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ABSTRACT

A group of studies of children's understanding of narratives, the degree to which knowledge available in the child's first language is used in understanding second-language input, and the relationship between knowledge use in two languages as children become bilingual and acquire age-appropriate literacy skills are discussed. The subjects were bilingual children in kindergarten through fifth grade with either English or Spanish as a first language. Their reading and listening comprehension of selected Aesop's fables was measured by means of story recall, "why," and moral-of-the-story questions. The results indicated that knowledge used to guide story comprehension in a first language is also used to guide it in the second language, contingent on mastery of basic auditory or orthographic coding skills in the second language. This finding reinforces the instructional practice of using the primary language as the language of instruction while English is introduced as a second language. In addition, while there may be some skills that require direct instruction, on which students may be expected to differ as a function of classroom lesson plans, these seem to be transitory, not persisting for more than one grade. The data also indicate that narrative comprehension skills as assessed in these studies are no different for students learning in either one language or two during elementary school. (MSE)

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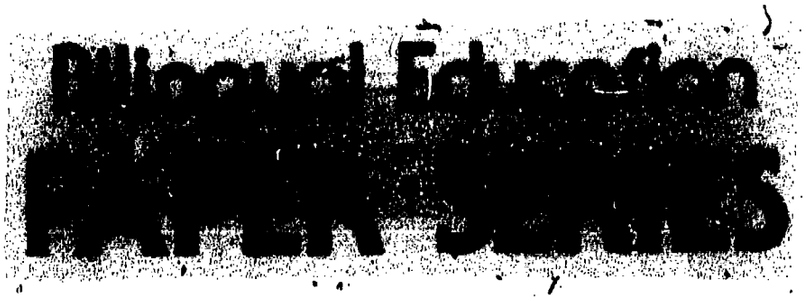

APPLYING FIRST-LANGUAGE SKILLS TO SECOND-LANGUAGE COMPREHENSION: NARRATIVE COMPREHENSION BY SPANISH-ENGLISH SPEAKERS

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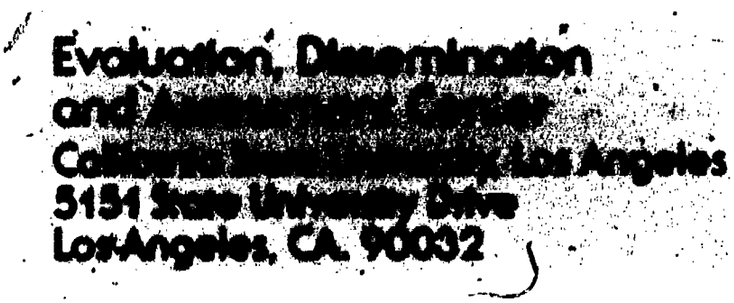

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APPLYING FIRST-LANGUAGE SKILLS TO SECOND-LANGUAGE COMPREHENSION: NARRATIVE COMPREHENSION BY SPANISH-ENGLISH SPEAKERS*

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The narrative story holds an importance place in children's lives. The narrative form originated in the oral tradition, prior to the invention of writing systems. Narratives were a primary mechanism for preserving and transmitting a culture's history. A relatively fixed structure for the narrative developed, probably to make such tales easier to remember. As writing systems evolved, the functions of narratives broadened to include entertainment as well as the communication of societal values and mores. As with human evolution in general, narratives have an early place of importance in a child's development. Along with conversation and dialogue, narrative stories are among the first types of organized language to which children are exposed. Many three- and four-year-olds also attempt to produce their own narratives and often do so very well.

Children's experiences with narratives lead to knowledge of the typical form of these stories and to familiarity with the sorts of situations, events, and themes comprising the content (Mandler and Johnson, 1977; Poulsen et al., 1979). These outcomes are important components in the development of literacy and in beginning reading instruction. Often, the first written language children see is dialogue; this is quickly followed by short narrative

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stories. The process of comprehending these stories depends, in part, on using previously acquired knowledge to encode the message and, later, to retrieve it. Knowledge of narrative content and form may be particularly important in children's ability to produce organized language, whether oral or written (Stein and Trabasso, 1982).

For the monolingual English speaker, knowledge acquired through oral language experiences prior to school entrance has been in English. These experiences, obviously, are applicable to written English. Barring some type of cognitive and/or language disability, the child uses this knowledge base in the classroom. For the native Spanish speaker, knowledge acquired through oral language experiences prior to school entrance has generally has been through Spanish. A significant amount of research (Caramazza and Brones, 1979, 1980; Kintsch, 1970; Lopez and Young, 1974) has addressed the question of whether bilinguals have language-specific knowledge systems or a common system. While the evidence appears to favor the common-system interpretation (Dornic, 1979; Macnamara, 1967; McCormack, 1977), we feel that this is a problematic empirical issue. The important issues concern the circumstances under which previously acquired knowledge is used in processing new language input, whether Spanish or English.

We examined children's understanding of narratives, the degree to which knowledge available in the child's first language is used in understanding second-language input, and the relationship between knowledge use in two languages as children become bilingual and acquire age-appropriate literacy skills. We used a particular type of narrative text to examine this issue: Aesop's fables.

