In a study that sought to identify the gains in English oral communication skills of Spanish speaking learning disabled students in the elementary schools, the Basic Inventory of Natural Language (BINL) and the Woodcock Language Proficiency Battery (WLPB) were administered to two groups of students aged 8 to 12 years: an experimental group of 20 students in a self-contained class and a control group of 20 mainstreamed students. Students in the experimental group received English as a Second Language (ESL) instruction using the natural approach (NAT) and the control group followed the audiolingual approach (AAT). The BINL was used as a measure of English oral production skills and the WLPB was used to measure English vocabulary comprehension skills and listening comprehension. Results reveal that elementary Spanish speaking learning-disabled students showed gains in English oral communication skills. The NAT and AAT showed instructional strengths for the acquisition of ESL in learning-disabled students. Students under the NAT treatment showed a significant difference in the Woodcock Analogies subtest by age group. (Contains 41 references.) (JP)
The Development of English Oral Communication in Learning Disabled Spanish Speaking Students in Puerto Rico

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Abstract

This study sought to identify the gains in English oral communication skills of Spanish speaking learning disabled students in the elementary schools. Subjects included 20 learning disabled students in a self-contained class who received the Natural Approach (NAT) as an experimental treatment group. The control group consisted of 20 learning disabled mainstreamed students who received English instruction through the Audio lingual Approach (AAT) treatment. The Natural Approach strategy emphasized language as communication, that in order to learn a second language, students need a rich acquisition environment in which they are receiving "comprehensible input" in low-anxiety environments.

The Basic Inventory of Natural Language (BINL) was used to measure the English oral production skills. The Woodcock Language Proficiency Battery (WLPB) was used to measure the English vocabulary comprehension skills and the listening comprehension skills. Data was analyzed using an analysis of covariance in order to statistically reduce the effects of the initial group differences. Pretest data were analyzed for each dependent measure, in order to account for group equivalence. Differences between group means standard deviations were found. Data were also analyzed using a two-way analysis of variance to determine whether there was interaction between treatment conditions.

No significant differences were found between the mean posttest scores of the NAT and AAT groups in English oral communication skills. No significant differences were found between the mean posttest scores in the oral communication skills of learning disabled English as a second language (ESL) students classified by age groups and treatment conditions on the BINL. No significant differences were found between the means of posttests scores of the Woodcock Picture Vocabulary Subtest in learning English vocabulary comprehension skills of students under both treatments. A significant difference was found between the mean posttest scores in the listening comprehension skills of learning disabled ESL students by treatment conditions on the Woodcock Analogies Subtest.

The result of this study revealed that elementary Spanish speaking learning disabled students showed gains in English oral communication skills. The NAT and the AAT showed instructional strengths for the acquisition of English as a second language in learning disabled students. Students under the NAT treatment showed a significant difference in the Analogy subtest by age group.

There is need for additional research, especially longitudinal studies with larger populations, in order to corroborate the findings of this study as well as the degree levels of English acquisition of Puerto Rican learning disabled students acquiring English as a second language over time.
The Acquisition of English Oral Communication in Learning Disabled Spanish Speaking Students in Puerto Rico

In the Puerto Rico educational public system, most self-contained special education students do not receive English as a second language (ESL) instruction. This practice has brought two different points of view from the society at large. Many Puerto Rican educators and parents are highly concerned with the need of learning disabled students to learn English for academic, survival and occupational purposes. Parents of handicapped children have suggested the need for students to acquire sufficient skills to qualify for jobs that require knowledge of English, to socialize in two languages in their communities (especially those who move to the United States) and to read school material that is only published in English. However, another group of educators believe that handicapped students cannot learn two languages simultaneously.

This last point of view may have its foundation in the belief that before 1960, bilingualism was considered to be negative to children (Jespersen, 1922; Macnamara, 1966; Saer, 1923; Tireman, 1955). Also, language acquisition research indicates that while all students develop language, that for learning disabled students mature articulation skills and fluency, the period of normal articulation deviations and non-fluency may be extended (Lerner, 1985; Wigg & Semel, 1984). Thus, Puerto Rican educators welcome projects that look at English acquisition in learning disabled students.

