An Examination of Sustaining Effects in Descubriendo La Lectura Programs

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Abstract

The study discussed herein examined the long-term impact of Descubriendo La Lectura (DLL) programs on second and third grade Spanish speaking students. The purpose of the study was to determine whether former DLL students sustain the gains they made in the program as they moved through the grades. Subjects included 264 students (184 second graders and 80 third graders). One-half of the subjects were former DLL students and one-half were students who were randomly selected from the grade cohort. Former DLL students and random sample students were compared on qualitative and quantitative measures. Results on all measures indicated that DLL students were either on par or ahead of random sample students, suggesting that DLL programs have sustaining effects for Spanish speaking students just as Reading Recovery programs have for English speaking students.

Reading Recovery programs in English have demonstrated much success in helping students who are struggling to learn to read (Clay, 1989; Pinnell, Lyons, DeFord, Bryk, Seltzer, 1994). The program consists of an average of 12 to 15 weeks of individually tailored instruction provided by a highly trained certified teacher. Read-ing Recovery programs are specifically designed for first grade students. The impact of Reading Recovery programs in English has been well documented and has indicated that the majority of children in Reading Recovery programs make accelerated progress while they are in the program. Their accelerated progress enables them to catch up with their peers, and exit the program in a short amount of time. In addition to accelerated progress, and a high rate of discontinuation, Reading Recovery programs in English have demonstrated that three years after successfully leaving the program, children still retain their gains. That is, they continue to make average progress and are on par with grade level peers even though they are no longer receiving individual attention or other special reading programs

An International Journal of Early Reading and Writing
An Official Publication of the Reading Recovery Council of North America

(e.g., Clay, 1985; DeFord, Pinnell, Lyons, & Young, 1987; Lyons, Pinnell, McCarrier, Young, & DeFord, 1988; Rowe, 1995).

In 1988, the Reading Recovery program in English underwent a reconstruction into Spanish, and has continued to evolve. The Spanish reconstruction has been named Descubriendo La Lectura (DLL) and is now being implemented in eight states in the United States. Research on student acceleration in Descubriendo La Lectura programs has demonstrated that DLL, like English Reading Recovery, does enable students to catch up to their grade level peers (Escamilla, 1994a). To date, however, little research exists that examines the sustaining effects of Descubriendo La Lectura on Spanish speaking students after they leave the DLL program and continue through the grades.

The purpose of this study, then, was to assess the sustaining effects of DLL programs on students who had the program in the first grade and were in second and third grades during school year 1996-97. This study was an initial attempt to examine the long-range effectiveness of DLL.

As part of this study, it was also important to examine additional variables that apply to the teaching of Spanish speaking children in the United States that are peculiar to them and do not occur with English speaking students. For example, in the United States, English speaking students who received and were discontinued from English Reading Recovery programs continue to receive English reading instruction throughout their school years (through secondary school and college). Such is not the case for Spanish speaking students, the majority of whom are in Transitional Bilingual Education Programs in U.S. schools (Fradd & Tikunoff, 1987). In these programs, students are expected to transfer, at some point in their elementary careers, from reading in Spanish to reading in English.

The criteria for transfer from Spanish to English reading vary by school and by school district, with some school districts transitioning children as early as second grade and others as late as sixth grade. It is important to note that children can also be in classrooms labeled as bilingual classrooms and yet no longer be reading in Spanish.

Therefore, in examining sustaining effects of DLL programs in Spanish, it is important to study children's success vis-a-vis their continuing opportunities to learn to read in their native language (Spanish), as well as to examine whether any of their Spanish reading gains transfer as they begin to learn to read in English.

Given the above, a second purpose of this study was to examine the reading environments of children who have been discontinued from DLL to study how such environments may affect student progress in learning to read in Spanish and English.

During the 1996-97 school year, 2,924 Spanish speaking students participated in DLL programs across the United States (National Data Evaluation Center, 1997). Of these students, 1,575 or 81% were discontinued successfully from the DLL program. The number of DLL programs continues to grow, as does the number of Spanish speaking children entering public schools in the United States. The growth of such programs, along with an

increase in the number of children in need of them, makes it imperative to study long-term effects.

The Study

Participants

This study involved schools and teachers from certified Descubriendo La Lectura Programs in California, Arizona, and Texas. The study included 264 students (184 second graders and 80 third graders). Students were divided into groups as follows: (a) Descubriendo La Lectura (DLL) children who were served and discontinued from the program (n = 89 second graders; n = 42 third graders); and (b) random sample children drawn from second and third grade classrooms in the schools participating in the study (n = 95 second graders; n = 38 third graders). The study also included 39 schools and 63 teachers from the three participating states.