This type of narrative has at least two characteristics that make it a good starting place. Aesop's fables are a familiar part of the literary tra-

dition of both Spanish and English cultures (Bravo-Villasante, 1973; Childcraft, 1973). In addition, educational researchers have used narratives in the assessment of language proficiency in bilingual and monolingual children (Cohen, 1975; John et al., 1970; Lambert and Macnamara, 1969). In fact, some of the most widely used language assessment instruments, e.g., the **Language Assessment Scales** (DeAvila and Duncan, 1976) and the **Bilingual Inventory of Natural Language** (1974), use story recall or story-telling tasks. However, the scoring and interpretation of performance on these instruments does not reflect current empirical work in this area. The results and conclusions regarding language proficiency may be confounded with differences in structural characteristics of the presented stories and are difficult to interpret, given the lack of basic, descriptive developmental data on story recall by nonnative English speakers in first and second languages. Finally, a number of systems have been developed for describing the organizational structure of this type of narrative (Johnson and Mandler, 1980; Rumelhart, 1977; Stein and Glenn, 1979; Wilensky, 1980).

One of the stories we used is shown in Table 1. In this structure, there are three behavioral episodes, each consisting of a beginning, reaction, development, and outcome. The beginning sets up the problem, the reaction typically relates goals and emotional responses to the problem, the development relates attempts to deal with the problem, and the outcome gives information about the result of the attempts. The fable shown in Table 1 involves three characters; two of these, the ant and the dove, interact cooperatively in all three episodes. The dove first helps the ant to get a drink and then helps save the ant from drowning. In the third episode, when the ant sees that the dove is in trouble, she helps the dove. This fable illustrates the

Table 1

SAMPLE FABLE USED IN THE RESEARCH

		The Ant and the Dove	La Hormiga y la Paloma
	Setting	Once there was an ant who was walking along.	Una vez había un hormiga que iba caminando.
First Episode	Beginning Event	Suddenly, she stopped. "I'm thirsty," said the ant.	De pronto, se paró. "Tengo sed," dijo la hormiga.
	Complex Reaction	"Why don't you get a drink of water from the river?" said a dove who was sitting in a nearby tree. "The river is close by. Just be careful you don't fall in."	"¿Por qué no bebes un poco de agua del arroyo?" dijo una paloma que estaba en una rama de un árbol. "El arroyo está cerca. Pero cuidado no te caigas en el."
	Development	The ant went quickly to the river and began to drink.	La hormiga fue al río y comenzó a beber.
	Outcome	Suddenly, the wind blew the ant into the water.	De repente, un viento aventó a la hormiga al agua.
Second Episode	Beginning Event	"Help!" cried the ant. "I'm drowning."	"¡Ayudame!" gritó la hormiga. "¡Me ahogo!"
	Complex Reaction	The dove heard the cry and went quickly to save the ant.	La paloma oyó el grito y fue pronto a salvar a la hormiga.
	Development	The dove broke a branch from the tree with her beak. Then, the dove flew over the river with the branch. and dropped it to the ant.	La paloma quebró una ramita del árbol con el pico. Después, la paloma voló sobre el arroyo con la ramita y la dejó caer junto a la hormiga.
	Outcome	The ant climbed onto the branch and floated to shore.	La hormiga se subió a la ramita y flotó hasta la orilla.
Third Episode	Beginning Event	Not long after, the ant saw a hunter. The hunter was setting a trap.	Poco después, la hormiga vió a un cazador. El cazador estaba preparando una trampa.
	Complex Reaction	He hid the trap so he could catch the dove.	El escondió la trampa para coger a la paloma
	Development	The dove was flying toward the trap. So, the ant bit the hunter's ankle as hard as she could.	La paloma comenzó a volar hacia la trampa. Así, que la hormiga mordió el tobillo del cazador tan fuerte como pudo.
	Outcome	The hunter let out a loud scream, "Ouch!" The dove heard the hunter and flew away.	"¡Ay!" gritó el cazador. La paloma oyó al cazador y salió volando.

moral, "One good turn deserves another." (Note that this tagline moral was not presented with the stories.)

We also used a second structure, again consisting of three episodes and three characters. In the second structure, the first two episodes involve goal-conflict and its resolution. A squirrel wakes up a lion; the lion is about to eat the squirrel, and the squirrel must bargain his way out of the situation. He does so, promising to help the lion some day, even though he is much smaller than the lion. In the third episode, the lion is in trouble and the squirrel does act to help him out of it. This fable illustrates the moral, "Little friends may prove great friends." Unlike the first structure, there is a more explicit obligation to help in the third episode.

We used these structures in a series of comprehension studies, involving students in kindergarten through fifth grade. Different and age-appropriate literacy skills were tested in the various experiments. Rather than describe each experiment and its results, we will discuss the data to address two issues. The first issue concerns the relationship between comprehension of Spanish-language and English-language input by students exposed to both languages. The second issue concerns the relationship between students using both Spanish and English, compared with those using only English during elementary school. Three different aspects of comprehension were assessed by using three dependent measures, outlined in Table 2. The first measure was based on a story-recall task: mean number of statements remembered. The second measure was based on a probe-question task. Four "why" questions were asked for each presented story. In answering these, children gave reasons for the actions of the various characters. A percent-correct score was derived from these data. Finally, we asked the children, "What lesson does the story teach?" We classified responses to this question into those representing

Table 2

MEASURES OF COMPREHENSION

Tasks	Derived Measures
1. Story recall	Mean number of statements recalled or summarized across.
2. "Why" probe questions (e.g., "Why did the ant go to the river?")	Percent correctly answered. (We scored more than one type of response as correct; e.g., "to get a drink" and "he was thirsty" were both scored as correct.)
3. "What lesson" question	Percent of responses that generalized from the specifics of the story. (Generalizes: "You should help others." Does not generalize: "The ant bit the hunter.")

abstractions from the story and those that did not. By abstraction, we mean generalized statements conveying a moral or general principle illustrated by the story. This type of response is not necessarily a direct result of exact memory for the presented information. A moral represents a generalization from the concrete activities depicted in the story. It is neither content-specific nor tied to particular events or characters in the story.