Learning disabled students have frequently been described as exhibiting a variety of language and communication difficulties (Spekman & Roth, 1988). The literature mentioned the following characteristics among others: (a) difficulties generalizing patterns from one situation to another, (b) incapable of making inferences, (c) less able to use information for accomplishments of tasks, and (d) show difficulties following communicative and social rules. Spekman's (1981) work suggest that learning disabled and young language impaired children are less successful in assuming role responsibility in both speaker and listener related situations. However, more recent research (Baca & Cervantes, 1989; Cummins, 1984; Lambert, 1977; Ortiz & Garcia, 1990; Pearl & Lambert, 1962; Scott, 1973; Swain & Cummins, 1979; Willig, 1986) has confirmed that bilingualism has educational, economic, and social benefits. This study's main purpose was to corroborate if Spanish speaking learning disabled students were able to learn
oral communication skills in English. Since the Department of Education in Puerto Rico were advocating the natural approach in the teaching of English, this method was used with the experimental group.

**The Development of Oral Communication Among Learning Disabled Students**

Most of the students participating in learning disabled classrooms show language deficits (Speckman & Roth, 1988). It has been estimated that more than 50 percent of all learning disabled students have severe language deficits (Baca & Cervantes, 1989; Kirk & Chalfant, 1984). Learning disabled children have been reported to follow the normal development sequence but show significant delays in learning selected linguistic relationships (Wiig & Semel, 1974). Their features are like those of any other children, but linguistically they lack vocabulary, have a poor visual and/or auditory memory for names and may show perceptual problems (Carrasquillo, 1990; Dulay & Burt, 1980). Learning disabled children can exhibit difficulties in the process of forming verbal abstractions and developing the processes required to interpret relationships expressed in language. The oral language difficulties may lead to perception and interpretation deficits, as well as in formulating and producing spoken language (Carrasquillo, 1990; Cervantes & Baca, 1989; Willig & Semel, 1984). A significant group of learning disabled students have difficulties with figurative language. They cannot discern changes in meaning, significance, and the use of specific words, phrases, or sentences and cannot translate the concrete word meanings into generalized, and abstract concepts.

Oral communication is mentioned in the literature as related to listening and speaking skills (Brown, 1980; Cazden, 1972; Lerner, 1985). According to Johnson and Myklebust (1964), the process of producing spoken language is called "expressive language." Although the child with an expressive language disorder can understand speech and language, does not have a muscular paralysis that prevents speaking, and may even do well on non-verbal tasks, yet this child is poor in the skill of speaking. Sometimes the child needs
to develop inner and receptive language before being able to express his/her thoughts and feelings (Brown, 1980; Brown, Cazden & Bellugi-Klima, 1971; Krashen, 1982).

Oral communication skills include three areas: listening comprehension, vocabulary comprehension, and oral production. Listening comprehension is the ability to comprehend words and simple sentences, and to react appropriately to verbal instructions. Listening comprehension can be divided into at least five sequential components, each dependent upon the preceding one. The first is the ability to distinguish all the sounds, intonation patterns, and voice qualities in the second language, and to discriminate between them and similar sounds in the native tongue. The second is the perception of an entire message produced by a speaker. The third is the ability to hold that message in one's auditory memory until it can be processed. Fourth, the listener decodes what the speaker has said. The fifth and last stage is the ability to use the message and store it in the second language (Chastain, 1976).

Vocabulary comprehension entails understanding what a word means, and the ability to listen and understand recordings of the teacher's short simple stories. Also, it includes the ability to distinguish the intonation and stress of words, phrases, and commands that are heard. In this study oral communication is seen as the "homo-sapien" meaningful act and not merely as the production of sounds, words, phrases and sentences. According to Searle (1969), all linguistic communication involves linguistic acts. The basic unit of linguistic communication is not the sentence, word, or any symbol, but the production of a speech act. Searle (1969) hypothesized that speaking involves: "acts such as making statements, giving commands, asking questions, making promises, and more abstractly, acts such as: referring and predicting" (p. 16). This is the content in which oral communication is defined in this study.

Learning Disabled Students Learning a Second Language

Can learning disabled students learn a second language? The literature (Carrasquillo & Reyes-Bonilla, 1990; Cloud, 1990; Krashen, 1982; Willig, 1986) indicates that learning disabled students can learn a second language. Willig (1986), for example, stated that one reason for the failure to consider alternative
language for instruction rests in the philosophy of special educators to think that if a child has learning disabilities, dual language instruction will only lead to cognitive confusion. Most learning disabled students need to learn English as a second language to feel they are capable of doing academic work of value. Teaching a second language to learning disabled student helps them feel undiscriminated against and as having the same rights as regular students.

The language that children hear and speak always has a function: to explore, to satisfy urges and drives, to express feelings, to give commands, to ask questions and/or give answers (Carrasquillo, 1990). For learning disabled students, language more than subject matter is a socialized, communicative, and emotional enterprise. The focus will be on the message and not on the grammar (Carrasquillo & Reyes-Bonilla, 1990; Krashen, 1982; Ortiz & Garcia, 1988).

