Bilingual education: is it feasible in deaf education?

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MASTER’S PROJECT
PROPOSAL

Bilingual Education:
Is it feasible in deaf education?

Submitted to the Faculty of the Master of Science Program in Secondary Education
of Students who are Deaf or Hard of Hearing

National Technical Institute for the Deaf
ROCHESTER INSTITUTE OF TECHNOLOGY

By

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(Project Advisor)
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Abstract

Bilingual/Bicultural programs are being implemented across the United States with varying degrees of effectiveness. Much of the research documenting the success and failures of such programs are performed in a typical mainstream program where English is the target language. Despite the fact that there are limited studies done in residential schools for the Deaf and hard of hearing, bilingual/bicultural programs are strongly advocated for such settings based on the success of the studies done in the mainstream programs. Due to the fact that bilingual programs do not necessarily mean that there is a bicultural component and that a bicultural program does not necessarily mean there is a bilingual component, the focus of this paper is solely on the effectiveness of bilingual educational programs. Through a literature review on bilingual education programs in both hearing mainstream programs and residential schools for the deaf, I found that bilingual education programs can be additive or subtractive and that when additive, they are effective. The elements that ensure successful implementation include a teacher who is proficient in both languages, the student is proficient in their first language and that their first language is understood and used in the home by all members of the family. Many of these elements are not found in the residential schools for the deaf and therefore it would indicate that more research is needed on the effectiveness of bilingual education programs in Deaf education. The current research findings cannot be used to support the implementation of bilingual education programs in Deaf educational settings due to the fact that the dynamics are completely different.
Introduction

Bilingual/Bicultural (eg: Spanish/English, Chinese/English etc...) programs are being implemented across the United States with varying degrees of effectiveness. The research related to such programs are conducted in hearing mainstream programs. Many people are using this research to support the use of bilingual programs in deaf education. It is critical to consider whether or not a bilingual program is feasible in deaf education. In order to determine this, we need to: (1) develop a clear definition of bilingual education, (2) present substantial evidence supporting the use of a bilingual program in deaf education, (3) determine the required elements for its success, (4) evaluate the conditions that may hinder the effectiveness of a bilingual program in deaf education, and (5) to consider whether or not it has been tried in deaf educational settings. All of these factors will help to determine the feasibility of implementing a bilingual program in deaf education.

History

Bilingual education involves “…instruction in two languages and the use of those two languages as mediums of instruction for any part of or for all of the school curriculum.” (Landry & Allard 1993) According to Lambert (1993), immersion bilingual programs can be additive or subtractive. Additive bilingualism occurs when instruction encourages developing the second language (L2) without losing proficiency of the first language (L1), “…as an additive form of bilingualism occurs…children with no fear of ethnic/linguistic erosion, can add one or more foreign languages to their accumulating skills and profit immensely from the experiences—cognitively, socially, educationally and even economically.” (Lambert 1993) Subtractive
bilingualism occurs when the L1 is gradually replaced by the L2, "...one's degree of bilinguality at any point in time would likely reflect a stage in the gradual disuse of the ethnic home language and...culture...and replaced with another more 'necessary' language and new culture..." (Lambert 1993)

In 1917, the use of a language other than English labeled people in negative ways. Bamford and Mizokawa (1992) indicated that the research done on bilingual education in the first half of the twentieth century concluded that bilingual education leads to "mental confusion" (Darcy as cited in Bamford & Mizokawa 1992). Lambert (1993), suggested that past research in bilingual education took place with immigrant/minority children who were experiencing subtractive bilingualism. These children were discouraged or punished whenever they were caught using their L1 in social or academic situations. (Cassanovia & Arias 1993) This would indicate that the L1 was not respected or encouraged and it was replaced by the L2, therefore resulting in subtractive bilingualism.

**Additive Bilingualism**

Today, research supports the use of an additive bilingual approach to educating students who have a first language other than English. Duncan & DeAvila (1979) found that, minority students had developed high levels of L1 and L2 proficiency, and performed significantly better than monolinguals and other subgroups of bilinguals on a battery of cognitive tests. Cummins, Swain & Lapkin, (1982) found that, children in French immersion programs in Canada perform better than comparison groups in some academic and cognitive skills. Cummins states, "...evaluations of bilingual programs for minority students in Canada and the USA ...and many other countries report that students taught through a minority language for all or part of the school day, perform at least as well ... in majority language academic skills as equivalent
students taught through the majority language for all or most of the school day. In some cases there is a slight initial lag in the development of the majority language academic skills but this usually disappears by the middle grades of elementary school and in many cases the bilingually-instructed students have shown superior performance by the end of elementary school.”