The experiments involved testing a variety of students. Subjects differed along the dimensions of age, language of beginning reading, degree of exposure to English-as-a-second-language (ESL) and Spanish-as-a-second-language (SSL). All testing was conducted during March and April. Table 3 gives an abbreviated description of the groups and tasks administered. They are further described as follows:

Kindergarten. A total of 21 students were tested. For 13, Spanish was the primary language. They received ESL instruction with all other activ-

Table 3

SUBJECT GROUPS, CONDITIONS, AND RECALL DATA FOR NARRATIVES

Grade Level		Groups and Descriptions	Condition	Mean Recall (Max = 28)
K	13	ESL; Spanish first language	Listen/Retell	Spanish 6.35 English 1.96
	8	Monolingual English; no Spanish instruction; reading at level		English 4.06
1	16	ESL; reading in Spanish at level	Listen/Retell	Spanish 11.9 English 9.7
	12	SSL; reading in English at level		Spanish 2.13 English 12.42
	16	Monolingual English; no Spanish instruction; reading at level		English 9.66
2	10	ESL; reading in Spanish at level	Listen/Retell	Spanish 12.15 English 9.95
	10	SSL; reading in English at level		Spanish .8 English 16.15
	8	Monolingual English; no Spanish instruction; reading at level		English 12.31
3	10	ESL; reading in Spanish at level; readiness for English reading	Listen/Retell	Spanish 14.2 English 11.9
	10	Reading in English; exited from bilingual classroom after first or second grade		Spanish 8.8 English 15.2
	10	Monolingual English; no Spanish instruction; reading at level in English		English 15.5
4	12	Began reading in Spanish; reading in English one year	Read/Retell	Spanish 18.08 English 16.96
	8	Monolingual English		English 16.31
5-6	12	Began reading in Spanish; reading at level in Spanish and English	Read/Write	Spanish 17.34 English 18.2
	8	ESL; reading in Spanish at third-fourth level; one year in program	Listen/Write	Spanish 17.56 English 13.4
	8	SSL; reading in English at level		Spanish 13.13 English 16.56
	40	Monolingual English; reading in English at level	Read/Write	English 17.53

ities in Spanish. Their scores on the **Language Facility Test** (Dailey, 1980) were zones two or three in Spanish, indicating limited proficiency but normal levels of Spanish proficiency. These children listened to both Spanish and English stories. English was the primary language of eight of the children who were from a traditional monolingual classroom. These children listened to English versions of these stories.

First grade. This sample consisted of three groups of subjects. Sixteen were children who began reading in Spanish and were receiving ESL. Twelve began reading in English and were receiving SSL. The third group consisted of monolingual English speakers who received no Spanish instruction.

Second grade. Three groups comparable to the first-grade groups were tested. There were ten each in the ESL and SSL groups and eight monolingual English speakers.

Third grade. Three groups of third graders were tested, ten subjects in each group. The first group began reading in Spanish and were receiving ESL. They had had one month of after-school instruction in readiness for English reading but had not yet begun English reading. A second group had begun reading in Spanish but had been exited from the bilingual program during first or second grade and were in monolingual English classrooms. The third group was comprised of monolingual English students who had received no instruction in Spanish.

Fourth grade. Twelve students who began reading in Spanish and had been reading in English for about one year participated. The second group was composed of eight monolingual English speakers.

Fifth/sixth grade. Four groups of fifth and sixth graders from combined fifth/sixth-grade classrooms were tested. Forty were monolingual English speakers who were reading at grade level in English and receiving no

instruction in Spanish. The remaining 28 students represented three groups in bilingual program classrooms. Twelve had begun reading in Spanish and were reading in Spanish and English at grade level. Eight were reading in English at grade level and were receiving SSL. Eight had been in the classroom for approximately one year and were receiving ESL. They were reading in Spanish at the third-fourth grade level.

The first-, second-, and fifth-grade students in the SSL component consisted of Anglos and Chicanos whose parents requested placement in a bilingual program. The fifth-grade ESL students represented recent arrivals to the district who were classified as limited-English proficient upon entrance to school. The third and fourth graders were drawn from a different school than the other students. The population in that school is predominantly Chicano and Mexican-American. The monolingual-English groups consisted of children who were classified as English proficient upon entering school and never participated in a bilingual program. At each grade level, the data are from students attending the same school.

