

Chapter 8

First-Language Oral Proficiency and Second-Language Literacy

Esther Geva and Fred Genesee

This chapter reviews research on the extent to which first-language oral proficiency is related to the development of literacy skills in English. Research on children learning to read in their first language has shown that word-level reading skills are linked to phonological processing but only marginally related to oral proficiency skills. In contrast, both phonological processing and oral proficiency skills have been implicated in reading comprehension. It is important to examine whether the same relationships hold between first-language oral proficiency skills and second-language literacy development.

Two overarching questions underlie the research discussed in this chapter. They are as follows:

1. What is the relationship between first-language oral proficiency and second-language word-level literacy skills?
2. What is the relationship between first-language oral proficiency and second-language text-level literacy skills?

The chapter is organized according to literacy outcomes. We begin by looking at word-level skills (word reading, pseudoword reading, and spelling) and then turn to text-level skills (reading comprehension and writing). Each of these skill sets is addressed within a developmental framework.. Various theoretical issues are addressed briefly, including the extent to which the relationships between specific first-language oral proficiency skills and English literacy skills in English-language learners mirror those noted for native speakers of English, and whether typological similarities between learners' first and second languages influence these relationships.

Relationship between First-Language Oral Proficiency and Word and Pseudoword Reading Skills in English

In this section, we review research on the relationship between English-language learners' oral language proficiency skills in their first language and their word and pseudoword reading skills in their second language, in this case English.

Two studies conducted in the United States with English–Spanish bilingual children in elementary school have yielded rather similar results. In one study, Durgunoglu, Nagy, and Hancin-Bhatt (1993) examined the English word and pseudo word reading skills of first-grade bilingual beginning readers whose dominant language was Spanish. They found that first-language oral proficiency measured by the Pre-Language Assessment Scales, or Pre-LAS, with subtests that examine expressive and receptive language skills in three domains of oral language—morphology, syntax, and semantics--did not predict performance on the English word reading and pseudoword decoding tasks. However, children’s level of phonological awareness in their first language, Spanish, predicted their English word reading and pseudoword decoding skills.

A study by Quiroga, Lemos-Britten, Mostafapour, Abbott, and Berninger (2002) yielded similar results. The participants in this study were first-grade Spanish–English bilinguals who had not had systematic instruction in Spanish. The researchers found that Spanish oral language proficiency as measured by the Pre-Language Assessment Scales was not related to English word or pseudoword reading, whereas phonological awareness in Spanish (and in English) was highly correlated with word and pseudoword reading in English. When all predictors were examined together, using regression analysis, the authors found that first-language oral proficiency did not explain any unique variance in word or pseudoword reading in English. However, English phonological awareness explained unique variance in word and pseudoword reading in English, whereas Spanish phonological awareness, entered after English phonological awareness, did not explain additional unique variance. The latter finding may reflect a suppressor effect related to the positive and significant correlation of phonological awareness measured in Spanish with phonological awareness measured in English. Given the strength of the correlation between phonological awareness in Spanish and English, it is likely that had phonological awareness in Spanish been entered first, it would have been a significant predictor of word recognition skills in English as well. The strong correlations between first- and second-language phonological awareness suggests that phonological awareness is a common underlying proficiency.

Findings of five other studies involving elementary and middle-grades English-language learners with different first languages (Farsi, Cantonese, and Urdu) suggest that the results reported above are not limited to English–Spanish bilinguals. In a study of native-Farsi-speaking English-language learners in grades 1 to 5, Gholamain and Geva (1999) found that verbal working memory and RAN, assessed in the first language (Farsi), accounted for significant variance in the students’ word and pseudoword reading scores in English. In contrast to previous studies that failed to find a significant correlation between oral language

proficiency and word-level reading skills, teacher ratings of Farsi oral language proficiency in this study correlated positively and significantly with the children's word and pseudoword reading skills in English. The correlations were in the moderate to low range. Moreover, unlike the two studies discussed above, results of regression analysis revealed that once the effects of Farsi working memory and Farsi letter naming speed (RAN) had been accounted for, oral proficiency in Farsi explained an additional 4% of the variance. Arguably, teacher ratings of language proficiency may not be a valid measure of oral proficiency because it may be difficult to rate oral language proficiency independently of academic achievement in general and reading achievement in particular. Support for this caution comes from the results of another study involving a similar group of participants. In this study of Farsi–English bilingual children in second and third grades, Arab-Moghaddam and Sénéchal (2001) found that first-language vocabulary knowledge (Farsi) did not correlate with word reading scores in English. In contrast, oral vocabulary knowledge in English correlated significantly with word reading skills in English.