(Cummins 1984 in Dunkirk 1995 p.139)

Winsler, Diaz & Espinosa (1997), performed follow up research to a study done by Rodriguez, Diaz, Duran, & Espinosa (1995). In this study they focused on two questions. First, they wanted to see if the patterns of bilingual language development remained stable over time with continued attendance in a bilingual preschool, and whether or not the findings in the first study could be repeated with a different group of children. They set up a longitudinal sample, which consisted of 43 of the original 49 subjects and a replication sample comprised of 48 new children, from the same community as the first group. In the preschool, the teachers were to spend half of the day speaking English and the other half of the day speaking Spanish. Their findings indicated that the replication group made significant gains in both Spanish and English language abilities over the course of one year. They indicated that no evidence was found to suggest that the children’s Spanish language proficiency suffered in anyway by the exposure to English and that the children’s receptive language, productive language, and language complexity in Spanish increased significantly as did the children in the control group. Winsler et al, indicate that although the English skills of both groups improved over time, the preschool group made greater improvements during the year in English word and narrative production compared to the control group. The longitudinal follow-up study indicated that the bilingual language development patterns continued and strengthened a year later as the two groups of children reached their fifth birthday. In addition, they indicate that both groups continued to
show significant improvement over a full two-year period in both Spanish and English language proficiency and the preschool group made greater gains over the control group. Winsler et al. conclude that, "high quality bilingual preschool experiences promote the development of both Spanish and English language competence, rather than impede the development of Spanish proficiency as has been suggested...even though young language minority children experience great pressure from peers, schools and society to adopt English as their primary language, there is little evidence that Spanish language loss occurs in the process, at least, not for young children." (p.5)

Bamford and Mizokawa (1992) performed a longitudinal study with Spanish-Immersion children in Washington State. They compared the language and mathematics achievement of additive bilingual and monolingual children. Bamford & Mizokawa cite Bialystok (1986a, 1986b) as finding that contemporary research indicates that additive-bilingual children out perform their monolingual counterparts on tasks requiring high levels of cognitive control. They found no significant differences between the groups in mathematic achievement. In relation to language achievement, the results showed that the two-way bilingual children out performed the immersion children in word recognition, spelling and language subtests. They state, "... while an earlier report of this longitudinal view had shown significant gains in non-verbal development by the Spanish immersion children in second grade, the mathematics and language achievement data do not indicate a corresponding advantage for the immersion children at the fourth and fifth grades." (p.23)
Critical Elements of Bilingual Education Programs

There are several hypotheses as to how additive bilingual education can be most effective. Generally speaking, it seems as though the most important key factors are early acquisition of the first language to a proficient level before introducing the second language, the equal use of both languages for a variety of academic subjects, respect for the home language and fostering an environment that supports the home-school relationship.

Diaz (1986) offers three hypotheses:

1. Two worlds of experience
   “…the bilingual-bicultural experience forces young children to de-center and move out of egocentric perspectives at a much earlier age than their monolingual peers.” (p.75)

2. Code-Switching
   “…when a bilingual child is frustrated or blocked when performing a task verbally, he has the possibility of switching to the second language, starting the problem once again with a fresh and different perspective.”

3. Objectification
   “Bilingual children have two words for each referent and early on are forced to realize the conventional nature of language…The awareness of another language ultimately leads to an awareness of one’s own language.” (p.77)

It is Cummins (1984) who suggests that the bilingual child must reach threshold levels of linguistic proficiency in order to avoid cognitive deficits, in doing so, this will allow the positive aspects of becoming bilingual to influence cognitive growth. As cited in Durkin 1995,
Cummins 1984 states, “...if bilingual children attain only a very low level of proficiency in one or both of their languages, their long-term interaction with their academic environment through these languages, both in terms of input and output is likely to be impoverished.” (p.137)

Cummins also states, “When minority students’ L1 proficiency is strongly promoted by the school program, the resulting additive bilingualism appears to entail some subtle linguistic and possibly cognitive benefits.”(p.137) and “...it is particularly important to communicate effectively to them (students) that their bilingualism is a special achievement to be valued and developed.”(p.138)

Landry and Allard (1993), suggest, “…complete additive bilingualism would encompass: a) a high level of proficiency in both communicative and cognitive-academic aspects of L1 and L2; b) maintenance of a strong ethnolinguistic identity and positive beliefs toward one’s own language and culture while holding positive attitudes toward the second language and that group’s culture; c) the generalized use of one’s own first language...without one’s language being used exclusively for less valued social roles or domains of activity.” (p.5)