The tasks (conditions) administered to each group are shown in the third column of Table 3. The tasks reflect types of age-appropriate activities. For example, by the fifth or sixth grade, students are expected to be able to write about information they have read, while oral production is expected in the early grades. It is important to note that we allowed children to do the recall task in the language they preferred, regardless of the language of the stories. We were interested in what they had understood and remembered and wanted a measure not confounded with production skills in the particular language. Also note that no student heard or read the same story twice. Our materials consisted of two examples of each structure with different characters and events.

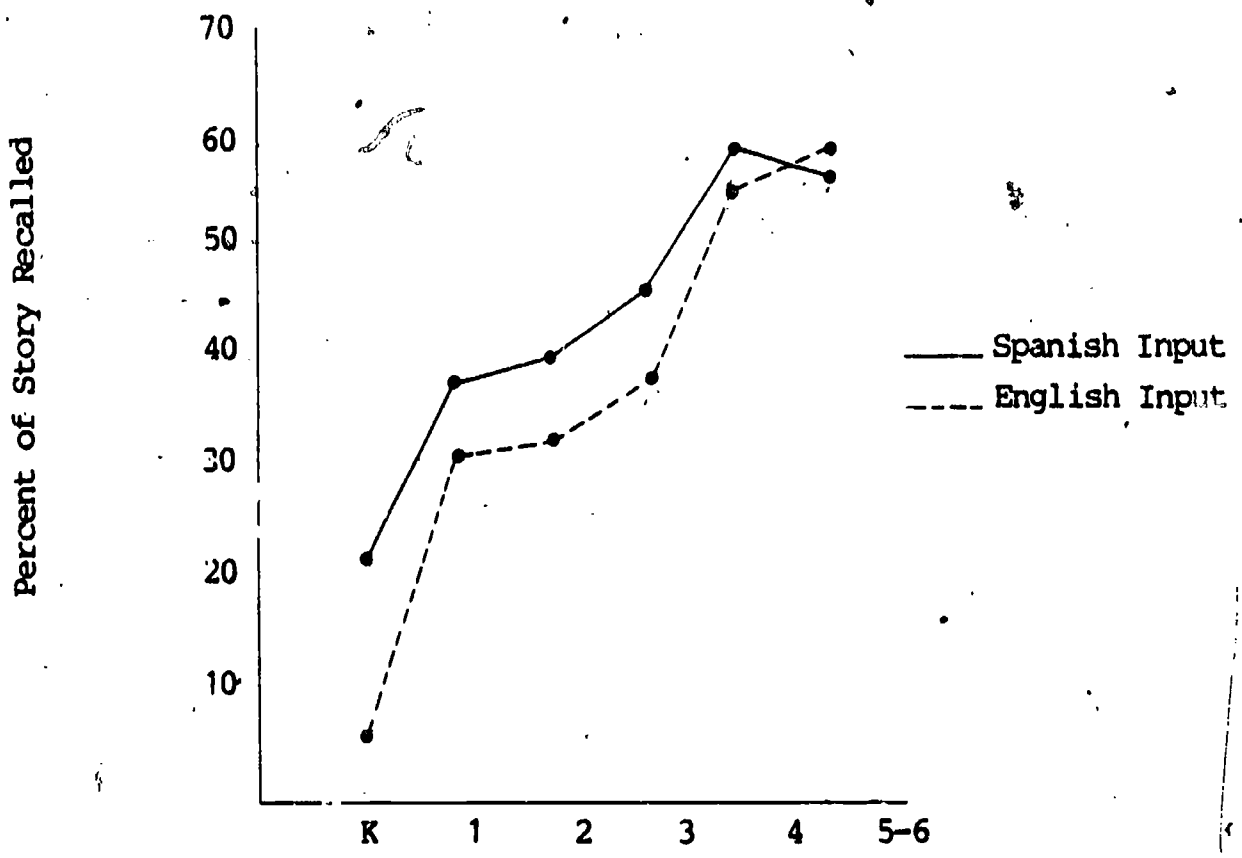
The final column of Table 3 shows the mean number of statements recalled for each of the various groups and presentation conditions. This measure represents the amount of presented story statements reproduced in gist form or summarized across. Appropriate analyses of variance indicated no structure effects, no practice effects, and no effects related to whether English or Spanish input occurred first in the experimental procedure.

