The partial immersion program at Key Elementary School in Arlington, Virginia, was prompted by work being done in Virginia and Connecticut public schools by the Center for Language Education and Research (CLEAR) at the Center for Applied Linguistics. Established within the gifted and talented strand at the school, for most of the year the class contained 22 students: 9 Spanish speakers and 13 English speakers. Instruction was divided equally between English and Spanish. CLEAR staff provided technical assistance in program monitoring, staff development, and program review, and also facilitated access to a network of local educators. In year 1 of the program, two first grade classes were paired, both following the regular first grade curriculum but one receiving instruction for a half day in English (English language arts and mathematics) and a half day in Spanish (social studies, science, and Spanish language arts). Classroom observation; test data; and interviews with students, teachers, staff, and parents were used to assess the program in the following areas: student progress and satisfaction; school and community awareness; and parent attitudes. Recommendations were offered for program expansion to grades K-2, summer curriculum development and teacher meetings, a shared teacher planning period, opportunities for practicing Spanish, peer-peer interaction, Spanish-language library materials, and inservice education. (LB)
Review of the Partial Immersion Program
Key Elementary School, Arlington, VA

Nancy Rhodes
JoAnn Crandall
Donna Christian

Center for Applied Linguistics
Center for Language Education and Research
June 1987

BEST COPY AVAILABLE
Review of the Partial Immersion Program

Key Elementary School, Arlington, VA

I. History of the Program

During the 1985-86 school year, staff of the ESOL/HILT program in the Arlington Public Schools began to exchange information and ideas with their counterparts in the Hartford Public Schools (Hartford, CT) Bilingual Program Office. These activities were prompted by the work being done with both school systems by the Center for Language Education and Research (CLEAR) at the Center for Applied Linguistics (CAL). At one point in the spring, two representatives from Hartford visited the program in Arlington and then, in May a reciprocal visit was made to Hartford by two individuals from Arlington--Paul Wireman and Emma de Heiner. The discussions in both cases were far-ranging but dealt extensively with program models and methods for educating language minority students and the possibilities for language education for majority students.

Upon his return, Dr. Wireman set into motion a plan to establish a partial immersion program at Key Elementary School. His idea was to begin with a first grade classroom, with students from English-speaking and non-English speaking backgrounds, and to establish the class within the gifted and talented strand at that school. Instruction would be divided equally between English and Spanish. For the English speakers, this class would provide a partial immersion experience, in which they would develop Spanish language skills through the use of the language in the classroom. For the Spanish speakers, they would continue to develop their English language skills, but would also have an opportunity to maintain and expand their Spanish skills. Although it
was late in the school year, Dr. Wireman managed to contact parents of prospective enrollees, inform them of this new opportunity, and secure agreement from enough parents to make the class a reality. At the same time, a search for teachers with appropriate qualifications was undertaken, and two teachers (one for the English component and another for the Spanish component) were identified.

By the end of the summer, the program was in place. CLEAR staff agreed to provide assistance in monitoring the program, providing staff development and preparing a program review at the end of the school year. The first of many meetings took place involving Key and CLEAR staff just before the school year began, and a meeting for parents was also conducted. Visits were also arranged for teachers and interested parents to a local bilingual program (Oyster School in Washington, DC) and local immersion programs (Montgomery County, MD). As a result, staff at Key gained access to a network of local educators who were concerned with similar issues.