The way in which the second language is introduced plays a major role in the way children learn that second language (Cummins, 1983; Dulay & Burt, 1980; Garcia, 1980). If the second language is introduced in context, embedded, socialized, and in meaningful situations, learning disabled students will learn the second language faster and easier. Learning disabled students do not present serious cognition problems; their main difficulty is in finding the appropriate strategy or technique to learn a second language. It is the special education teacher's role to find the strategy, the appropriate situation and environment which best helps the learning disabled student to learn. In this way, the simultaneous use of linguistic, social, and cognitive strategies will allow the learning disabled student to acquire a second language. It is particularly important for special educators to communicate effectively to learning disabled students that their bilingualism is a special achievement to be greatly developed and valued. For the learning disabled, language is more than subject matter; it is a socialized, communicative, and emotional drive. They will focus on the message and not on the grammar (Carrasquillo, 1990; Cloud, 1990; Ortiz & Garcia, 1990).

Research on second language shows that the process of children's second language acquisition is similar to the process described by Brown (1980) and Cazden (1972) for first language acquisition. Dulay and Burt (1980) and Krashen (1981, 1982) stated that the second language is filtered through their first language.
Cummins (1984) postulated that if the learning disabled student acquires a basic level of proficiency in the first language, the skills can be transferred to the second language. Bruck (1978) performed a study on the performance of 147 kindergarten children with learning disabilities in early French immersion programs. She found that in the immersion program, children made good progress in listening comprehension, being rated at least average by their teachers, although the progress was slower in terms of French oral production (cited in Cummins, 1984). It can be hypothesized then that learning disabled students can learn a second language.

**Method**

*The Problem*

The purpose of this study was to identify the gains of learning disabled second language students on English oral communication skills. In this study, oral communication skills mean listening comprehension, vocabulary comprehension and oral production. Listening comprehension is the ability to comprehend words and simple sentences and to react appropriately to verbal instructions. Vocabulary comprehension is understanding what a word means, the ability to listen and understand words or phrases. Another skill that is emphasized in vocabulary comprehension is the ability to distinguish the intonation and stress of words, phrases, and commands that are heard through simple stories, poems, or songs. In this study, oral communication skills were measured by the Woodcock Language Proficiency Battery (WLPB) and the Basic Inventory of Natural Language (BINL). The WLPB's first cluster of subtests measures oral language abilities (picture vocabulary, antonyms-synonyms, and analogies). This measure of oral language ability is based upon the rationale that the abilities required to derive meaning produce meaningful responses in the execution of certain cognitive tasks, that are prerequisites to understanding and producing oral language. The BINL is a standardized instrument which is designed to assess language dominance and oral language proficiency in school-age children. The inventory yields a language profile that includes a fluency score, an average sentence length, and a level of complexity score.

This investigation sought to answer the following research questions:
1. Will there be significant gains in English oral production skills as measured by the BINL?

2. Will there be a significant gains in English listening comprehension skills as measured by the Woodcock Language Proficiency Battery?

3. Will there be significant gains in English vocabulary comprehension skills as measured by the Woodcock Picture vocabulary subtest?

4. Will there be significant differences between the natural approach group- NAT (self contained-experimental group) and the control group- AAT (mainstreamed-control group) in English oral communication skills as measured by the BINL?

Subjects

The study consisted of a group of 20 learning disabled students (self-contained) attending an elementary school in Bayamon II, Puerto Rico. The school district had an enrollment of 5,560 students from kindergarten to 12th grade, from which 206 were identified as learning disabled students. Subjects were assigned either to the experimental, or the control group by stratified random sample. Students in the experimental group received English as a second language using the natural approach (NAT); (recommended ESL methodology of the Puerto Rico Department of Education), while the control group follow the traditional audio lingual approach (AAT).

Students participating in the study were selected using the following criteria: (a) subjects were enrolled in the Puerto Rico public school system in the urban area of Bayamon. (b) subjects were in self-contained classrooms for the learning disabled and were from 8 to 12 years of age. (c) subjects were diagnosed as learning disabled by the district placement committee, and (d) subjects showed learning disorders in areas such as visual perception, visual memory and/or poor motor coordination. For comparison purposes, the control group consisted of 20 students reflecting the same characteristics but were mainstreamed to regular classrooms, and were receiving English as a second language on a daily basis as part of their regular curriculum.
The English as a Second Language Approach