Essentially the same conclusion was reached by Da Fontoura and Siegel (1995) in a study of the relationships between first-language grammatical sensitivity (assessed with an oral cloze task that tapped into students' knowledge of grammar) and second-language reading in fourth-to sixth-grade, low-socioeconomic-status Portuguese–English bilingual students attending a Portuguese heritage language program. The oral cloze scores in students' first language (Portuguese) did not correlate with word or pseudoword reading in English. However, the authors also note that the bilingual readers who had good word-level reading skills in their second language had similar profiles with respect to phonological processing, word-level reading skills, and spelling in their first language. Likewise, the students who had poor word-level reading skills in the second language had similar profiles in both languages. These findings argue that not only are first- and second-language word-level reading skills interrelated, but so, too, are phonological processing skills necessary for word reading. That students who had poor phonological skills in their first language also had poor phonological skills in their second language, also suggests that phonological processing, captures an underlying proficiency that is related to word reading performance in the first and second languages.

In a cross-sectional study spanning grades 1 to 8, Gottardo, Yan, Siegel, and Wade-Woolley (2001) administered parallel measures of phonological processing and word reading in English and Cantonese to Cantonese–English bilingual students. Oral-language proficiency skills were assessed in both languages by using a grammatical sensitivity task (oral cloze). As in the Da Fontoura and Siegel (1995) study, there were no significant correlations between grammatical

sensitivity in Cantonese (the first language) and word and pseudoword reading skills in English. However, phonemic awareness in Cantonese, assessed by a rhyme detection task, correlated significantly with word and pseudoword reading skills in English.

Mumtaz and Humphreys (2002) examined the relationship between 7-to 9-year-old Urdu–English bilingual students’ phonological processing (including digit span, nonword repetition, and rhyme detection), oral proficiency skills in Urdu, and word and pseudoword reading skills in English, their second language. Mumtaz and Humphreys used a between-group design in which students were divided into high and low vocabulary groups, based on their performance on a vocabulary task in their first language (Urdu). Whether they had to read English words in isolation or in sentence contexts, the students with relatively strong Urdu oral vocabulary performed significantly better on English regular word and pseudoword reading than on English irregular word reading, compared with the group of children with low Urdu vocabulary knowledge. However, error analysis showed that the group with high Urdu oral vocabulary, in comparison with the low-vocabulary group, made significantly more errors in reading irregular words in English than in reading regular words—they pronounced irregular words as if they conformed to general spelling-to-sound patterns (i.e., regularization errors in English). These results may indicate that children with high oral language proficiency in the first language (Urdu) may be better at applying Urdu decoding skills to English word reading of irregular words resulting in relatively more errors in reading English irregular word reading. Of particular relevance to the question of cross-language influences, correlational analyses showed that two aspects of phonological processing measured in Urdu (rhyme detection and phonological memory) correlated positively and significantly with word-level reading skills in English. However, once the influence of phonological awareness in Urdu had been removed, using analysis of covariance, the interaction between word-level reading skills and command of Urdu oral vocabulary was not significant. This latter result suggests that the better English word and pseudoword reading skills in the group of children who had high vocabulary knowledge in Urdu was due to better phonological awareness skills in English and Urdu.

Results of a study by Ahern, Dixon, Kimura, Okuna, and Gibson (1980) of fourth-grade speakers of the Hawaiian Creole dialect of English (HCE) indicate that links between first-language oral skills and word-level reading skills in English are not invariant. Hawaiian students’ word reading skills in English were assessed by their ability to perceive minimal pairs in standard English containing phonological contrasts that do not exist in HCE (e.g., distinguishing the long and short vowel sounds in *leak–lick*). First-language oral proficiency (measured by an

index of HCE) was negatively correlated with English word reading. Students who were dominant in HCE were less able to discriminate words in standard English that contained English-specific phonological contrasts. At the same time, students who were aware of the phonological differences between HCE and standard English overcorrected to take those differences into account and had significantly fewer English word reading errors. The authors conclude that instruction can enhance language-minority students' ability to identify differences between the first and second languages and thereby compensate for interference from first-language oral proficiency.