II. Description of the Program

A. Program Design

The Key Partial Immersion Program is designed so that "second language learning is done in a way similar to how children acquire their first language: they learn it in order to take part in meaningful and interesting communication" (from a report on the program prepared by Katharine Panfil, Foreign Language Supervisor for Arlington Public Schools). Half of each day is conducted in English and half in Spanish, providing an "immersion" experience for the non-native speakers of the language. Further, since the class includes native speakers of both languages, the students can turn to their fellow students as resources.
Two first grade classes were paired for the first year of the program. The teachers were Floe Bingham and Luisa Concepcion. Both classes followed the regular first grade curriculum, but one class received instruction for a half day in English and a half day in Spanish (the "immersion" class). With the students switching classrooms at lunch, the change from one language to another was easily demarcated. In the morning, the immersion students were instructed in language arts and mathematics in English by Ms. Bingham. After lunch, they moved to Ms. Concepcion's room where they studied science, social studies and Spanish language arts in Spanish. The companion class also switched rooms at lunch, but their instruction from both teachers was in English. This design can be represented as follows:

<table>
<thead>
<tr>
<th>Immersion class</th>
<th>Paired class</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mornings</strong></td>
<td></td>
</tr>
<tr>
<td>[English]</td>
<td>[English]</td>
</tr>
<tr>
<td>Ms. Bingham</td>
<td>Ms. Concepcion</td>
</tr>
<tr>
<td>English Language Arts</td>
<td>Social Studies</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Science</td>
</tr>
<tr>
<td><strong>Afternoons</strong></td>
<td></td>
</tr>
<tr>
<td>[Spanish]</td>
<td>[English]</td>
</tr>
<tr>
<td>Ms. Concepcion</td>
<td>Ms. Bingham</td>
</tr>
<tr>
<td>Social Studies</td>
<td>English Language Arts</td>
</tr>
<tr>
<td>Science</td>
<td>Mathematics</td>
</tr>
<tr>
<td>Spanish Language Arts</td>
<td></td>
</tr>
</tbody>
</table>

Special classes (music, art, physical education, library) occurred as scheduled in the regular first grade curriculum for both groups and were in English.

During the English portion of the day, the pilot class followed the regular first grade curriculum and used materials comparable to other first grade classrooms. During the Spanish portion of the day, the first grade science and social studies curriculum was followed, but there were not as many Spanish language materials available as in the English-medium classes for those subject areas. For Spanish language arts, there were some texts and readers, but again the supply was much more limited. Supplementary materials, such as library books, audio-visual aids and so forth, were also limited.
B. Personnel

As mentioned above, Luisa Concepcion and Floe Bingham were the classroom teachers for the first year of the program. Ms. Concepcion, a native speaker of Spanish, provided the Spanish language instruction to the immersion class. Dr. Paul Wireman, principal, assumed responsibility for all phases of implementation, and Marta Guzman, ESOL/HILT Resource Specialist at Key, gave ongoing support for the teachers and students in the program. In addition, the Foreign Language Supervisor, Katharine Panfil, assisted at the county level through support for staff and curriculum development. Other staff at Key kept informed about the progress of the students as well and provided support as needed, including the reading specialist and the department chairs.

C. Class Composition

The partial immersion class began with an enrollment of 17 children. Of these, 9 were native speakers of Spanish and 8 were native speakers of English. During the school year, five students transferred into the immersion class: three native speakers of other languages (Armenian, Chinese, and Vietnamese) who had been mainstreamed into English-medium classes, and two native English speakers. For most of the year, then, the class contained 22 students: 9 Spanish speakers and 13 English speakers. The paired class contained a smaller proportion of native English speakers and was smaller overall. Its composition changed during the year as well, but for most of the year, there were 14 students, including 5 native speakers of English, 5 native Spanish speakers, and 4 native speakers of other languages.

III. Evaluation Procedures

Arlington staff requested that CAL/CLEAR provide an evaluation of the immersion program's first year of operation. CLEAR staff who participated in
the project included Nancy Rhodes, JoAnn Crandall, Donna Christian and G. Richard Tucker. A plan was developed to address the following questions:

1. What is the English and Spanish proficiency of students in the immersion program, and how does it change over the year?

2. How well do the immersion students do in content area subjects? Do they make academic progress comparable to other first graders?

3. Are cross-cultural and language attitudes enhanced by participation in the program?

4. How do parents and other members of the school view the program?

5. How might the program be improved?

In addition to ongoing involvement by CLEAR in a variety of advisory capacities, several types of information collection activities were undertaken specifically for this review of the program.