The Natural Approach (NAT) was the instructional methodology used in the experiment. The NAT approach's primary instructional goal was to communicate language in spoken or written forms in natural situational activities. The importance of vocabulary was stressed, suggesting the view that in language instruction, meaningful communication utterances are important and will determine how the lexicon is exploited to produce the messages. The approach is based implicitly on the same theory of second language acquisition, namely, that in order to acquire language, students need a rich acquisition environment in which they are receiving "comprehensible input" in low anxiety situations (Asher, 1977; Krashen, 1977; 1982; Wells, 1986). There was an absence of error-correction, and there was no attempt of the explicit teaching of rules (Brown at al., 1971; Brown & Hanlon, 1970; Krashen, 1982). Language was introduced in the classroom in a "natural environment" as similar as in the acquisition of the first language, with highly motivating experiences and promoting the development of receptive language. The teacher presented experiences, talked in the second language, and the student listened and responded to the teacher commands. They were stimulated to answer short questions or express feelings or ideas in English or Spanish.

The study used three curriculum units: "Body Parts", "The Family", and "The House". The purpose of the "Body Parts" unit was to guide students in identifying their body parts, to raise their self-esteem through personal related dialogues and to develop creativity and second language vocabulary. The purpose of "The Family" unit was to familiarize them with vocabulary, related to family members emphasizing dialogues and role playing, to think and to talk aloud. The purpose of "The House" unit was to familiarize students with the rooms in their home, and with the homes in their community. Dialogues, rhymes, songs and informal conversations were emphasized throughout the unit.

For purposes of comparison, the control group used the Audio lingual approach (AAT). This approach provides students with useful building blocks of language material, which they can use in communication, and from which they can generalize to parallel forms and functions. The useful building blocks or expressions and structures are to be learned to a level of automatic production through saturation practice. The initial language instruction usually takes the form of memorization of dialogues. Students give
responses to the stimuli of the dialogue sentences, first memorized and then with sentence variations (Fries, 1965). The grammar aspect is learned through drilling in substitution, expansion, or conversion of elements in the language patterns. In the drilling structure, quick exposure with immediate confirmation of the correct form is the focus.

Results

The analysis of the data found that all students acquired English oral communication skills (See Table 1).

Table 1. Mean Scores by Variables and Treatment Conditions on the Pretests and Post-tests.

<table>
<thead>
<tr>
<th>Variables</th>
<th>NAT</th>
<th>AAT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>Oral Production (BINL)</td>
<td>133.30</td>
<td>147.15</td>
</tr>
<tr>
<td>Vocabulary Comprehension (WPVS)</td>
<td>77.80</td>
<td>75.75</td>
</tr>
<tr>
<td>Listening Comprehension (WPLT)</td>
<td>259.60</td>
<td>284.00</td>
</tr>
</tbody>
</table>

Table 1 summarizes the mean scores by variable, and treatment condition on the pre and post-tests. Both instructional approaches (NAT and AAT) showed mean score gains and strengths. Although, students showed gains in English oral communication, no significant differences were found between the mean post-test scores of the Natural and Audio lingual Approach groups in English or communication skills on the Basic Inventory of Natural Language Test.

Table 2 indicates a summary of the analysis of variance for the WLPB pretest scores by treatment condition and age group classification. The sources of variation by treatment were found to be significant at .05 (5.01 and 9.98).
Table 2. Summary of the Analysis of Variance for the WLPB Pretest Scores by Treatment Conditions and Age Group Classification.

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean of Squares</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main effects</td>
<td>290496.05</td>
<td>2</td>
<td>145248.02</td>
<td>7.50</td>
</tr>
<tr>
<td>Treatments</td>
<td>97121.02</td>
<td>1</td>
<td>97121.02</td>
<td>5.01*</td>
</tr>
<tr>
<td>Age groups</td>
<td>193375.03</td>
<td>1</td>
<td>193375.03</td>
<td>9.98*</td>
</tr>
<tr>
<td>Treatment by age groups</td>
<td>3074.34</td>
<td>1</td>
<td>3074.34</td>
<td>.16</td>
</tr>
<tr>
<td>Explained</td>
<td>293570.39</td>
<td>3</td>
<td>97856.80</td>
<td>5.05</td>
</tr>
<tr>
<td>Residual</td>
<td>696921.97</td>
<td>36</td>
<td>19358.94</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>990492.37</td>
<td>39</td>
<td>25397.24</td>
<td></td>
</tr>
</tbody>
</table>

* p< .05

Significant differences were found between the mean post-test scores in listening comprehension skills of learning disabled ESL students by age groups and treatment conditions on the Woodcock Analogies Subtest. Students under the NAT treatment showed a significant difference in the Analogy subtest by age group (see table 3).