All sites are members of the Descrubriendo La Lectura Collaborative, which is a membership organization of school districts with DLL teacher leaders and teachers who are implementing certified DLL and bilingual education programs. Members of the collaborative, the purpose of which is to assure quality implementation of DLL and bilingual education programs, meet twice a year at different locations to discuss issues related to the implementation. As a part of membership, school districts sign a set of assurances to guarantee quality program implementation. Among these assurances are the following:

1. Members of the collaborative agree to participate in research on program effectiveness, particularly longitudinal research.
2. Members of the collaborative agree that Spanish speaking students in bilingual programs will continue to receive Spanish reading instruction through the third grade, although it is strongly recommended that the students continue their literacy development in Spanish beyond the third grade.
3. DLL teachers will have strong academic and instructional backgrounds in both Bilingual Education and Reading Recovery theory. They will be certified in DLL, and hold bilingual and bicultural endorsements (Guidelines for Participating in Reading Recovery in Spanish, 1995).

The guidelines above reflect standards and expectations for teachers implementing DLL programs, but do not cover basic bilingual classroom teachers. In English only classrooms in the United States, the majority of teachers are native speakers of English and have completed state approved programs to obtain teaching licenses. Such is not the case in Spanish language bilingual education classrooms. In many cases, bilingual education classrooms have personnel consisting of an English speaking teacher and a bilingual paraprofessional. In these classes, the paraprofessional is responsible for all Spanish language instruction including reading and writing. In other cases, bilingual classroom teachers hold licenses to teach, but have not ob-tained state bilingual endorsements. Thus, they may not be well versed in bilingual teaching methodology, including the

teaching of reading and writing in Spanish.

Given the above, it is important, in studies such as this one, to consider the qualifications and experiences of the persons who are directly teaching Spanish speaking children (i.e., the basic bilingual education teachers). For this study, all bilingual teachers were asked to complete a survey to determine whether they were native speakers of Spanish, and if they held full bilingual endorsements. A sample survey is included in Appendix A. Table 1 presents results of attributes of second and third grade teachers who participated in the study. Data are separated by state, and do not include DLL teachers.

Table 1 illustrates that 72% of the teachers in the basic bilingual classrooms in the study were native Spanish speakers and 80% held bilingual endorsements. The caliber of classroom teachers in this study helped to insure that former DLL students and other bilingual students had opportunities to continue to learn to read in Spanish in classrooms where instruction was provided by fully qualified, bilingual teachers. It should be noted, however, that these classrooms do not necessarily represent typical bilingual classrooms.

Research Questions

Research questions addressed in the study were as follows:

1. Are former DLL students continuing to read in Spanish in second and third grades?
2. How does the performance of discontinued DLL students compare with the performance of random sample students in Spanish reading in second and third grades based on informal measures?
3. How does the performance of DLL students compare with the performance of random sample children on the end-of-year assessment of Text Reading in Spanish?
4. How does the performance of DLL students compare with the performance of random sample children on an end-of-year standardized reading achievement test in Spanish?
5. What proportion of DLL students achieve end-of-the-year scores that are at least within the average band for their grade level in participating schools in the study?
6. What proportion of DLL students and random sample students have been transitioned from reading in Spanish to reading in English? At what grade level did the transition take place?

Table 1 Attributes of Second and Third Grade Basic Bilingual Classroom Teachers

State	Grade	Native Spanish	Billingual Endorsement	N
Arizona	Second	8	10	10
	Third	6	5	6
California	Second	4	8	13
	Third	7	5	10
Texas	Second	17	18	21
	Third	3	3	3
Total		45	49	63

The following definitions serve to clarify the various categories of children, teachers, and classrooms:

Discontinued Descubriendo La Lectura Children: Children who successfully completed the program and who were officially released from the program during the year or who were identified by the DLL teacher at the end of the year as having reached a performance level satisfactory for discontinuing.

Random Sample Children: Children who are Spanish readers and who were in the same bilingual classrooms as DLL children, but who did not receive the program.

Bilingual Classroom: A classroom where Spanish and English are used for instruction in all content areas and literacy for all or part of the school day. Children in bilingual classrooms receive their literacy instruction in their dominant or strongest language (in this case Spanish).

Descubriendo La Lectura Teacher: A teacher who has been fully trained and certified as a DLL teacher and whose training program focused on DLL.