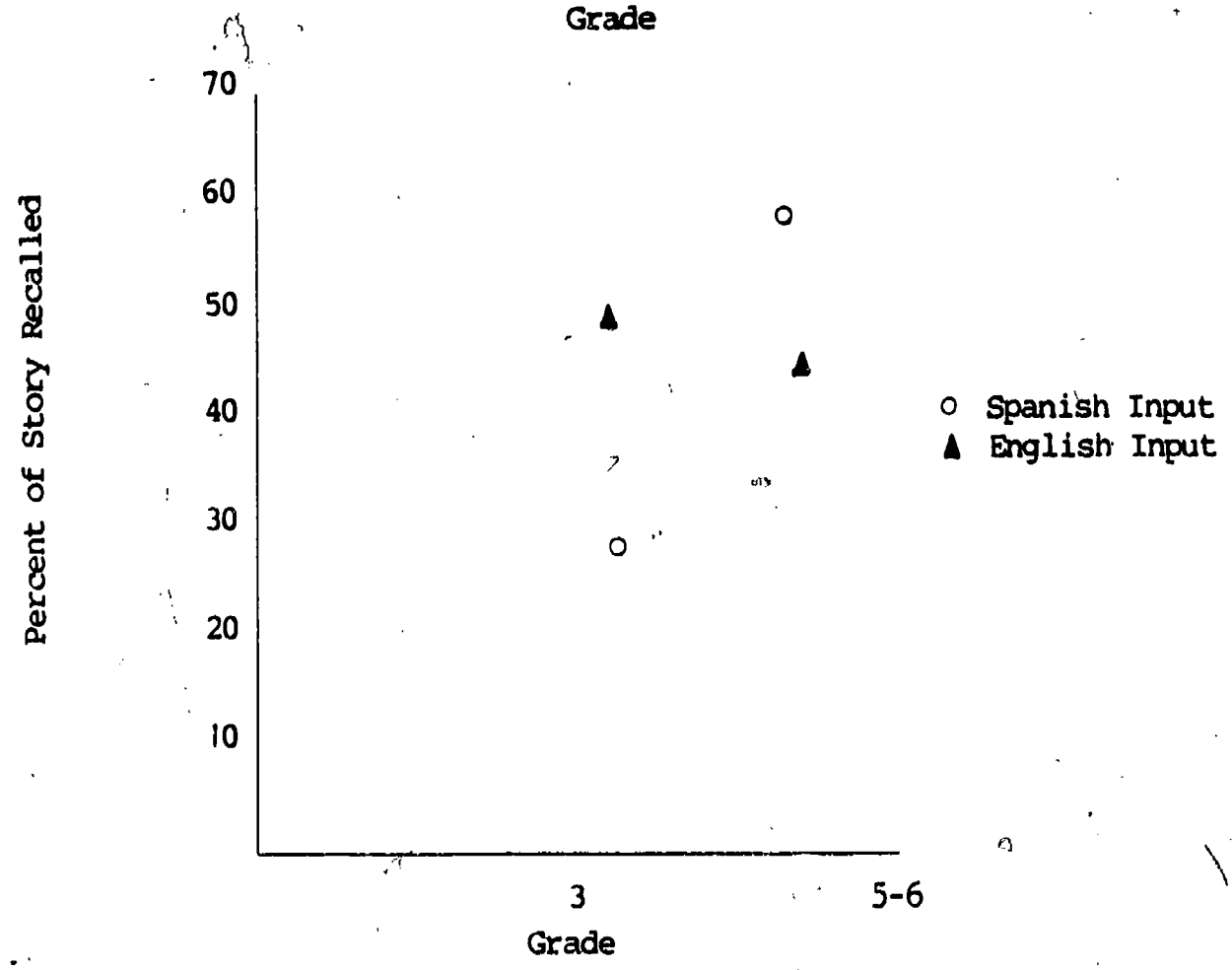
To address the issues of knowledge utilization, a series of graphs will be used. The data shown in the top graph of Figure 1 address the relationship between performance in two languages for those students who began reading in Spanish and transitioned to English reading at the end of third/beginning of fourth grade. These are students who have been in bilingual classrooms since entering school. The solid line represents Spanish-language input, the dotted line, English. Significance tests on the differences between the means for Spanish versus English input at each grade level indicated that the differences are significant only for the kindergarten children [$F(1,12) = 9.53$, $p < .01$]. For input in both languages, there is a steady increase across grades until fourth grade. This trend is similar to previously reported developmental changes in monolingual English samples on story recall tasks.

We will focus on four additional data points, shown in the lower graph of Figure 1. The circles indicate performance on Spanish materials and the triangles, performance on English. In third grade, students who transitioned to English in first or second grade did better on English input ($\bar{X}$ = 15.2) than third graders who had not yet transitioned ($\bar{X}$ = 11.85, $t = 2.39$, $df = 18$, $p < .05$). However, their performance in Spanish was worse, [$t = 2.23$, $df = 18$, $p < .05$ (8.8 versus 14.2)]. This superiority in English appears to be temporary; the performance of the fourth grade bilingual group was equivalent for English ($\bar{X}$ = 16.96) and Spanish input ($\bar{X}$ = 18.08). The fifth- and sixth-grade

Figure 1

PERFORMANCE BY STUDENTS ENROLLED IN BILINGUAL PROGRAMS
(ESL COMPONENT)





students had been in the bilingual program for approximately one year and were reading at the third- and fourth-grade level in Spanish. Their performance with Spanish input was equivalent to that of the fourth and fifth graders. Their performance with English input ($\bar{X}$ = 13.44) was significantly lower than the fifth- and sixth-grade bilingual students ($\bar{X}$ = 18.17, $t = 2.25$, $df = 18$, $p < .05$) but fell between the performance of third- and fourth-grade groups on English materials.

An examination of the data from the "why" questions indicates a similar pattern. Of those who began reading in Spanish, kindergartners were the only group whose mean percent correct scores were higher with Spanish input than with English. In general, the mean percent correct for the eight questions (four from Structure 1 and four from Structure 2) tended to be above 65 percent for all of these groups.

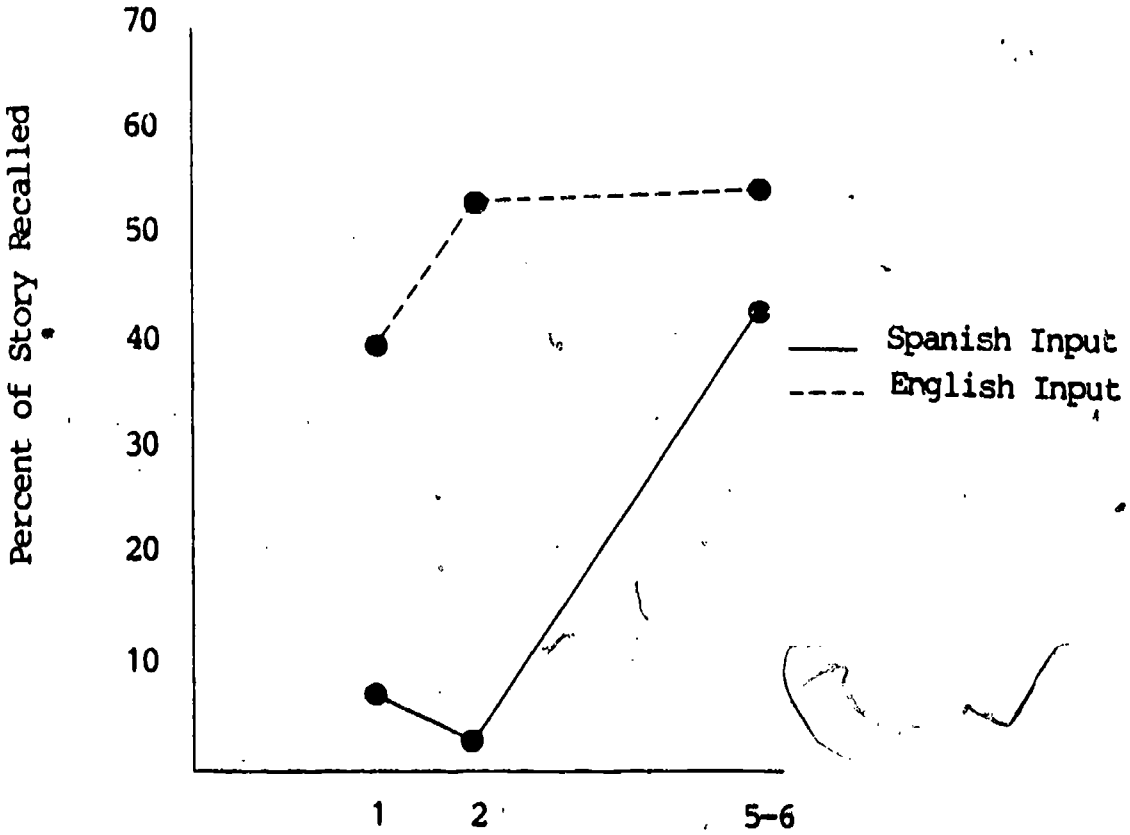
As a whole, these data indicate that, once children for whom Spanish is the first language have mastered basic auditory English parsing skills, comprehension of stories in Spanish and English reflects largely equivalent use of relevant knowledge. We came to this same conclusion for students receiving SSL. These data are shown in Figure 2.

In the first and second grades, students performed significantly better on materials presented in English over those in Spanish. However, for the fifth- and sixth-grade students the difference was no longer significant (12 percent).

Performance on the "why" questions was at ceiling levels in both languages for these fifth- and sixth-grade students. For the first- and second-grade students, performance was better after English input than after Spanish

Figure 2

PERFORMANCE BY STUDENTS ENROLLED IN BILINGUAL PROGRAMS
(SSL COMPONENT)



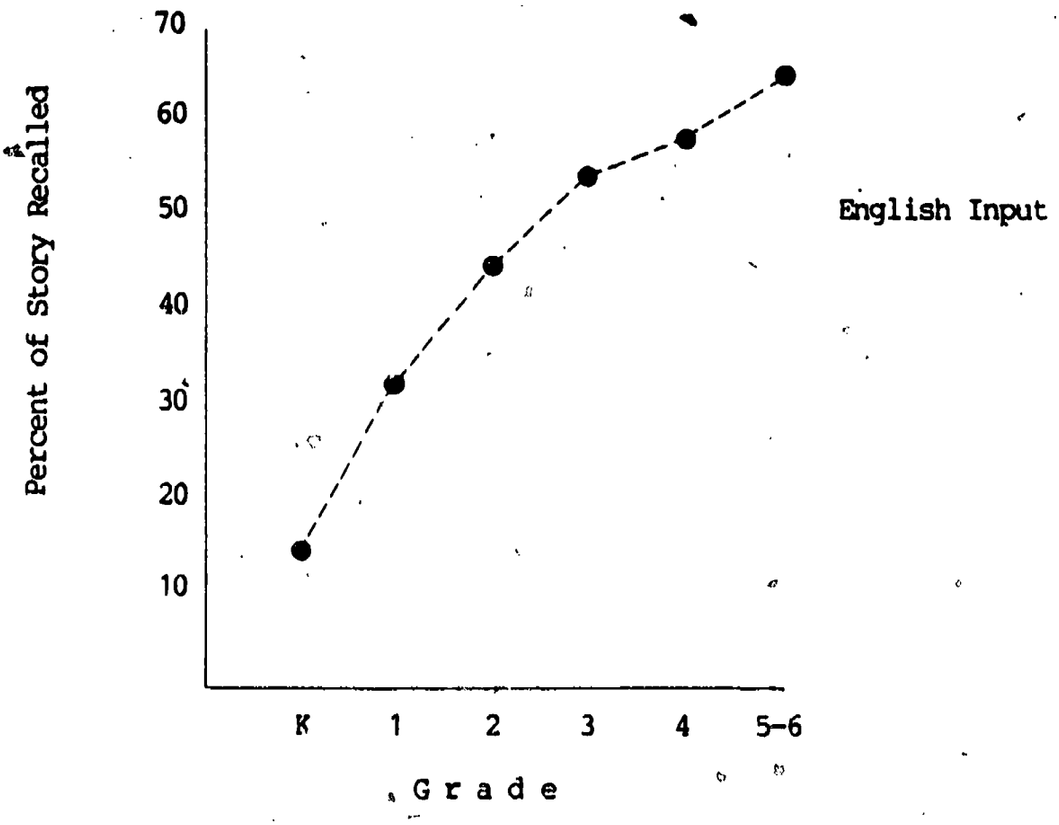
input in only three out of eight cases. Our interpretation of the slower acquisition of Spanish is in terms of instructional time differences between ESL and SSL. Spending only 30 minutes a day on Spanish, and this only "when there is time," leads to a slower mastery of basic auditory skills. It is important to note, however, that for both the ESL and SSL students, comprehension revealed by answers to "why" questions shows an earlier mastery of the second language. While this is not surprising, in our efforts to assess proficiency, this should be borne in mind.

