisite for written language at each grade level.

Of course, much of the oral language acquisition process occurs outside of the classroom. Television, daily contacts and discussions with friends and acquaintances, newspapers and other reading activities, and all of the other daily activities which involve contact with language allow one to progress through the sequence to full fluency as an adult. As reading skills increase, the need for a separate Oral language curriculum fades. After attainment of third grade level reading skills, a separate curriculum for oral language may not be necessary. Instead of a separate category, most (if not all) oral language needs can be placed in subject matter areas under "skills".

For the early years through third grade level, it would appear that it is critical that all students have their oral language skills checked. If found lacking in this area, they would need to have remedial oral language stimulation. As children have the innate capacity for rapid language acquisition during these years, it would seem that we only need to structure situations where such learning can occur. We would need to use our oral language curriculum to devise an instrument that would tell us where the given student is within the curriculum, and then assess the child. The results would allow us to decide what the student needs to learn in order to progress orally, so the child can learn to read. However, there is more to oral language than the prerequisites to reading. There are also oral language prerequisites to science, social studies, and math and most other subject matter areas. There is also a need for the children to bring to these areas the necessary prerequisite skills as well. In order to devise an educational curriculum in the area of oral language, some way to decide...
what part is math and what part is reading may be necessary. Once this is done, it may become obvious that some students need nothing but oral language instruction, as they lack prerequisite oral skills in all areas.

It is proposed that Oral language be structured, so that there is a firm curriculum for age two through twelve, and beyond. In order to develop such a curriculum, begin with the prerequisites for understanding each subject matter area, including reading, math, etc. For example, before one can learn phoneme-grapheme correspondence, a certain level of language proficiency is necessary. Before one can perform the operation of addition, some oral facility with numbers is essential. Part of this structure exists now, but tends to be imbedded in the written language goals at the higher levels of the curriculum. It is at the lower levels, or pre-reading stages, where the curriculum is weak.

To develop a curriculum for the early years, start with existing measures of oral language proficiency. These tests were developed originally for the second language learner, and tend to reflect a sequential structure. The author is most familiar with the Idea Oral Language Proficiency Tests in Spanish and English, not all tests of this nature function in the same way. This test publisher provides a skeletal curriculum within the Oral Language test kits. This test does not claim to be a test of prerequisite skills for reading, but the author has observed that in practice, certain levels of this test are attained by readers (or pre-readers) at certain grade levels. This correlation has exceptions, but they tend to be explainable. In other words, the test has a set of prerequisite oral language skills for each grade level. This test works for oral reading, but comprehension is another area.

The reading task frequently involves other subject matter. The reader must bring a certain amount of background to the reading task, or the material is meaningless. Even a student who has perfect grammar and diction could not read a math book if the student did not have counting skills. This kind of information is critical to comprehension, but not to the basic reading skill areas. Typically, subject matter areas have a curriculum which includes oral language skills at the lowest levels, and most elementary school teachers are familiar with these. Nonetheless, the students familiarity with this area also needs to be measured to determine if remedial efforts are required. It would appear that the Verbal scales from intelligence tests measure these skills.

The educational problem we are faced with then, is how to deal with the oral language training needs of the students, and at the same time teach the subject matter areas. Ideally, there would be opportunities to assure that the oral language prerequisites are present before first grade, and that the oral language progress of each student will be monitored effectively so that all students would receive the necessary oral language training within the subject matter classes as they progress through the grades.
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As of this time, such opportunities are not provided in the lower socio-economic areas of our society. In the upper and middle socio-economic areas, there are preschools, academies, nurseries, and other child-care facilities which emphasize the prerequisite oral language skills. Some schools have the children ready to read at age four, and by the beginning of first grade, these students can write their own "books". In the lower socio-economic areas, Head Start is sometimes available, day care, and family members help with the day to day care of the children while the parent works. Head Start is typically taught by other lower income people who don't have the knowledge or training in order to accelerate the oral language of the child. Even if there is that exceptional teacher of Head Start, the parents typically don't have the resources or the know-how to prepare the child for accelerated language.

Lower socio-economic and second language learners do have opportunities to practice their prerequisite to reading language skills in these preschools, and are confronted with some of the academic or subject matter skills as well in the Head Start environment. Again, a curriculum is necessary for these workers to have in order to know where the child is within the oral language continuum.

The prevention of Language disadvantage during language acquisition would appear to be a matter of oral language instruction at the right time, in a comprehensible way. By preventing Language disadvantage, we are preventing failure in reading and subject matter areas, and reducing the need for remedial classes at the higher levels of the educational continuum.

BIBLIOGRAPHY


ABSTRACT

The author of this position paper applies Cummins' Theory of Language Acquisition to a model of assessment of the child in order to determine what the author has defined as language disadvantage. Specific tests and their application to this assessment are mentioned, and the suggested prevention technique is oral language expansion. A two-sided approach to developing the curriculum which includes both formal (Academic) and informal aspects of oral language is recommended. The overall emphasis is on the lower socio-economic and second language learners.