Data Collection and Procedures

All students (DLL Program and Random Sample) who participated in the study were given two separate measures to assess Spanish reading achievement. These included: (a) Spanish Text Level Reading (developed for use with DLL program students and students who have discontinued from DLL programs); and (b) the SABE-2 Spanish Reading Achievement Test (CTB Macmillan/McGraw-Hill, 1994). In addition, schools that had transitioned children from reading in Spanish to reading in English were asked to administer two additional measures. These were: (a) the English Text Level Reading (developed for use with Reading Recovery students and former Reading Recovery students); and (b) the Gates MacGinitie Standardized English Reading Test. All subjects were given some or all of these measures at the end of the 1997 school year (the end of the school year varied by state and ranged from mid-May until mid-June). Both English and Spanish Text Level Reading measures were administered by certified DLL teachers. The SABE-2 Spanish reading achievement test and the Gates-MacGinitie English reading achievement tests were administered by classroom bilingual teachers.

In addition to the above, the research team created a survey for use in collecting information relating to student reading performance in bilingual classrooms. The Student Infor-mation Survey is included in Appendix B. The survey was designed to gather additional information related to classroom reading behaviors of Spanish speaking students. This survey provided information such as, which children were reading in Spanish, which were reading in both Spanish and English, and which had been transitioned to English reading. Information about other program interventions such as ESL, special education, Title I, and other programs was

also gathered. The survey was also used to gather teacher judgment data related to classroom reading and writing performance of former DLL and random sample students.

Results and Analysis

Research Question 1: Are former DLL students continuing to read in Spanish in second and third grades?

Data to address research question 1 were gathered from two sources. The first source was the data base established for all project sites using all four reading measures. Subjects who took the two Spanish reading measures were counted as being students who were continuing to read in Spanish. Students who took all four measures (two in Spanish and two in English) were counted as students who had either transitioned from Spanish reading to English reading or had added English reading to Spanish reading. From this data base, it was noted that all 264 children in the study were continuing to read in Spanish in the second and third grades. It was also noted that 62 students (23%) had been given the English language assessment measures as well as the Spanish language assessment measures. Further, all of the students who were assessed both in Spanish and English came from the same school district in Texas. There-fore, from these data, it would appear that the majority of students are continuing to read in Spanish and thus complying with the DLL collaborative agreements (please refer to the collaborative agreements explained earlier). Table 2 presents a breakdown of students for whom data on reading achievement in both Spanish and English were collected.

The second source of data to examine continuing opportunities to read in Spanish was taken from questions 1 and 3 from the follow-up Student Survey (see Appendix B). These questions asked classroom teachers to report in which languages students were reading and in which reading groups they were participating. Student Survey data were collected for 259 of 264 subjects. Classroom teachers did not know who the random sample and DLL students were when they completed the teacher

Table 2 Students Taking Both Spanish and English Reading Achievement Measures

Grade	Status	Spanish Only Data	Status	Spanish/English Data
Second	DLL	71	DLL	20
	Random	74	Random	21
Third	DLL	31	DLL	11
	Random	28	Random	10
Total		204		62

survey forms. These data serve to verify further that the vast majority of students (both DLL and random sample) are continuing to read in Spanish in the second and third grades. Further, most of the students who were reported to be reading in English were also reading in Spanish. However, it is noteworthy that a very small number of students in both second (n = 6) and third (n = 8) grades have been transitioned to reading only in English. Table 3 presents summary results of these sections of the Student Survey.

Research Question 2: How does the performance of discontinued DLL students compare with the performance of random sample students in Spanish reading in second and third grades based on informal measures?

To address this question, results of the Student Survey were compared across groups (DLL and Random). Informal measures consisted of obtaining teacher judgments regarding student classroom reading performance with respect to a variety of issues including: (a) special services students were receiving; (b) reading group participation; and (c) teacher judgment to predict future student performance, and to assess current attitudes toward reading and writing. To collect these informal data, classroom teachers completed a survey for each student in their classroom who was a part of the study. Student surveys were completed on 259 of the 264 total study subjects. Results of the informal assessment of student progress are presented below.

Special Services Received by Students

Data were collected to determine whether former DLL students needed or were referred to more special services than random sample students. Data presented below indicate there are no major differences in the participation of DLL students and random sample students in special programs. More than half of DLL and random sample students receive ESL as a service. This is to be expected since both groups of students are still learning English, and ESL is a basic part of a bilingual education program. All other special services such as Title I and Special Education have minimal participation by either group of subjects. From these criteria, presented in Table 4, former DLL stu-

Table 3 Language(s) for Reading Instruction During Spring 1997

Grade	Status	Spanish Only	English Only	Both	Total
Second	DLL	71	2	21	
	Random	74	4	24	
Third	DLL	18	4	7	
	Random	24	4	6	
	Total	187	14	58	259

dents are doing as well as random sample students.