From January through March, CLEAR staff systematically conducted classroom observations of the immersion class. Each week, one staff member spent time with the immersion class, observing both the English (morning) and Spanish (afternoon) instruction. The observations were staggered so that all the days of the week were sampled at least twice. In addition, several observations were conducted with the paired class to provide a basis for comparison of instruction in the immersion and all-English classrooms. There were as well numerous opportunities for CLEAR staff to visit the classes at other times before and after the observation period and to talk informally with the immersion teachers and other Key staff.

Several kinds of test data were collected on the students to assess their academic progress and language development. In the fall and spring, the Language Assessment Scales (LAS) were administered, to provide a measure of both English and Spanish proficiency for the immersion students. The Boehm R Test of Basic Concepts assessed the students' conceptual development in English and Spanish. Finally, the students' mastery of content area subjects was
examined from scores on end-of-unit tests in social studies, science and mathematics. We also took into consideration daily attendance when looking at the success of the program as a whole.

In order to determine participants' perceptions of the program, a series of interviews were conducted. The students were interviewed in small groups and asked about their feelings on learning in Spanish and in English. Teachers at Key were also interviewed, including those teaching in the program (Bingham and Concepcion), four teachers from other classrooms, the reading specialist, and the ESOL/HILT resource specialist. Although not formally interviewed, other staff members' perceptions were also tapped, including the principal. Finally, the parents of the immersion students were asked to describe their feelings about the program. They were interviewed in phone conversations in English or Spanish, whichever language they felt more comfortable using.

The results of these information collection efforts are described in the following section.

IV. Student Progress and Satisfaction

A. English and Spanish Language Development

The Language Assessment Scales (LAS) are used to measure English and Spanish language development through a five-part test that measures students' ability with minimal pairs (identifying words as being the same or different), vocabulary (naming an object represented by a drawing), pronunciation (repeating a word), comprehension (listening to a tape and then pointing to a picture that is described on the tape), and oral production (retelling a story). The first four parts of the test make up 50% of the total score while the story retelling makes up the other 50%. Students are rated on a scale from
0 - 5: scores 0, 1, and 2 indicate levels of a "non-speaker"; 3 indicates a "limited speaker," and 4 and 5 indicate a "fluent" (proficient) speaker.

**English Speakers** - On the English test in the fall, of the 12 native English speakers and native speakers of languages other than English or Spanish, three were at Level 3, seven at Level 4, and two at Level 5. By spring, two were at Level 4 and the rest had moved up to Level 5. The scores were comparable for the paired class.

On the Spanish test in the fall, all the non-native Spanish speakers scored at Level 1. By spring, four students had moved up to Level 2. It should be noted here that, although the scores do not show a dramatic improvement from fall to spring, the test administrator commented that there was a noticeable improvement in the students' comprehension and attentiveness during test-taking, especially during the story portion of the test. In addition, individual component test scores showed a systematic increase, even though a change in level may not have occurred.

**Spanish Speakers** - On the English test in the fall, among the 9 native Spanish speakers, one student was at Level 1, two students were at Level 3, three at Level 4, and three at Level 5. By the spring test, one student was at Level 3, one at Level 4, and seven students were at Level 5.

In the fall on the Spanish test, one student was at Level 3, three at Level 4 and five at Level 5. By spring, all were at Level 5.

Three important conclusions can be drawn: (1) the native English-speaking students in the pilot class performed as well in English as the students in the paired class (who had been receiving all their instruction in English); (2) the English-speaking students in the pilot class improved their Spanish from fall to spring, as demonstrated by their scores on the five parts of the LAS even though their overall level may not have changed; and (3) the Spanish-speaking
students in the pilot class improved their Spanish and English from fall to spring.