Table 3. Summary of the Analysis of Covariance for the Woodcock Analogy Posttest Scores by Treatment Condition and Age Group Classification with the Woodcock Pretest Scores as Covariates.

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean of Squares</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariate pretest scores</td>
<td>95636.35</td>
<td>1</td>
<td>95636.35</td>
<td>93.07</td>
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<tr>
<td>Main effects treatments</td>
<td>1346.42</td>
<td>1</td>
<td>1346.42</td>
<td>1.31</td>
</tr>
<tr>
<td>Age groups</td>
<td>6090.69</td>
<td>1</td>
<td>6090.69</td>
<td>5.92*</td>
</tr>
<tr>
<td>Treatment x age groups</td>
<td>1288.60</td>
<td>1</td>
<td>1288.60</td>
<td>1.25</td>
</tr>
<tr>
<td>Explained</td>
<td>104555.37</td>
<td>4</td>
<td>26138.84</td>
<td>25.43</td>
</tr>
<tr>
<td>Residual</td>
<td>35963.00</td>
<td>35</td>
<td>1027.51</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>140518.37</td>
<td>39</td>
<td>3603.035</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05

As an additional test in the analysis of covariance for the Woodcock Analogy post-test scores by treatment condition and age group classification with the Woodcock Analogy pretest scores as covariates, a
significant difference was found \((F= 5.92, p= .05)\) by age group. Table 3 reports the summary of the analysis of covariance for the Woodcock Analogy post-test scores by treatment conditions, and age group classification with the Woodcock pretest scores as covariates.

A significant difference in the Analogy subtest was found by age group. No significant differences were found between the means of post-test scores of the WPVS in learning disabled vocabulary comprehension skills of students under both treatments, and no significant differences were found between means of post-test scores of the WLPB in learning disabled listening comprehension skills of students under both treatments.

Conclusions

The findings of this investigation indicated that:

1. All students participating in the experiment showed gains in English oral communication skills.
2. The mean scores of the learning disabled ESL oral communication skills of the students under the NAT condition were not significantly higher than those under the AAT condition. Perhaps both methodological approaches stressed those elements that are necessary to emphasize in ESL programs: (a) use of role playing and games, (b) opportunities to communicate in the target language, (c) opportunities for testing constructive and creative utterances, and (d) opportunities for using English for functional purposes: to ask, to get information, to inform, to express anger or surprise and to express a need. Research has shown that second language acquisition requires all of the above characteristics (Carrasquillo & Reyes-Bonilla, 1990; Cummins, 1984; Ellis, 1985; Spekman & Roth, 1988). Both methods put great emphasis on these important elements.
3. The mean scores of the learning disabled ESL vocabulary skills of the students under the NAT conditions were not significantly higher than those under the AAT condition.
4. The mean scores of the learning disabled ESL listening comprehension skills of the students under the NAT conditions were not significantly higher than those under the AAT condition.
Discussion and Recommendations

The purpose of this study was to determine the English oral communication gains of learning disabled students. Findings indicated that students showed gains in English oral communication skills. The results of the investigation have practical implications for educators responsible for teaching learning disabled students. The results of this study indicate that learning disabled students can learn English as a second language. In Puerto Rico, special education learning disabled self-contained students do not receive ESL as part of their curriculum. Students participating in this study showed gains in both approaches used. Students were engaged in English listening, comprehension, and the usage of the language for meaningful purposes. Students were engaged in interactive activities, relying on listening comprehension, communication and the expression of appropriate content and vocabulary. A recommendation of this study is that all students in Puerto Rico should be exposed to learning a second language, since all children, if well guided, are able to benefit from the acquisition of a second language.

Two teachers were involved in this study. One teacher was responsible for the NAT, while another teacher was in charge of the AAT. It is difficult to assess the influence that teachers may have had in the effect of the particular methodology. It may be argued that teacher's enthusiasm and experience with the particular method may have influenced the results of the study.

It is recommended that this study be followed by an ethnographic study to observe learning disabled students' characteristics in learning a second language. A stream-of-behavior chronicles can be recorded, and patterns of Puerto Rican learning disabled students learning English as a second language can be obtained. An ethnographic study can provide other language learning behaviors not observed in this experimental study. Also, a longitudinal study on second language learning disabled students is recommended in order to assess changes in the learning disabled students who are learning ESL over time. Learning disabled students learning ESL can be sampled in intervals of 1 or 2 years over a five year period. Such a longitudinal study...
should include student, teacher, and parent interviews. Collection of documents and analysis of the pertinent documents are highly recommended.

References