Reading Group Participation

An interesting finding from the survey was that the vast majority of bilingual classroom teachers in the study continue to use ability grouping as the predominate means of grouping students for instruction. However, they use a variety of assessment techniques to make group placement decisions. Survey information indicated that bilingual classroom teachers used the following information to place students in reading groups, and that these methods were the same for both former DLL students and random sample students. Techniques used in order of their frequency were: (a) teacher observation, 66%; (b) informal reading inventory, including Running Records, 54%; (c) other information (e.g. previous teacher recommendation), 27%; (d) placement test from a basal reader series, 23%; (e) information from a student's previous report card, 15%; and (f) standardized reading test, 3%.

Using the above information, teachers reported the data presented in Table 5 with regard to student grouping for Spanish reading instruction.

These data provide further evidence that DLL students are faring well in bilingual education classrooms in Spanish reading. These data indicate that over 1/2 of the former DLL students are in the high reading groups in their second and third grade classrooms, and that DLL and random sample students are found in the high reading group in roughly equal percentages. The same can be said for the average and low groups. Again, using the criteria of reading group assignment, former DLL students are faring as well as random sample students.

Table 4 Special Services Received by Students

	DLL		Random Sample	
Service	Number	Percent	Number	Percent
ESL	80	61%	78	59%
Title 1	35	26%	28	21%
Speech	5	3%	8	6%
Special Education	1	1%	3	2%
Other	18	13%	18	13%
None	16	12%	19	14%

Table 5 Reading Group Participation

Group	DLL		Random Sample	
	Number	Percent	Number	Percent
High	74	59%	69	54%
Average	50	39%	46	36%
Low	1	1%	10	8%
Other[a]	1	1%	3	2%

[a]Class does not group for instruction

Prediction Regarding Future Reading Performance

Bilingual classroom teachers were also asked to predict how well they thought their students would do in reading in subsequent school years. These data are presented in Table 6.

Once again, these data suggest that classroom teachers predict DLL students will fare very well or satisfactorily at even higher rates than random sample students. They also predict that fewer DLL students will require supplementary assistance.

Reading and Writing Attributes

Finally, bilingual classroom teachers were asked to rank, on a scale of 1-5, each one of the students in the study using the following attributes relative to reading and writing. The data presented in Table 7 indicate the mean ranking for DLL and random sample students on each attribute.

Drawn from teachers'perspectives, these data suggest there are no major differences in student reading and writing attitudes and abilities between for-

Table 6 Teacher Prediction Regarding Future Reading Performance

Teacher	DLL		Random Sample	
Prediction	Number	Percent	Number	Percent
Very Well	66	50%	54	40%
Satisfactory	50	38%	45	33%
Will Need Extra Help	12	9%	26	20%

mer DLL and random sample students. In sum, all data indicate, in the view of teachers, that former DLL students are performing as well as other students in classroom literacy activities.

Research Questions 3 and 4: How does the performance of DLL students compare with the performance of random sample children on the end-of-year assessment of Text Reading in Spanish? How does the performance of DLL students compare with the performance of random sample children on an end-of-year standardized reading achievement test in Spanish?

For research questions 3 and 4, data were collected by administering the Spanish Text Level Reading assessments to all second and third grade subjects. These reading assessments have been especially developed for use with students in Descubriendo La Lectura programs. The text level reading measure was administered individually to children by a certified DLL teacher. Children were asked to read stories aloud while the DLL teacher took a Running Record of reading behavior and calculated an accuracy level. Children continued reading at higher levels until they reached a level where they read below 90% accuracy. The score on text level reading is the highest level read with at least 90% accuracy. Levels range from A-30.

All subjects also took the SABE-2 Spanish achievement test in reading. These tests were group administered by classroom bilingual teachers. Scores obtained were from the Total Reading score of the test. For the Spanish Text

Table 7 Reading and Writing Attributes

Attribute	DLL Mean	Random Sample Mean
Reading Ability	3.8	3.8
Writing Ability	3.2	3.4
Attitude Toward Reading	4.2	4.2
Attitude Toward Writing	3.6	3.5
Chooses to Read	3.7	3.6
Selects Books at his/her Level	4.2	4.2
Independent in Class Work	3.5	3.9
Tries Hard	3.5	3.8
Completes Work	3.8	3.7
Attends Well In Class	3.7	3.7
Responds in Group Discussion	3.4	3.6

Table 8 Results of Spanish Text Level Reading

Grade	Status	Mean	SD	N
Second	DLL	25.6	5.2	89
	Random	23.9	7.0	95
Third	DLL	28.4	4.0	42
	Random	24.9	8.0	36
Total				262

Table 9 Results of SABE-2

Grade	Status	Mean Raw Score	SD	Mean Stanine	N
Second	DLL	31.6	7.8	5	81
	Random	31.9	8.5	5	86
Third	DLL	39.1	8.0	5	34
	Random	38.0	9.8	4	40
Total					241

Level Reading, mean reading levels were calculated for each group and each grade. For the SABE-2 test, mean reading levels were calculated for each group and each grade two times -- one time using raw scores and a second using percentiles. A two-tailed *t* test was used to test for significant differences between group means. Tables 8 and 9 present results for the Spanish Text Level Reading measure and the SABE-2 test measures.