B. Conceptual Development

The Boehm Test of Basic Concepts is designed to measure children's mastery of concepts considered necessary for achievement in the first years of school. Boehm test results may be used both to identify children with deficiencies in this area and to identify individual concepts on which the children could profit from instruction. The test consists of 50 pictorial items arranged in approximate order of increasing difficulty. The examiner reads aloud a statement describing each set of pictures and instructs the children to mark the one that illustrates the concept being tested.

**English speakers** - On the English version of the Boehm in the fall, the native speakers of English in the pilot class averaged 45.9 items correct, while the native speakers of languages other than English or Spanish averaged 44.6. In the spring, their scores had increased to 48.1 and 47.0, respectively, an increase of 2.2 and 2.4 points. In the paired class, native speakers of English averaged 47.0 items correct in the fall and 49.2 in the spring, a gain of 2.2, and native speakers of other languages scored 45.0 in the fall and 48.0 in the spring, for a gain of 3.0. Thus, the gains for these students on the English version of the Boehm were quite similar, between 2 and 3 points.

On the Spanish version of the Boehm, the native English speakers scored 27.2 in the fall and 29.2 in the spring, a gain of 2 points. Speakers of other languages increased by 7.3 points, from 23.0 in the fall to 30.3 in the spring.

**Spanish speakers** - On the English test, the native speakers of Spanish in the pilot class scored 41.5 items correct in the fall and 46.1 in the spring, for a gain of 4.6 points. On the Spanish version, they received similar
scores, 41.4 in the fall and 45.9 in the spring, improving by 4.5 points. In the paired class, the native Spanish speakers had an average of 45.3 in the fall and 47.7 in the spring on the English version of the Boehm, a gain of 2.4 points. They were not given the Spanish test.

We can make several observations in the basis of the Boehm scores: (1) all groups of students showed gains in their understanding of concepts from fall to spring; (2) the pilot class, group by group, had gains similar to those of the paired class from fall to spring on the English test; (3) the native Spanish speakers in the pilot class made the most progress, improving an average of 4.6 points on the English version of the test and 4.5 points on the Spanish. This final observation is particularly noteworthy, since it indicates that the conceptual development of the Spanish speakers was facilitated by continued development of their native language along with English.

C. Social Studies, Science, and Math Achievement

Students in the pilot class were given 10 chapter tests in science and 7 chapter tests in social studies throughout the year. Since science and social studies are taught only in Spanish, the tests were, of course, in Spanish. The class scores for science (when each student's individual grades have been averaged) were 4 A's, 11 B's, 5 C's, and 2 D's (2.7 average on a 4 point scale). The class scores for social studies were 3 A's, 12 B's, 5 C's, and 2 D's (2.7 average). The average for the paired class for both science and social studies, where the instruction and tests were given in English, was 2.8. There was virtually no difference in science and social studies test results between the pilot and paired class.

On the math chapter tests, the paired class scored higher than the pilot class. Students in the pilot class averaged 2.3 and students in the paired class averaged 3.0. Both classes received math instruction in English.
D. **Student Satisfaction**

The majority of the students expressed a great deal of satisfaction with the partial immersion class. They eagerly expressed their opinions of the class and appeared pleased that someone was interested in what they had to say. Their main reasons for liking to study in Spanish include the following.

"If you have a friend who speaks Spanish you can speak to him."

"I like Spanish because it's fun. I like reading in Spanish and it's fun to do sometimes. I like to say things in Spanish to my friends."

"I haven't learned it yet, but it's fun to learn something new. We get hard work."

"We learn a lot. We color, we read, we watch movies, we have fun, we work, we use the computer."

When asked why some students in the class (native speakers) spoke more Spanish than others, their responses showed a keen awareness of the reasons people speak different languages.

"They know Spanish. They're born somewhere Spanish. Their mommy knows it and when they're born, they know the language their mommy knows."

"When they were little babies they started out with Spanish. When they grew up they knew how to speak Spanish. If their mother was a Spanish person, then they could speak Spanish. My mother wasn't a Spanish person so I can't speak Spanish."