Clearly the research supports an additive bilingual program for children. Lambert (1993), suggests transitioning away from subjective bilingual programs through transforming the subtractive bilingualism into additive bilingualism. Lambert states, “...a dual track education model that emphasizes the use of the non-English home language as the major instructional language in the early grades and ...introduces a separate English-language instructional component when it is certain that the child’s home language has taken roots and is a secure base of adding the new language.” (p.37) It is important to stress the acquisition of the child’s first language, ensure that the method in which the first language and the second language are used are appropriate, (90/10, - 75/25, - 50/50, - 25/75, -10/90) and that the home-school connection is
encouraged and respected by all involved in order for the additive bilingual education program to be effective.

**Method**

A multi-method approach will be taken in regard to bilingual programs. Through a literature review a clear definition will be established of bilingual education, evidence in regard to bilingual education in the hearing mainstream and deaf setting will be considered, conditions required for the success of bilingual programs will be determined as well as the conditions that may hinder the effectiveness of a bilingual program. Pertinent to deaf education, a survey will be conducted to obtain information that is not available in the literature. The questions will consider: (1) How many deaf students are enrolled, (2) How many teachers (hearing and deaf) are on staff, (3) How many students and teachers come from families where both parents are deaf, (4) How many students and teachers come from families where both parents are hearing, (5) How many students and teachers come from culturally Deaf families where ASL is the primary language.

It is anticipated that through the survey, the critical elements necessary for effective bilingual programs will either be present or not. The results will then be examined relative to the descriptive statistics of mainstream programs in regard to the racial and ethnic backgrounds found in mainstream programs.
References


January 28, 1999

South Dakota School f/t Deaf
Superintendent
1800 East 10th Street
Sioux Falls, SD 57103-1899

Dear Superintendent:

I am currently employed by the National Technical Institute for the Deaf at Rochester Institute of Technology. I am also a graduate student in secondary education of students who are deaf and hard of hearing. I am involved in research related to students’ language backgrounds which are critical to the student’s educational process. I am enclosing a brief survey in the hopes that you will take some time to complete the chart.

This project is the capstone of my experience at NTID and your participation is critical, as it would help strengthen the results of the study. Furthermore, I am planning to publish the results and I am currently in the process of preparing the manuscript. I will share the results of my study with you.

I am hoping to receive the completed survey no later than February 11, 1999. If this will be completed by anyone other than you, please include their name and title. The completed survey can be returned to me in one of four ways:

1) Fax: (716) 720-9165
2) E-mail: thimmelsbach@yahoo.com
3) Phone: (716) 473-7518 (answering machine)
4) Mail to the above address

As you can see, I am anxious to hear from you and feel your participation is critical.

Sincerely,

Kristina A. Himmelsbach
Please fill in the numbers of students for each category in the table below:

<table>
<thead>
<tr>
<th>Total Number of Students</th>
<th>Home Environment is Primarily Hearing (both parents or single parent)</th>
<th>Home Environment is Primarily Deaf (both parents or single parent)</th>
<th>Home Environment is Combination of a Deaf and Hearing Parent</th>
<th>Home Environment is Culturally Deaf Where ASL is the Primary Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades K-6</td>
<td># Students = __________</td>
<td># Students = __________</td>
<td># Students = __________</td>
<td># Students = __________</td>
</tr>
<tr>
<td>Grades 7-12</td>
<td># Students = __________</td>
<td># Students = __________</td>
<td># Students = __________</td>
<td># Students = __________</td>
</tr>
</tbody>
</table>

Please fill in the numbers of hearing teachers for each category in the table below:

<table>
<thead>
<tr>
<th>Total Number of Hearing Teachers</th>
<th>Home Environment was Primarily Hearing (both parents or single parent)</th>
<th>Home Environment was Primarily Deaf (both parents or single parent)</th>
<th>Home Environment was Combination of a Deaf and Hearing Parent</th>
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</tr>
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Please fill in the numbers of deaf teachers for each category in the table below:

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<tr>
<th>Total Number of Deaf Teachers</th>
<th>Home Environment was Primarily Hearing (both parents or single parent)</th>
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<td># Teachers = __________</td>
<td># Teachers = __________</td>
</tr>
</tbody>
</table>

Does your school participate in a bilingual program (ASL and English)?