From the calculated means of Spanish Text Level Reading, it is noted that the DLL students were above their random sample counterparts in both second and third grades. For both second and third graders, *t* test results indicated that the differences were statistically significant for second graders ($t = 1.87$, $p < .001$) and for third graders ($t = 2.44$, $p < .001$). These findings provide support for the notion of sustaining effects. Former DLL students are continuing to progress in their acquisition of literacy without additional special program support. In fact, their achievement in Spanish reading is higher than the random sample students.

From the calculated means of the raw scores on the SABE/2 Spanish Reading Achievement Test, it is noted that the DLL students also performed above their random sample counterparts in third grade, and at a roughly equivalent level in the second grade. In the second grade both groups were in the fifth stanine, and in the third grade both groups were in the fourth stanine. A *t* test was conducted using the raw score data to ascertain whether these differences were statistically significant. For both second and third graders, *t* tests did not indicate that the differences between former DLL program students and randomly selected students were statistically significant. These data provide solid evidence to support the notion of sustaining effects. Specifically, former DLL students were selected for the program because they were performing far behind their peers in first grade. These data suggest they are no longer far behind, but rather reading at a level that is equivalent to their peers. These data provide further evidence that former DLL students are continuing to progress in their acquisition of literacy without additional special program support.

It is further significant to note that, at the second grade level, mean percentile scores for both DLL and random sample students are above the 50th percentile (54.2 for DLL; 55.5 for the random sample). This is an indication that DLL students are not only keeping pace with random sample students in the study, but also are achieving on par with national norms. At the third grade level, mean percentiles for DLL and random students are also similar (23.8 for DLL; 26.7 for the random sample). However, scores for both groups are below the 27th percentile. Achievement levels for both groups are well below national norms and represent a significant decrease in achievement from the second grade.

The exact causes of this decline in scores cannot be determined from the data presented in this study. However, it might be important to consider the role played by language status differences between English and Spanish. It has been well documented that, in most bilingual programs in the U.S., there is an unequal status between English and Spanish (Escamilla, 1994b; Shannon, 1995). English is the high status language, while Spanish has a lower status. As a result, after several years in U.S. schools, students begin to think there is no value in knowing Spanish. As a result, they begin to reject Spanish and resist learning in Spanish. This resistance develops at the same time that schools are putting pressure on teachers to transfer students from Spanish to English reading, and to exit them from bilingual programs.

Given this situation, it may be that the decline in Spanish reading achievement is a reaction to the message that learning in Spanish is not as important as learning in English. As Shannon (1995) reports, children and teachers respond in real ways to the "hegemony of English." It is important that any report on student achievement in Spanish in bilingual programs in the U.S. consider language status differences and the context in which bilingual education programs are implemented as they undertake studies such as this one.

Research Question 5: What proportion of DLL students achieve end-of-the-year scores that are at least within the average band for their grade level in participating schools in the study?

Research question 5 examined the proportion of DLL students who achieved end-of-the-year scores that were at least within the average band for their grade level in the schools in the study. To address this question, an average band of performance was calculated using the random sample of second grade children in this study. An average band was also calculated for third grade using the random sample third graders in the study. Average bands were calculated using both Spanish Text Reading and SABE-2 raw scores. The average band was calculated as ± .5 standard deviations from the mean. This calculation determined the upper and lower band of average performance. The numbers of students who achieved or exceeded average band performance and the percentages of total DLL students are presented in Table 10.

Table 10 Numbers and Percentages of DLL Children in End-of-Year Average Band on Spanish Text Reading and SABE-2 Spanish Reading Test

Grade	Measure	Average Band	Met Average Band Number Percent	Exceeded Average Band Number Percent	N
Second	Spanish Text Reading	20.45-27.48	39 43.8%	43 48.3%	89
Second	SABE-2 Raw Scores	27.62-36.21	37 45.6%	24 29.4%	81
Third	Spanish Text Reading	20.93-29.01	6 14.4%	33 78.6%	42
Third	SABE-2 Raw Scores	33.13-42.93	17 50.0%	10 29.2%	34

The vast majority of DLL students both in second and third grades achieved or exceeded average band performance on both measures (Spanish Text Reading and SABE-2 Raw Scores). These data provide further support for the notion that the initial positive impact of Descubriendo La Lectura Programs is sustained across grade levels.