We asked the students if learning in Spanish was any different from learning in English and most of them felt that it was. However, one student responded with this insight:

"It's not that different. It's just that one (teacher) speaks English and the other speaks Spanish. When Miss Concepcion speaks in Spanish everyone knows in Spanish what she's saying in English. Spanish is just English but they say it in Spanish. What they say is the same but they just say it in different languages."

E. **Attendance**

The classroom teachers reported that student attendance in the pilot program was normal throughout the year and was comparable to attendance in the other first grade classes.
V. School and Community Awareness and Parent Attitudes

A. School and Community Awareness

To get a general sense of how the immersion program fits into the entire Key School program, we interviewed staff members who were not directly involved with the immersion class, including two kindergarten teachers, a first grade teacher, and a third grade teacher. We were interested in finding out how much they knew about the pilot Spanish immersion program at the school. It turned out they knew quite a bit. They were favorably impressed and their general impressions were that (1) the teachers in the program had to do a great deal of planning, far beyond what's usually expected of classroom teachers; (2) in the team teaching approach, with one teacher teaching the children in the morning and the other in the afternoon, it was crucial that the teachers work well together; and (3) it's an appropriate type of program for Key School because of the multicultural nature of the student body.

The Arlington community has become very involved in Key's pilot program through the Arlington County Citizen's Foreign Language Advisory Committee. In a recent report to the Arlington Advisory Council on Instruction, their recommendations included (1) the continuation and expansion of the Key School Spanish immersion program and (2) implementing the Key School model at other schools and with other languages. These recommendations were sent to Virginia Governor Baliles and he responded that, "I am impressed with the program...at Key School. This program combines what we know about effective language instruction with the creativity to involve native speaking students as part of the instructional team."

B. Parent Attitudes

Overall, the parents have been very pleased with what their children have been learning in the partial immersion program. During our phone interviews
with them, many mentioned that they had had reservations during the first month or two when the children had a lot of adjusting to do—not only adjusting to the day-to-day activities of first grade but also adjusting to a new language as well. But as time went on, they felt that it became a lot easier for the children, and by November and December they were settled into the regular classroom routine. A parent whose native language is neither Spanish nor English commented, "Our daughter really likes it and that's the most important thing...and neither of her parents speak any Spanish at all."

Some of the native English speaking parents expressed concern that they couldn't help their child with Spanish homework and hoped to be able to take Spanish classes sometime in the future. The Arlington Foreign Language Supervisor has offered to provide these classes through the Adult Education Department as soon as there is a group of 10 interested adults.

The English speaking parents offered various reasons for enrolling their children in the program, including:

"It gives him every chance possible to do well and have a good education."

"Immersion is a great way to absorb language with little effort."

"I thought it was an exciting program and I wanted it for my daughter since I've always found languages very difficult myself."

The Spanish speaking parents expressed equal satisfaction with the program, but for different reasons. They felt that the immersion program gave their children a wonderful opportunity to keep up their Spanish. Parents commented:

"My husband and I feel that it's best for our child to stay in the program to learn Spanish instead of just trying to pick up Spanish at home. At school he learns better than at home. We want him to keep up his Spanish and we tend to speak too much English at home."

"I want my child to learn two languages, and it's very important that he doesn't forget his Spanish."
One parent summarized the general feeling of other parents by commenting, "We would like our child to continue immersion in the second grade. Key School has run the program very well. They've kept us informed on the progress of the program which is crucial. I like the openness they've had—we could visit the classrooms whenever we wanted."

Thus it is not surprising that all but 2 of the parents were definitely planning on enrolling their child in the second grade immersion class in the fall. (Of the two, one family was leaving the area so the child would not be able to participate, and the other was still undecided.)