These recall- and "why"-question data indicate that students enrolled in bilingual programs utilize prior knowledge of story form and content to similar degrees in both Spanish and English languages, once basic auditory and orthographic parsing skills are acquired.

One might argue, however, that dealing with two languages in elementary school leads to performance in both languages that is poorer than performance by monolingual students. The data in Figure 3 illustrate that this is not the case. This is the recall data for the monolingual English students. It shows an age trend similar to that of the bilingual program groups. Comparison with the bilingual recall data indicates that only in third grade is performance with English input significantly different. In the third grade, students not yet reading English do worse on English input than do monolingual English students ($t = 2.42$, $df = 18$, $p < .05$). However, performance with Spanish input for the ESL students is equal to performance with Englisn input for the monolingual English students (14.2 vs. 15.53).

Figure 3

PERFORMANCE BY MONOLINGUAL ENGLISH STUDENTS



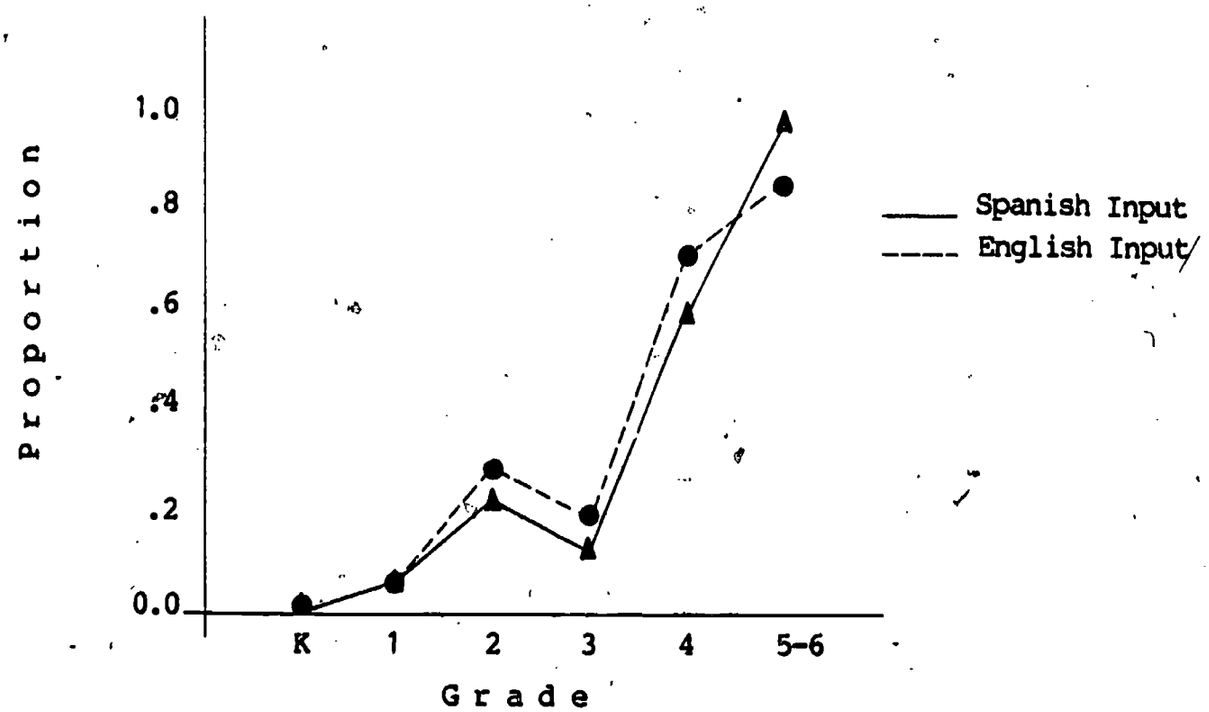
Comparison of the SSL groups with the monolingual groups suggests that first and second grade SSL students may be doing a bit better with English input. The "why"-question data for the monolingual English students again showed generally high performance (better than 65 percent correct) on most of the questions. There was only one question out of eight on which monolingual students did better than the other groups and this was only at the kindergarten level.

There was a good bit of individual variability in recall and some variability in "why"-question responses in kindergarten, first, and second grades. We have done some preliminary correlations to determine the consistency of recall and question-answering behavior within an individual. All correlations were positive, indicating that the better the recall the more correct answers to "why" questions. Thus, children with little or no recall do not answer the questions correctly. We are continuing to explore this issue.

The final set of data concerns responses to the "what-lesson" question. The response pattern mirrors the trends reported in the recall data. The proportion of responses that generalized some moral principle or rule of conduct is shown in Figure 4 for the ESL students, i.e., those who began reading in Spanish and transitioned to English reading around the beginning of fourth grade. The data indicate two important points. First, there are no differences related to language of input at any grade level. Second, it is not until the fourth grade that more than 50 percent of the responses generalize from the story. Below fourth grade, the majority of the responses to this question involve retelling information from the story. Some of the younger children also interpreted "lesson" as school lesson and responded "letters," "words," "English," or "Spanish."

Figure 4

RESPONSES OF ESL STUDENTS TO "WHAT-LESSON" QUESTIONS

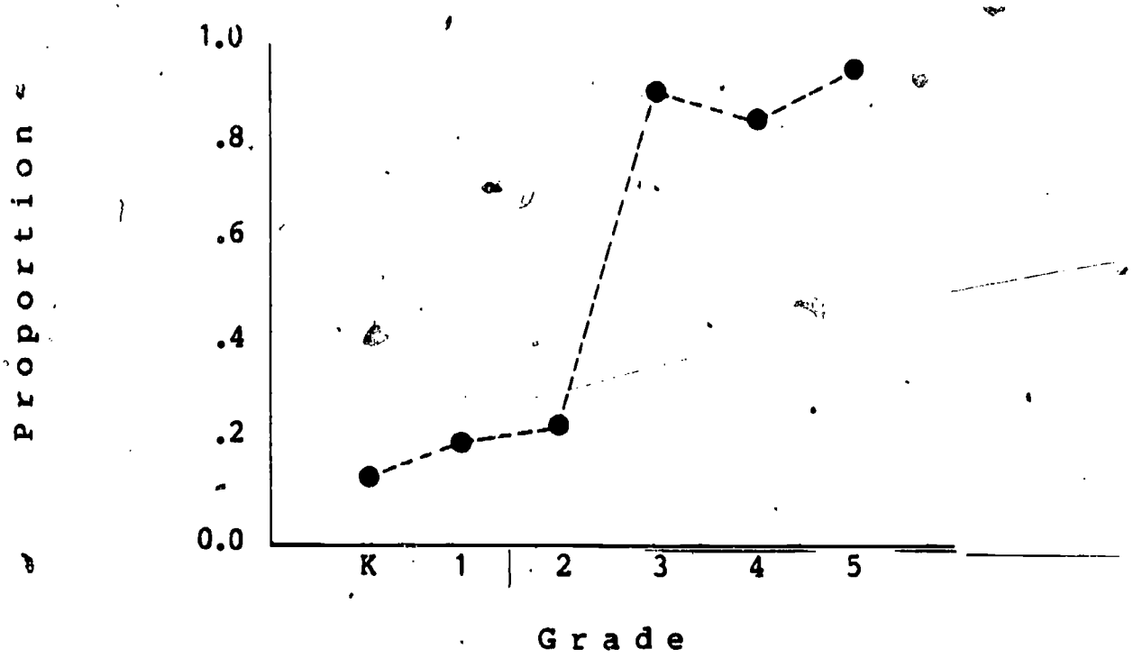


The responses to the lesson question for the monolingual English students are shown in Figure 5. The greatest difference between the ESL and monolingual students is in the third graders. Differences between kindergarten, first, and second grades are not significant. Third-grade monolingual students are equivalent to the fourth and fifth graders on this task.

It may be that this difference between the ESL and monolingual students reflects how classroom time is spent. Teachers in the monolingual classrooms may cover questions such as these at a lower grade level than those in the bilingual classrooms. Answering this type of question with a generalization from the story may be a skill that requires some type of instruction, either of a formal nature in the classroom setting or of an informal nature in the home/parental setting. In contrast, the performance measured by the recall and "why" questions may be based on knowledge and skills that are acquired incidentally, without direct instruction.

Figure 5

RESPONSES OF MONOLINGUAL ENGLISH STUDENTS
TO "WHAT-LESSON" QUESTIONS



In conclusion, our findings indicate that knowledge used to guide story comprehension in a first language is also used to guide it in the second language. This process is contingent upon mastery of basic auditory or orthographic coding skills in the second language. This conclusion reinforces the instructional practice of using the primary language as the language of instruction while English is introduced as a second language. There may be some skills that require direct instruction, on which students can be expected to differ as a function of classroom lesson plans. However, these appear to be transitory, not persisting for more than one grade. The data also indicate that narrative comprehension skills, as assessed in this research, are no different for students learning in either one language or two during elementary school.

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