Research Question 6: What pro - portion of DLL students and random sample students have been transitioned from reading in Spanish to reading in English? At what grade level did the transition take place?

Research question 6 was meant to investigate whether or not sustaining effects of DLL in Spanish may have transfer effects as Spanish speaking students begin to learn to read in English. To address the question, data were collected on DLL program students and random sample students who had been transitioned from reading in Spanish to reading in English. Transitioned students were given the Gates MacGinitie English Achievement Test to assess their progress in English reading.

Of the 39 schools participating in the study, only one school in one school district reported transitioning students from Spanish to English reading in either the second or the third grade. In this district, transition data were reported in second grade for 20 DLL students and 21 random sample students. The same district reported transition data in third grade for 11 DLL students and 11 random sample students.

With only one district and one school reporting transition data, it was not appropriate to do extensive data analysis, as data reported were not representative of the larger group of DLL and random sample students. Further, in this particular school district, all Spanish speaking children transition to English reading in the second grade and thus the proportion of DLL students making the transition is exactly the same as English language students. The policy is applied to all Spanish speaking students regardless of special program category.

The fact that only one district and school reported data on transition from Spanish to English and on English language achievement it is not viewed as a problem in this study. In fact, according to the guidelines for participating in

Table 11 English Reading Achievement of DLL and Random Sample Students Transitioned from Spanish to English Reading

Grade	Program	N	Mean/ sd Vocabulary	Mean/ sd Comprehension
Second	DLL	20	28.05/28.06	27.55/28.47
	Random	21	30.29/22.11	28.70/22.00
	Total	41		
Third	DLL	11	21.46/28.13	21.36/24.81
	Random	10	10.3/13.73	9.90/13.99
	Total	21		

Descubriendo La Lectura, school districts commit to keeping students in Spanish reading through the third grade. The majority of districts in this study are simply choosing not to transition students to English reading until the fourth grade or beyond.

The question about sustaining effects of DLL program and their potential for transfer to English reading programs is an important one. However, it will need to be addressed in future longitudinal studies that look at reading achievement of former DLL students in fourth grade and beyond. The majority of districts in this study are simply choosing not to transition students to English reading until the fourth grade or beyond.

Data on the English Reading Achievement of transitioned students are presented in Table 11. Data are presented only as descriptive statistics. Because of the low numbers of students and the fact that they all came from the same school district, no statistical analyses were conducted with these data and they should be discussed only in a very preliminary way. While they provide a snap-shot that suggests former DLL students are doing as well in English reading as a random sample of second graders, it must be noted that the achievement of both groups in English reading is low. Similarly, in third grade, former DLL students are doing much better in English reading than random sample students, however, achievement in both groups is low. Again, because of the low number of students in each group, these findings should be considered with caution.

Discussion

The data reported here establish that the DLL program achieved sustaining effects with Spanish speaking students who had been in DLL programs in first grade, who had been discontinued from these programs, and who were continuing to read in Spanish in second and third grades. Results of this study, considered collectively with research on acceleration of Spanish speaking students in DLL programs (Escamilla, 1994a), establish that Descubriendo La Lectura is having a positive impact on Spanish speaking students in much the same way that Reading Recovery is impacting English speaking students.

DLL children could be considered as ones in need of long-term interventions beyond DLL. As second language learners of English, they will need continued support in both their first and second languages to insure their long-term success in U.S. schools. Aside from language, children who participate in DLL have other social needs. They often are among the poorest of all school-aged children in the United States. They most likely attend large urban schools that are overcrowded and lacking in resources, and they are likely to be in classrooms with teachers who have no preparation in how to teach them. DLL is having a positive impact on these students, however, issues affecting their academic success may extend far beyond literacy instruction. DLL is helping these children become literate, but this program cannot solve the social and societal issues that are part and parcel of growing up in the United States as members of a cultural and linguistic group that is marginal-

ized and undervalued by the larger society.

Evidence of sustaining effects presented in this study include both qualitative and quantitative data. Qualit-ative data indicate that former DLL students in both second and third grades do not require special services such as Title I at higher rates than random sample students, they are as likely to be in the average or high reading group in their classrooms as random sample students, and their teachers report that their achievement in and attitude toward reading and writing are very similar to random sample students. Their teachers perceive them just as likely to be successful in reading and writing as they perceive other Spanish speaking students.

Quantitative data gathered on Spanish reading achievement on the DLL Spanish Text Level Reading indicated that former DLL students were achieving at higher rates than randomly selected students both in the second and third grades and that these differences were statistically significant in favor of former DLL students. Mean scores for the former DLL students in second grade were at level 25 on Spanish Text Reading. Mean scores for the former DLL students in third grade were at level 28 on Spanish Text Reading. Third grade results are prom-ising in that they also provide evidence for sustaining effects of the DLL program two years after discontinuation from the program, and indicate that former DLL students are continuing to progress in Spanish reading without further program assistance.