VI. Recommendations for the Key School Partial Immersion Program

Because the Key School Partial Immersion Program has had such a promising first year, our major and most important recommendation is that the program should not only be continued, but also expanded. Here we are in agreement with the Arlington County Foreign Language Advisory Committee, who also recommended that a kindergarten and second grade class be added, while continuing the first grade program, permitting those first grade students enrolled in this year's program the opportunity to continue in a partial immersion program and also enlarging the opportunities for other students in the County to participate in innovative language education programs.

To strengthen the program even more, we are offering the following recommendations:

1. Summer curriculum development and teacher meetings should be encouraged.

This year, the two participating teachers were forced to develop curricula and plan activities throughout the year since there had been limited start-up time for the program. However, before next year there is adequate time for the participating teachers to meet and to work together to design a carefully structured and integrated program, reducing the demand for daily discussions.
and meetings to ensure that the program being offered by the paired teachers is integrated and complementary. A clearly articulated curriculum will be especially important for next year, if grades K and 2 are added to the sequence. All kindergarten, first, and second grade teachers, resource personnel, and key staff should be involved in the summer meetings.

2. A common planning period for paired teachers should be scheduled. This year, the paired first grade teachers did not have a set time in which they could meet together to coordinate their instructional programs and discuss problems. As a result, they gave up lunch time, arrived early and stayed late after school, and found brief intervals in which they could meet. Next year, paired teachers should have the same time set aside as a planning period, with students from both classes assigned to another teacher or activity to keep the time truly free for planning.

3. Paired classes should continue to meet next to each other. It was helpful that the paired teachers had classrooms right next to each other this year, enabling them to briefly discuss particular students or plans without needing to leave the classroom area. This pattern should be retained in the future, with classes either next door to each other or in close proximity.

4. Increased opportunities for acquisition and practice of Spanish should be provided by the program. Since there are limited opportunities for English-speaking children to acquire or practice their Spanish outside of class, more activities need to be provided for English-speaking children to learn and practice Spanish. These could include enhanced Spanish language arts instruction, which could be offered to the English-speaking students while the Spanish-speaking students are engaged in Spanish reading. Other opportunities are available daily within the classroom, where Spanish-speaking students can serve as resources to the
English-speaking students, and the reverse, but the teachers need to encourage and structure these. This year there was a very limited amount of small group or paired interaction in the classes, when such cooperative learning could have been very beneficial for all students.

5. An ongoing program of inservice education for teachers and resource specialists should be provided.

To enable teachers to continue to expand their repertoire of methods and activities for the partial immersion classes and to ensure articulation across grade levels, an ongoing series of staff development workshops should be planned, involving key personnel within the program. Others working in two-way programs in the area should also be invited, to encourage sharing among teachers in this area. Current plans to attend immersion workshops this summer provided by the Montgomery County Public Schools are an excellent step in this direction. Participation in the Advocates for Language Learning (ALL) Conference, to be held in Washington in October, is also an excellent idea.

6. Classes should encourage increased small group or peer-peer interaction.

When students have an opportunity to work together, both orally and on written tasks, their language and academic development are promoted. Although classrooms are small and relatively crowded, opportunities for more small group or paired cooperative learning should be incorporated as an integral part of the instructional program. Perhaps several staff workshops could be directed to helping teachers to more easily incorporate peer-peer instruction in their classes. It is particularly important in a program such as this one, since a major goal of the program is increased understanding between student groups as well as improved ability to communicate in each other's languages.

7. An increased budget for Spanish language materials for classroom use and the library is needed.
The Spanish language materials available to the program this year were quite limited, requiring the Spanish teacher to adapt English language materials. For example, when she taught a science lesson in Spanish, she often had to use English titled film strips and supplementary materials. Spanish language materials for classroom use, key reference works such as encyclopedias and dictionaries in Spanish, and Spanish language pleasure reading books for the library are all needed to support the efforts in the program to help English-speaking students acquire Spanish language skills.

VII. Conclusion

As this report indicates, the Key Partial Immersion program has made an excellent start and is likely to be even better in subsequent years. We strongly urge that the program be given the support it needs to continue and expand in future years.