Only one relevant study (Abu-Rabia, 1997) was identified that examined the relationship between first-language oral proficiency and word-level reading skills in high school English-language learners. In a study of 10th-grade students learning English as a foreign language in Israel, Abu-Rabia found that first-language (Hebrew) oral language proficiency, as measured by a grammatical sensitivity task (oral cloze), did not correlate with the students' performance on English word reading tasks, including word attack and word recognition. However, the correlations between measures of phonemic awareness and working memory in Hebrew and word-level reading skills in English were positive and moderately high.

The overall paucity of research on high school students may be due to a number of factors, including the assumption that high school English-language learners have already acquired basic word-level reading skills in English or their first language, and thus at this level text-level reading and writing should be the target of instruction and research. The extent to which these assumptions are valid, especially in English-language learners who immigrate to English-speaking communities when they are older, is open to question.

Taken together, findings from studies of elementary and middle school students and one study involving high school children indicate rather consistently that measures of first-language oral proficiency do not correlate with English word reading skills (Abu-Rabia, 1997; Arab-Moghaddam & Sénéchal, 2001; Da Fontoura & Siegel, 1995; Durgunoglu et al., 1993; Gottardo et al., 2001; Quiroga et al., 2002) or do not explain unique variance in English word-reading skills. This was true for a wide variety of first languages, including Farsi, Cantonese, Urdu, Hebrew, and Spanish. The only exception is the study by Gholamain and Geva (1999), in which teacher ratings of oral proficiency skills correlated with word-level skills.

The picture is quite different, however, when relationships between first-language phonological processing skills and English word reading skills are examined. The results of several studies of children from different first-language backgrounds and educational settings, conducted in the United States, the United

Kingdom, Canada, and Israel, suggest that first-language phonological processing skills are closely related to the development of word reading skills in English. This finding appears across a variety of phonological processing measures, including rhyme detection in Chinese (Gottardo et al., 2001) and Urdu (Mumtaz & Humphreys, 2002); awareness of grapheme–phoneme correspondences as measured by pseudoword reading (Abu-Rabia, 1997; Arab-Moghaddam & Sénéchal, 2001); phonological awareness involving segmentation, blending, and matching (Durgunoglu et al., 1993; Quiroga et al., 2002), rapid naming of discrete items such as letters or digits (RAN), and working memory (Abu-Rabia, 1997; Da Fontoura & Siegel, 1995; Gholamain & Geva, 1999; Mumtaz & Humphreys, 2002).

Studies cited in this section indicate that the relationship between first-language oral proficiency and English word-level skills also can vary somewhat as a function of the measures used to assess phonological awareness in each language. For example, it may be that the grammatical sensitivity measures used to assess first-language oral proficiency by Abu-Rabia (1997), Da Fontoura and Siegel (1995), and Gottardo et al. (2001) are not precise enough to capture the aspects of the first-language oral proficiency that are linked to second-language word reading.

In addition, first- and second language typological factors appeared to be related to differences in linguistic constructs such as syllable structure and stress patterns. Ahern et al.'s (1980) study of Hawaiian children and Mumtaz and Humphreys' (2002) study of Urdu–English English-language learners suggest the need for caution to avoid adopting a simplistic view of the relationships between phonological processing skills in children's first language and word reading skills in English. The studies indicate that the effects may vary, depending on the similarity and differences between the first- and second-language orthography. It may be prudent to adopt a more refined framework in which certain relationships are universal, but conditional on similarities and differences between the first language and English. Age may also be a factor that influences the relationship between first-language oral proficiency and second-language word reading skills. Students' level of first-language oral proficiency and literacy is likely to influence the relationship.

Relationship between First-Language Oral Proficiency and Spelling in English

In this section, we review studies that examine the relationship between first-language oral proficiency and spelling in English. Extensive research on the early development of spelling skills in native-English-speaking children learning to read and write in English has shown that knowledge of letter names is essential for beginning writing, that young native-English-speaking children develop knowledge of the orthographic patterns of their language by progressing from small to large units, and that morphological strategies also guide their spelling (Treiman, Tincoff, Rodriguez, Mouzaki, & Francis, 1998). By comparison, less research is available on the developmental foundations of spelling for language-minority students (see Chapter 4) on the role of first-language oral proficiency in the English spelling performance of English-language learners.

Three correlational studies at the elementary and middle-grades levels were identified that examined the role of first-language oral proficiency in the acquisition of English spelling skills (Arab-Moghaddam & Sénéchal, 2001; Da Fontoura & Siegel, 1995; Gottardo et al., 2001). In a study of second- and third-grade Farsi–English bilingual children living in Canada, Arab-Moghaddam and Sénéchal (2001) found that vocabulary knowledge in Farsi, the students’ first language, did not correlate with their spelling performance in English, although vocabulary knowledge in English did. Similar findings are reported by Gottardo et al. (2001) in a study of Chinese–English bilingual students in grades 1 to 8. They found that oral proficiency in students’ first language, Chinese, (as measured by a cloze task of grammatical sensitivity) did not correlate with performance on an orthographic recognition task in English in which students were asked to judge which member in each pair of pseudowords was a possible English spelling. However, phonological awareness in Chinese (measured by rhyme detection) correlated significantly with scores on the English spelling task. Of additional interest, scores on a tone detection task in Chinese did not correlate significantly with scores on the English spelling task, arguably because tones are irrelevant to English orthography and spelling.

Da Fontoura and Siegel (1995) (reviewed earlier) examined the relationship between oral language proficiency (as measured by a grammatical sensitivity cloze task) and spelling in a group of fourth- to sixth-grade, low-socioeconomic-status Portuguese–English bilingual children who were attending a Portuguese heritage language program. First-language oral proficiency did not correlate with spelling scores in English (though English oral proficiency did). However,

pseudoword decoding in Portuguese (i.e., a measure of the ability to match orthographic patterns to phonemes) correlated significantly with spelling in English. This study again illustrates the lack of a relationship between grammatical sensitivity in the first language and second-language spelling skills. At the same time, it illustrates the relevance of phonological and orthographic skills, measured in the first language, to spelling in the second language.

Only one study (Abu-Rabia, 1997) was identified that examined the English spelling skills of high school students. This study (mentioned previously) involved native-Hebrew-speaking students learning English as a foreign language in Israel. Abu-Rabia administered a battery of parallel tests of syntactic skills, decoding skills, orthographic knowledge, and working memory in English and Hebrew to 60 tenth graders. Although Abu-Rabia found significant positive correlations between Hebrew and English within a number of domains (i.e., working memory, grammatical sensitivity, and orthographic skills), he found no significant correlations between performance on a grammatical sensitivity cloze task in Hebrew (participants had to judge for each pair of pseudowords which item sounded like a real word in Hebrew) and performance on a test of English orthographic conventions (participants had to select in each pair of pseudowords the one that “could be the spelling of a real word in English”). Nor did Abu-Rabia find a correlation between performance on a phonological choice task in Hebrew and the English orthographic conventions task. The phonological choice task required participants to select in each pair of printed pseudowords the one that “sounded like a real word in Hebrew.” These findings differ from those of the studies reviewed above, possibly because of methodological factors associated with the dependent measure (the English orthographic conventions task). In particular, unlike consistent differences between skilled and less-skilled readers on all other language and reading tasks, both in English and in Hebrew, there were no differences between these reading groups on the orthographic conventions task (administered in English or in Hebrew), and the performance in both groups was rather low, suggesting chance performance. However, performance on the syntactic sensitivity cloze test in Hebrew did correlate with performance on another task that focused on spelling skills in English. In this spelling recognition task students were required to select the correct spelling of real words in English. The conclusion that there is a relationship between first language oral proficiency and second language spelling needs to be qualified, however, because the task demands of the grammatical sensitivity cloze task capture not only oral proficiency but various aspects of cognitive ability; the test correlates positively and significantly with memory assessed in Hebrew as well as with performance on an arithmetic test.

In addition to the correlational studies that examined the relationship between first-language oral proficiency and spelling skills in English, some studies examined this question within a contrastive analysis framework. Two studies (Cronnell, 1985; and Ferroli & Shanahan, 1993) found that features of first-language (Spanish) phonological awareness had an effect on spelling in English. Cronnell (1985) examined the nature and frequency of English spelling errors in writing samples of Mexican American English-language learners of poor socioeconomic status in grades 3 and 6. He reports that many of the students' spelling errors could be traced to differences between Spanish and English phonology; for example, *b-v* misspellings, the spelling of *d* for *th*, and the simplification of final consonant clusters (e.g., *han* for *hand*). In a similar study, Ferroli and Shanahan (1993) studied the effects of first-language phonology (voicing) on invented spelling in English in second- and third-grade bilingual Latino children attending a transitional bilingual program in the United States. These students were prone to using spelling patterns in English that were appropriate for voiceless sounds (derived from Spanish) when letters that correspond to voiced sounds (derived from English) were called for (e.g., /p/ versus /b/).

In summary, correlational designs failed to find significant relationships between measures of first-language oral proficiency and English spelling skills. As with word reading skills, it may be that the grammatical sensitivity measures used to assess first-language oral proficiency by Abu-Rabia (1997), Da Fontoura and Siegel (1995), and Gottardo et al. (2001) are not precise enough to capture the aspects of the first-language oral proficiency that may be linked to second-language spelling. On the other hand, measures of first-language phonological processing (e.g., phonological awareness) and English spelling skills correlate with each other rather consistently. Given the small group of studies that examined this relationship, the conclusion that there is a positive relationship between phonological processing in the first language and spelling in English is rather tentative at this point, and needs to be examined in additional studies involving English-language learners coming from different first-language backgrounds and different age groups.

Quasi-experimental studies focusing on error analysis (Cronnell, 1985; Ferroli & Shanahan, 1993) suggest that typological differences between the phonology of the first and second languages are reflected in patterns of second-language spelling acquisition. Specifically, the evidence suggests that phonological differences between English-language learners' first language and English can hinder or facilitate the acquisition of specific English spelling patterns (e.g., voicing contrasts; see Cronnell, 1985, and Ferroli & Shanahan, 1993).¹ Caution is clearly called for in interpreting these results because of the limited number and

scope of these studies and because of methodological flaws (e.g., the absence of comparison groups composed of students from a variety of first language backgrounds) and the possibility that the spelling errors reflect developmental patterns, including “errors,” that resemble those made by first-language learners of the same language (see Chapter 6).

Studies reported on in this chapter suggest that the link between first-language oral language proficiency, phonological processes, and spelling achievement in English is not invariant. It is important to consider the measures used and typological similarity between the first and second languages. Thus, multivariate studies are needed to disentangle the relationships between these factors and spelling development in English-language learners. Finally, the virtual absence of relevant studies on high school students is of concern.

Relationship between First-Language Oral Proficiency and Reading Comprehension in English

Research has shown that the development of reading comprehension skills in monolingual English-speaking students is complex (Spiro & Myers, 1984) and that one factor that influences reading comprehension is oral language proficiency (Carver, 2000). Unfortunately, in contrast to the wealth of research on the development of reading comprehension in native English speakers, there is little research on the development of second-language reading comprehension skills in language-minority students at all grade levels, from elementary to high school (see Chapter 4 for a review of this research) and even less research on the role of first-language oral proficiency in the development of second-language literacy.

Only one study was identified that examined the relationship between first-language oral proficiency and reading comprehension in English in elementary school English-language learners. Using structural equation modeling (SEM), Dufva and Voeten (1999) examined the reading comprehension skills of third-grade Finnish-speaking students who were learning English as a foreign language in school. Among other findings, they report that students’ listening comprehension skills in Finnish, assessed in grade 1, had an indirect effect on English reading comprehension scores in grade 3. However, the link between grade 1 Finnish listening comprehension skills and grade 3 English reading comprehension skills was mediated by the students’ reading comprehension skills in Finnish in grade 2 (direct effect). That is to say, grade 1 listening comprehension in Finnish correlated with grade 2 reading comprehension in Finnish, which in turn correlated with English reading comprehension in grade 3. These researchers also report that the students’ phonological memory, assessed in Finnish in grade 2, correlated significantly with grade 3 reading comprehension in English (direct effect). The findings from this single study underscore the

multidimensional nature of the development of reading comprehension in a nonnative language.

Research on English-language learners in middle school has not found a relationship between first-language oral proficiency and English reading comprehension. In a longitudinal study of fifth- and sixth-grade Spanish-speaking English-language learners in a transitional bilingual education program, Royer and Carlo (1991) found no significant correlation between the students' Spanish listening comprehension skills assessed in grade 5 and their reading comprehension skills in English in grade 6. A similar lack of association between first-language proficiency and reading comprehension in English was found in one study that used self-report measures. Okamura-Bichard (1985) found that self-ratings of first-language proficiency did not correlate with reading comprehension in English in a group of sixth-grade bilingual Japanese–English students.

Finally, one study (Nguyen, Shin, & Krashen, 2001) that examined the relationship between first-language oral proficiency and reading outcomes more broadly defined (combined reading and language subtests on the Stanford Achievement Test) found no significant relationship. The study examined Vietnamese English-language learners in grades 5 to 8, and the measure of first-language oral proficiency was self-reported ratings. Because these authors do not report correlations for the reading comprehension subtest alone, the precise nature of this association is difficult to interpret; nevertheless, this study also points to a lack of relationship between first-language proficiency and general second-language reading achievement.

Only one study in the database examined the relationship between first-language oral proficiency and English reading comprehension in high school English-language learners. Buriel and Cardoza (1988) examined the relationship between self-reports of first-language (Spanish) proficiency and English reading comprehension in ninth-grade Spanish–English bilingual students. Reading tests that had been standardized on the High School and Beyond senior sample were used to assess reading outcomes (Heyns & Hilton, 1982). Students were first-, second-, or third-generation Mexican Americans living in the southwestern United States. Findings suggest that the relationship between first-language proficiency and English reading comprehension is more complex than that reported in studies of younger English-language learners. These researchers did not find significant relationships between first-language proficiency and English reading comprehension for first- and second-generation Mexican American high school English-language learners. However, they report significant negative relationships between first-language proficiency and/or use and English reading

for third-generation Mexican American students. See Chapter 11 for a further discussion of the relationship of home language use to English reading outcomes.

In summary, across the different levels of schooling, the findings from this limited group of studies are complex. On the one hand, most found no relationship between reading comprehension in English and first-language oral proficiency measured through self-ratings of first-language proficiency or language use (Kennedy & Park, 1994; Nguyen et al., 2001; Okamura-Bichard, 1985) and through listening comprehension (Royer & Carlo, 1991). However, in the case of students learning English as a foreign language, one study found that listening comprehension in the first-language related indirectly to reading comprehension in English. In this study, first-language listening comprehension was more directly related to first-language reading comprehension; first language reading comprehension was directly related to second language reading comprehension. There is also some evidence from research reported in this and other chapters that intervening factors may influence this relationship—more specifically, that phonological memory (Dufva & Voeten, 1999) and sociocultural context (Buriel & Cardoza, 1988) are associated with the development of reading comprehension in English.

Relationship between First-Language Oral Proficiency and Writing in English

Few studies systematically examined the relationship between first-language oral proficiency and the acquisition of English writing skills. No studies examined the relationship between first-language oral proficiency and emerging writing/composing skills in English in elementary or high school English-language learners.

Two studies (discussed earlier) were identified that examined the relationship between first-language oral language skills and English writing development in middle school English-language learners (Cronnell, 1985; Okamura-Bichard, 1985). As noted earlier, first-language influences on second-language development provide a useful, albeit indirect, method for studying factors that affect the development of English writing skills. Using this framework, Cronnell (1985) examined the nature of the errors found in the English writing samples of Mexican American students from poor socioeconomic backgrounds in grades 3 and 6. Cronnell reports that the students made syntactic errors in English that reflected nonstandard grammatical usage (e.g., word order problems and the use of double negatives) that could be attributed to influences from the students' first language. Cronnell also notes that the overall quality of the students' writing was not necessarily related to the frequency of spelling or syntactic errors; some students were able to write well-constructed stories in spite of numerous such

errors. Okamura-Bichard (1985) studied sixth-grade Japanese–English bilingual students whose families resided temporarily in the United States. These bilingual learners attended a public school during the week and a Japanese school on the weekend. Okamura-Bichard found that measures of listening comprehension in Japanese did not correlate with self-report measures of writing ability in English. The question arises whether the failure to find cross-language effects is due to the fact that most first-language oral proficiency skills are less important than phonological awareness in predicting the development of text-level second-language competence; to the typological dissimilarity between Japanese and English, especially in their writing systems; or self-report measures of writing that were not valid. Overall, too little research has been done in this area to conclude anything about the relationship between first-language oral proficiency and second-language writing ability.

Footnote Chapter 8

¹ For a more comprehensive treatment of the transfer issue in first- and second-language learning, see Chapters 7 and 11.