All subjects were also given the SABE-2 Spanish Reading Achievement Test. Again, DLL students were achieving at levels that were at or above their random sample counterparts in both second and third grades. For these measures, achievement differences between DLL and random sample students were not statistically significant, providing support for the notion of sustaining effects since the achievement of DLL students is similar to that of randomly sampled students. This is true because when first selected to participate in DLL, this group's achievement was far below that of all other students. The goals of DLL are to have children reach the average of their class in reading and writing, while at the same time to develop independent learning strategies. Results of this study indicate the children are achieving these goals.

Further evidence of sustaining effects is apparent in second graders' achievement on the SABE-2 where their mean was at the 54th percentile. The third graders'mean percentile on the SABE-2 was only at the 23rd percentile, representing a significant decrease from the second grade. However, this decline occurred in the third grade for both DLL and random sample students. When interpreting these data for Spanish speaking students, it is important to consider the role that language status may play in both student and teacher beliefs about the importance of literacy in Spanish.

Achievement of discontinued DLL students in second and third grades was further examined by calculating the number and percentage of former DLL students who were achieving within or above the average band of reading on the Spanish Text Level Reading measure and on the SABE-2 Test. In second grade, 92% of the former DLL students

were achieving within or above the average band on Spanish Text Level Reading and 75% were achieving within or above the average band on the SABE-2 Spanish Reading Achievement Test. In third grade, 93% of the former DLL students were achieving within or above the average band on Spanish Text Level Reading and 79% were achieving within or above the average band on the SABE-2 Spanish Reading Achievement Test.

A very small number of former DLL students in the study, who were from the same school district, were transitioned from Spanish reading to English reading during the course of the study (n = 20 second graders and n = 10 third graders). These low numbers indicate that school districts participating in the implementation of Descubriendo La Lectura are following implementation guidelines and not transitioning students before the end of the third grade. Data on English reading achievement were presented herein, however, no statistical analyses were conducted. Collecting and analyzing data on former DLL students as they transition from Spanish to English reading is of critical importance to future longitudinal studies dealing with the impact of DLL on students. However, such data should not start being collected until fourth grade, and must include only students who have had consistent and continuous instruction in Spanish reading until the fourth grade or until they have met academic criteria for transition.

Summary

In summary, results presented herein, indicate that DLL programs are affecting former students in a positive way after they are successfully discontinued from program services. Data presented here establish that the DLL program has sustaining effects in much the same manner as Reading Recovery programs in English. It must be noted that this study is the first of its kind, and there is a crucial need for further studies addressing these issues for Spanish speaking students.

Finally, it is important to state, once again, that research on Descubriendo La Lectura programs and children cannot and should not consist of simple replications of studies conducted on English Reading Recovery programs. The implementation of Spanish DLL programs has a political and social reality that is quite different from English Reading Recovery. This unique political and social reality must be considered in future research studies, in order to insure valid and reliable interpretation of study results.

As an example, in all likelihood, students who participate in and are discontinued from English Reading Recovery will continue to receive English reading instruction throughout their school careers. Such is not the case for Spanish speaking students. In many cases, basic literacy instruction for Spanish speaking students is inconsistent and often interrupted. For example, it is not unusual to find school and bilingual programs where students receive literacy instruction in Spanish one year, in English the next year, and then Spanish the following year. It is also not unusual to find programs where students are prematurely transitioned into English (Cziko, 1992; Escamilla, 1994c).

In addition, the overwhelming majority (95%) of Spanish/English

bilingual programs in the United States are transitional in nature (Fradd & Tikunoff, 1987). This means that Spanish speaking students will receive Spanish reading for only three or four years or until they are transitioned into English reading. There is strong research evidence that literacy skills and strategies transfer from one language to another (Escamilla, 1987; Krashen & Biber, 1988; Lesher-Madrid & García, 1985; Rodríguez, 1988). However, this research base must be extended to include students who were former DLL students. Future studies in this area that look at former DLL students as they begin to read in English must consider both the quantity and quality of Spanish reading instruction after students were discontinued from DLL programs. While English Reading Recovery programs will not likely be scrutinized to see if former students are applying reading skills and strategies in a second language, Descubriendo La Lectura programs most assuredly will be studied vis-a-vis transfer to the students' second language. Moreover, it is important that future studies investigate former DLL students in the upper elementary grades and examine their English reading achievement as well as their Spanish achievement.

Research in the area of Descubriendo La Lectura is promising, but must be considered to be in its infancy. Much remains to be studied. However, if basic bilingual programs are inconsistently implemented or are not operating using sound pedagogy, then the efficacy of Descubriendo La Lectura programs will also most likely be affected. It is critical, therefore, for future research to study DLL in the context of the larger school's implementation of bilingual education, as well as in the context of the sociolinguistic realities of the status of Spanish and Spanish speaking populations in the United States.

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Acknowledgments

The authors wish to acknowledge with gratitude the financial support for this project that was granted by the Reading Recovery Council of North America. Also, special appreciation goes to Carlos Manrique of the El Monte Unified School District in El Monte, California, for the countless hours of help in mailing and distributing materials for this project.

We extend our gratitude to all of the tireless Descubriendo La Lectura teacher leaders and teachers who made this project a priority when they were already over-worked and over-committed. Without their willingness to help collect data for this study, it would never have been completed. Their commitment to the cause of quality educational experiences for Spanish speaking children is commendable. Otra vez, muchisimas gracias.

In addition, we wish to acknowledge the following school districts that participated in this research project:

Arizona

Tucson Unified School District

California

ABC Unified School District
Bakersfield City Schools
Baldwin Park School District
Cajon Valley School District
Chula Vista School District
Corcoran Unified School District
Delano School District
Fresno Unified School District
Hilmar Unified School District
Lindsay Unified School District
Los Angeles County Office of Education
Long Beach Unified School District
Los Nietos School District
Madera Unified School District

Napa Valley Unified School District
Patterson School District
Planada School District
Pomona Unified School District
Porterville Unified School District
San Diego City Schools
San Diego Unified School District
Santa Rosa Unified School District
Sonoma Unified School District
Vacaville Unified School District
Visalia Unified School District
Texas
Carollton-Farmer's Branch Independent School District
Fort Worth Independent School District
McAllen Independent School District
Spring Branch Independent School District
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Appendix A

Descubriendo La Lectura
Follow-Up Study
1996-97
Teacher Information Form

DLL Teacher Leader: Please complete the following information for each classroom teacher from whom you have taken children for this study. This includes teachers who teach former DLL students and randomly selected students.

Teacher Name:_____

Grade: _____ District: _____

Address:
_____
_____

State Bilingual Endorsements: _____Yes _____ No

Native Spanish Speaker: _____ Yes _____ No

Number of Years Experience as a Bilingual Teacher _____

Comments:_____

Appendix B

Descubriendo La Lectura
Follow-Up Study
1996-97
Student Survey

Complete for each student in the DLL study (former DLL and random sample students).

Child's Name: _____

Grade: _____ School: _____

District: _____

1. Student is currently reading in:
   ____ Spanish ____ English ____ Both

2. What special services are currently being received by the student:
   ___ ESL
   ___ Title 1
   ___ Speech
   ___ Special Education
   ___ Other (Please specify)
   ___ None

3. In what reading group is the student currently participating?

Spanish	English (if applicable)
___ High	___ High
___ High Average	___ High Average
___ Average	___ Average
___ Low Average	___ Low Average
___ Low	___ Low
___ Other (e.g., no ability groups)	___ Other (e.g., no ability groups)

4. What information did you use to place students in these reading groups?

Spanish	English (if applicable)
___ Basal Reader Test	___ Basal Reader Test
___ Standardized Reading Test	___ Standardized Reading Test
___ Informal Reading Inventory	___ Informal Reading Inventory
___ Teacher Observation	___ Teacher Observation
___ Previous Student Report	___ Previous Student Report
___ Other (Please describe)	___ Other (Please describe)

5. What grade did the child receive in reading on the last report card? (Explain your assessment system if it is other than grades)?

6. In what basal reader is the child currently reading? (Indicate grade level)
   If no basal reader is used, approximately what grade level is the child reading?
   How did you determine this?

7. How do you predict the child will perform in reading next school year?
   ___ very well
   ___ satisfactory
   ___ will need extra help

8. Rate the attributes that best describe this child by rating him/her on a scale of 1-5 (1=weak; 5 = strong).

Spanish	English (if applicable)
___ Reading Ability	___ Reading Ability
___ Writing Ability	___ Writing Ability
___ Attitude Toward Reading	___ Attitude Toward Readingg
___ Attitude Toward Writing	___ Attitude Toward Writing
___ Chooses to Read When Time	___ Chooses to Read When Time
Allows	Allows
___ Selects Books on His/Her Own	___ Selects Books on His/Her Own
___ Independent in Class Work	___ Independent in Class Work
___ Tries Hard	___ Tries Hard
___ Completes Work	___ Completes Work
___ Attends Well in Class Work	___ Attends Well in Class Work
___ Responds in Group Discussions	___ Responds in Group Discussions

9. Other comments about the student as a learner of two languages: