Foreign Language Learning Difficulties: An Historical Perspective

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Abstract

For 10 years, the authors of this article have examined cognitive, affective, and linguistic influences on foreign language learning. They have proposed the Linguistic Coding Differences Hypothesis (LCDH) as a model for understanding foreign language learning problems. The authors review their empirical support for the LCDH and explain the diagnostic, pedagogical, and policy implications of their research.

In a global economy and increasingly multilingual society, the acquisition of a foreign language (FL) has emerged as one of the major goals for children of the next century (Agresto, 1985). Public schools and universities often require their students to demonstrate this competency in FL coursework prior to graduation (Ganschow, Myer, & Roeger, 1989; Ganschow & Sparks, 1987). However, this requirement is difficult for many students of average to above-average ability who do not perform well in FL courses (Freed, 1987). Numerous explanations have been proposed and debated concerning why some students who do well in other courses (e.g., mathematics, science, social studies) do not perform well in or fail FL courses.

In the 1960s Paul Pimsleur and his colleagues (Pimsleur, 1968; Pimsleur, Sundland, & McIntyre, 1964; ) studied FL “underachievers,” or students who performed less well in FL courses than in their other courses. They proposed that a factor called “auditory ability” (the ability to deal with sounds and sound-symbol learning) was often responsible for differences in FL learning that could not be explained by low motivation or intelligence. Dinklage (1971) documented cases of college students at Harvard who obtained overall GPAs of 3.5 or higher in their coursework yet failed in their attempts at fulfilling the FL requirement. He noted that these students had tried to perform well in their FL courses and thus their learning difficulties were not due to lack of motivation or poor attitude. Dinklage suggested that many of the students seemed to have learning difficulties similar to dyslexia; that is, the students exhibited histories of difficulties with learning to read and spell, letter/symbol reversals, sound confusions, discrimination of sounds and syllables in the FL, and verbal memory. In 1986 we presented detailed case studies of college students who experienced FL learning difficulties (Ganschow & Sparks, 1986). We proposed that students’ FL learning difficulties were related to their problems with native language learning (e.g., problems with reading, spelling, writing, oral language). Others also have described the native language learning problems of students with FL learning problems (see Cohen, 1983; Fisher, 1986; Lefebvre, 1984; Levine, 1987; Pompian, 1986; Pompian & Thum, 1988).

In the 1980s, with our background as special educators, we began a line of research on the etiology of these FL learning difficulties, focusing on cognitive, affective, and linguistic domains. In our studies we have found that students with and without FL learning problems do not exhibit significant differences in intelligence (IQ; see, e.g., Ganschow & Sparks, 1995; Ganschow, et al., 1994; Ganschow, Sparks, Javorsky, Pohlman, & Bishop-Marbury, 1991). In the affective domain, our research suggests that poor attitude and lack of motivation are a result of difficulties with language, rather than a cause of FL learning problems. We argue that one’s level of language skill and aptitude for learning a foreign language should be considered when examining the role of affect in FL learning (Sparks & Ganschow, 1995a). Au (1988) supported this view in his admonition to the FL field that failure to control for students’ language skills in studies involving FL learning and affect was a “serious methodological weakness” (p. 91).

A major premise underlying our work is our hypothesis that the primary causal factors in successful or unsuccessful FL learning are linguistic; that is, students who exhibit FL
learning problems have overt or subtle native language learning differences that affect their learning of a foreign language. In our Linguistic Coding Differences Hypothesis (LCDH) we present our position that language skills influence the acquisition of, and play a critical role in, FL learning (Sparks & Ganschow, 1991; Sparks, Ganschow, & Pohlman, 1989). The purpose of this article was to review a decade of research we and our colleagues have conducted on the LCDH. To assist the reader in understanding some of the terminology we use herein, we have provided abbreviated definitions of key terms in the Appendix. We begin by describing our LCDH and reviewing research supporting the role of linguistic variables in FL learning problems. We then examine teaching methodologies and describe research we have conducted supporting a direct instructional approach that emphasizes the phonological/orthographic and grammatical rules of the FL. We conclude our article with the diagnostics, pedagogical, and policy implications of this research.

The Linguistic Coding Differences Hypothesis

In 1989 Sparks and Ganschow introduced the Linguistic Coding Differences Hypothesis into the learning disabilities (LD) literature (Sparks et al., 1989) and in 1991 into the FL literature (Sparks & Ganschow, 1991; see Note) The LCDH is derived from native language research, especially the work of Vellutino and Scanlon (1986), who found that poor readers and writers had problems primarily with the structural (phonological/orthographic and syntactic) but not meaning (semantic) aspects of language. Poor readers have been found to have particular difficulty with the phonological/orthographic, or sound and symbol, "code" of language (see Bradley & Bryant, 1985; Stanovich, 1988; Wagner & Torgesen, 1987). Initially, our interest was in describing difficulties that students with learning disabilities have with learning a foreign language. However, as we began to find that large numbers of students without LD exhibited FL learning difficulties (see Ganschow & Sparks, 1995, 1996; Ganschow et al., 1994; Ganschow et al., 1991; Sparks & Ganschow, 1993a, 1993b, 1993c, 1996; Sparks, Ganschow, Javorsky, Pohlman, & Patton, 1992a, 1992b), we changed our original term from deficits to differences. The change was meant to reflect the notion of a continuum of difficulties with FL learning that ranges from mild to severe.

In the LCDH we proposed that skills in the native language components—phonological/orthographic, syntactic, and semantic—provide the basic foundation for FL learning. Both Carroll (1973) and Skehan (1986) asserted that basic language aptitude is a "residue" of first language skill. Spolsky (1989) included intact language skills (e.g., phonology/orthography, grammar) as "necessary" for learning a foreign language in his model of language learning. We speculated that both native and FL learning depend on basic language mechanisms and that problems with one language skill (e.g., phonology/orthography) are likely to have a negative effect on both the native language and the FL system. Thus, the focus of the LCDH is on language variables in FL learning because FL learning is the learning of language. Furthermore, we speculated that the majority of FL underachievers have the most difficulty with the phonological/orthographic aspects of FL learning.

Research on Native Language Skill and Foreign Language Aptitude Differences

Native Language Skill and Foreign Language Aptitude in Foreign Language Learning

Since the publication of our 1991 article on the LCDH, we and our colleagues have conducted a number of empirical studies on various facets of FL learning among good and poor FL learners. Results of our research have provided strong support for the LCDH, in that good FL learners have been found to exhibit significantly stronger native oral and written language skills and FL aptitude (as measured by the Modern Language Aptitude Test or MLAT; Carroll & Sapon, 1959) than poor FL learners. These differences have been demonstrated at both the secondary and the postsecondary level of education. All of the studies have used native language skill and FL aptitude measures to study differences in the language skills of good and poor FL learners. Some of our studies have also used affective measures (e.g., anxiety) to explore the relationship between language skills and affect. In this article we briefly review findings from studies examining (a) native language skill and FL aptitude differences; (b) FL grades; (c) students' self-perceptions, teachers' perceptions, and parents' perceptions of FL learning; (d) anxiety and FL learning; (e) FL proficiency; and (f) factor analyses.

Research on Native Language Skill and Foreign Language Aptitude in Foreign Language Learning

In one study, Ganschow et al. (1991) administered measures of native language skill (e.g., reading, spelling, vocabulary, writing) and FL aptitude (the MLAT) to 15 postsecondary students who had successfully passed college FL courses with a grade of A or B and 15 students who received a petition to waive or substitute the FL requirement. Results showed that successful FL learners exhibited significantly stronger native language skills on measures of phonological/orthographic processing (but not semantics) and greater FL aptitude than unsuccessful FL learners.

In another study, Sparks et al. (1992a) administered a similar battery of native language and FL aptitude measures to first-year FL learners in high school. Students were divided into groups based on their first-quarter
FL grade (i.e., 36 low-risk learners achieved A or B, 29 high-risk learners achieved D or F) and their FL teachers' recommendation. Results showed that the low-risk FL learners exhibited significantly stronger phonological/orthographic and syntactic, but not semantic, skills and greater FL aptitude than did the high-risk FL learners. In a related study (Sparks et al., 1992b), a group of 15 students diagnosed as LD were enrolled in first-year FL classes were compared to the low- and high-risk learners on the same testing measures. Results showed that the low-risk FL learners exhibited significantly stronger phonological/orthographic and syntactic, but not semantic, skills and greater FL aptitude than the low-risk FL learners. No significant differences were found on most native language and FL aptitude measures between the high-risk and LD groups; only a measure of spelling differentiated the two groups. We speculated that high-risk, non-LD FL learners and students diagnosed as LD and enrolled in FL classes exhibit similar language and FL aptitude difficulties.

FL educator Humes-Bartlo (1989) found that poor FL learners show mild deficits in their native language skills when compared to good FL learners. Skehan (1986) also reported that children who “make more rapid progress in their first language tend to do better in foreign language learning at school” (p. 196). Service (1992) found that phonological/orthographic tasks and the ability to compare syntactic-semantic structures predict skill in second language learning.

Foreign Language Grades

An examination of the FL grades of good and poor FL learners in relation to their native language skills and FL aptitude has also provided support for the LCDH. A recently published study by Sparks and Ganschow (1996) showed significant differences on measures of native language skill and FL aptitude among 154 students who achieved final grades of A, B, C, and D/F in first-year, high school foreign language courses (i.e., students who achieved A’s scored higher on those measures than students who achieved B’s, B’s scored higher than C’s, etc.). Other studies we have conducted have consistently shown that students who achieve higher FL grades have significantly stronger native language and FL aptitude skills than students who achieve lower FL grades (Ganschow & Sparks, 1996; Ganschow, et al., 1994; Ganschow et al., 1991; Sparks & Ganschow, 1995b).

Two related studies involved determining the best predictors of FL grades in first-year high school FL courses (Sparks, Ganschow, & Patton, 1995). There were 154 women in one study and 100 co-ed learners in the other study. In both, students’ eighth-grade English grade and their score on an FL aptitude measure (the MLAT) were the best predictors; native language spelling was also a significant predictor of FL grade in one experiment. We speculated that the presence of these variables in the prediction models provided support for the LCDH because both English class and the MLAT require a student to use oral language skills (listening and speaking) and written language skills (reading and writing) for classroom success. Also, the appearance of native language spelling as a predictor variable in one model suggested the importance of phonological/orthographic skill for FL learning.

Students', Teachers', and Parents' Perceptions of FL Learning

Several investigations have been conducted on students’ self-perceptions about their FL learning, teachers’ perceptions about their students’ FL learning skills and affective characteristics, and parents’ perceptions about their child’s language learning skills. All of the studies support our contention that basic native language skills and FL aptitude are important for success in FL learning. In one study, for example, we designed a self-report instrument to measure college students’ perceptions about learning a foreign language and administered it to 60 students with LD and 144 students without LD who were enrolled in FL courses (Javorsky, Sparks, & Ganschow, 1992). We found that both groups reported equal motivation to learn a foreign language; however, the students diagnosed as LD perceived themselves as less capable and possessing fewer skills to master the oral and written language requirements and content of FL courses. These students also reported themselves as being more anxious when taking tests in and studying for the FL. We concluded that the students’ self-reports reflected their weaker native language skills.

In a study of 373 college students (Ganschow & Sparks, 1991), we used a self-report screening instrument designed to examine potential links between native and FL learning to identify students who were at risk for FL learning problems. The instrument asked questions about students’ histories of native language learning (e.g., reading, spelling, language development), and the results showed that questions relating to native language grammar, spelling, writing, and reading were the best discriminators of students at risk for FL learning difficulties.

In a study of 79 high school students (Sparks, Ganschow, & Javorsky, 1993), we used the same self-report questionnaire but modified the instrument for secondary-level FL learners. Here, we compared the self-perceptions of low- and high-risk students and students diagnosed as LD enrolled in first-year FL courses regarding their academic skills and attitudes toward FL learning. Results indicated that the low-risk students reported significantly higher estimated FL grades and expressed more positive attitudes about their language learning skills than the high-risk and LD groups. The high-risk students and students diagnosed as LD perceived
themselves as lacking the academic skills to master a foreign language. All three groups, however, expressed equally positive attitudes about wanting to learn a foreign language. We speculated that the less positive perceptions of the high-risk and LD groups were the result of their significantly weaker native language skills and FL aptitude.

In another study of high school students, the relationship between FL teachers' perceptions of 168 students' FL academic skills (i.e., listening, speaking, reading, writing) and affective qualities (i.e., motivation, attitude, anxiety) and their performance on measures of native language skill and FL aptitude was examined (Sparks & Ganschow, 1996). Students were divided into high, average, and low groups on the basis of their scores on each of the native language and FL aptitude tests. Teachers' perceptions were compared by group. Results showed that teachers perceived students who scored lower on the testing measures as having weaker FL academic skills and less positive affective characteristics (i.e., higher anxiety, lower motivation, less positive attitude) than students with stronger native language skills and FL aptitude.

In a study on parent perceptions of their child's language ability, Sparks and Ganschow (1995b) used an author-designed self-report instrument to ask parents about their child's history of native language learning. All of the 79 students, who were enrolled in first-year high school FL courses, were administered a battery of native language skill and cognitive measures and an FL aptitude test. Students were differentiated into low-risk, average-risk, and high-risk groups on the basis of scores on the parent questionnaire, and we looked for group differences on the test battery. Results showed overall significant group differences favoring the low- and average-risk groups over the high-risk group on all but one of the native language, FL aptitude, and cognitive measures.

These studies provided empirical support for our speculations that affective differences are the result rather than the cause of FL learning problems, and that language aptitude differences account for differences in FL learning (Sparks, 1995a; Sparks & Ganschow, 1991, 1993c, 1995a).

**Anxiety and Foreign Language Learning**

Ganschow et al. (1994) investigated the relationship between FL aptitude and native language skills and anxiety among 36 low-, moderate-, and high-anxious college FL learners grouped by scores on the Foreign Language Classroom Anxiety Scale (Horwitz, Horwitz, & Cope, 1986). Significant group differences by anxiety level were found on measures of native language phonology/orthography, overall reading, oral language, and FL aptitude. No differences were found among the three groups on native language semantic and short-term verbal memory measures. We replicated these results in a study with a larger group (N = 154) of postsecondary students (Ganschow & Sparks, 1996). In a recent study, Sparks, Ganschow, Artzer, Siebenhar, & Plageman (1997) found that students with lower levels of anxiety about FL learning, stronger native language skills, and greater FL aptitude scored significantly higher on measures of FL proficiency than students with higher levels of anxiety about FL learning, lower native language skills, and less FL aptitude.

**Foreign Language Proficiency**

We have also conducted studies on oral and written proficiency, which is defined by the American Council on the Teaching of Foreign Languages (ACTFL) as "what an individual can and cannot do [with an FL], regardless of where, when, or how the language has been learned or acquired" (ACTFL, 1989). In one study with two experiments, Sparks, Ganschow, Artzer, Siebenhar, et al. (1997) examined the extent to which there would be differences in native language skill and FL aptitude among two groups of high school students (n = 60, n = 36) who were completing their second year of FL study. In both experiments the students were divided into high-, average-, and low-proficiency groups according to their scores on oral (listening, speaking) and written (reading, writing) FL proficiency measures designed according to ACTFL guidelines and administered-scored by trained evaluators. The results of both studies showed overall differences among the three proficiency groups on the native language and FL aptitude measures. The majority of group differences were between high- and low-proficiency FL learners. The results of the studies were supportive of the LCDH, in that native language skill and FL aptitude differences were found among students who exhibited different levels of oral and written proficiency in a foreign language.

In a related study, Sparks, Ganschow, Patton, et al. (1997) examined best predictors of overall oral and written proficiency in a foreign language among the above two groups of high school students who were completing their second year of an FL course. The best predictors of overall (oral and written) FL proficiency in both experiments were end-of-first-year FL grade and FL word recognition, a phonological/orthographic measure. The results of these studies reinforced the notion that basic language skills serve as the foundation for FL learning. Support from the FL field came from Olshtain, Shohamy, Kemp, and Chatow's (1990) finding that academic proficiency in students' first language plays the most important role in predicting success in FL learning in the classroom. Koda (1992) reported that lower level verbal processing skills (i.e., word recognition) are important for FL proficiency.

**Factor Analyses**

Three factor analysis studies also lend support to the LCDH. One study
was conducted with a high school population of 80 high- and low-risk FL learners and students with identified LD (Ganschow, Sparks, Patton, & Javorsky, 1992). Results of the factor analysis of a battery of native language measures and an FL aptitude test indicated three factors, which the authors labeled Phonology/Syntax, FL Aptitude, and Cognition/Semantics.

In a second study (Sparks, et al., 1995), factor analyses were conducted on two high school populations, one a class of 154 ninth- and tenth-grade females and the other a co-ed population of 100 ninth graders who had been administered a battery of native language measures and an FL aptitude test designed to predict FL grade. Again, a three-factor solution emerged. The factor solutions were similar to those in the aforementioned analysis, though we replaced the Phonology/Syntax factor label with a factor we called Phonology/Orthography. In this second study, knowledge of spelling rules emerged as an important factor, and the study did not include measures of syntax. Here all three factors contributed significantly to the variance in FL grade.

In a recently completed study, Sparks and Ganschow (in press) conducted a factor analysis of a test battery administered to 96 students and designed to predict oral and written FL proficiency. A three-factor solution emerged from the analysis: Language/Memory, Phonological Recoding, and Spelling/Word Recognition. The Language/Memory and Phonological Recoding factors accounted for the largest part of the variance in FL proficiency, and only these two factors contributed significantly to the variance in overall FL proficiency. The authors hypothesized that the Language/Memory component in their study was similar to the Meaning and Cognition/Semantics factors in their two previous studies and that the Phonological Recoding and Spelling/Word Recognition (a factor composed of only native language phonological/orthographic measures) factors in this study were similar to the Phonology/Syntax and Phonology/Orthography factors in their two previous studies. Although the Phonological Recoding factor was represented by measures of phonology/orthography, these measures comprised tasks to which the students had infrequent exposure (i.e., low-frequency words, unfamiliar words, pseudowords, FL words).

The results of the three-factor analyses suggest that all components of language, including phonology/orthography—a "lower level" language skill—are important for both oral and written FL proficiency.

Research on Teaching Methods

In the 1990s we conducted a series of studies on instructional methods that might be successful for at-risk FL learners. In light of our hypothesis that these students have particular difficulties with the phonological/orthographic and syntactic codes of language, we turned to a teaching methodology that has been found to be successful in working with students who have native language learning difficulties in these areas, the Orton-Gillingham method for teaching reading and spelling (Gillingham & Stillman, 1960). Initially we located two FL teachers at private high schools who had learned the method in English and adapted it for teaching Spanish to their students with identified language problems. The Orton-Gillingham method emphasizes "cracking" the language code via a structured, multisensory approach in which the students simultaneously hear, see, and write sounds/symbols and are directly taught rules for word endings, word order, subject–verb agreement, and declensions. The teaching of these principles involves careful sequencing of materials, controlled pacing, board drills, flash cards, and integration of reading, spelling, and writing. (For a detailed description of the approach, see Ganschow, Sparks, & Schneider, 1995; Myer, Ganschow, Sparks, & Kenneweg, 1989; and Sparks, Ganschow,Kenneweg, & Miller, 1991.)

To date, we have conducted a series of pilot studies to test the efficacy of the Orton-Gillingham approach. Findings of four studies (including replication and cohort designs) indicate that direct teaching of the sound and sound–symbol system of the FL significantly improves both the FL aptitude (on the MLAT) and the native language sound and sound–symbol performance of at-risk FL learners (Ganschow & Sparks, 1995; Sparks & Ganschow, 1993b; Sparks, Ganschow, Artzer, & Patton, 1997; Sparks, Ganschow, Pohlman, Artzer, & Skinner, 1992). The results of a recently completed longitudinal study (Sparks, Artzer, et al., 1998) showed that this methodology is effective in helping at-risk learners become as proficient as not-at-risk FL learners in reading, writing, spelling, and listening to a foreign language after 2 years of study.

Related support has been generated for the potential of the approach to be effective in languages other than Spanish. One study on Latin (Sparks, Ganschow, Fluharty, & Little, 1996) demonstrated that students diagnosed as LD made significant progress in both FL aptitude (on the MLAT) and the native language sound–symbol system when taught the Latin sound–symbol system. Schneider (1997) adapted the Orton/Gillingham methodology into German and developed materials to teach phonology/orthography, grammatical rules, and morphological principles. Her pilot study with several at-risk students of German suggested that the approach holds promise in that language, as well.

Implications

A number of implications for FL teaching and learning can be drawn from this research. We discuss implications of our work in three areas: diagnosis of FL learning problems, FL instruction for students with FL learn-
ing problems, and school policies for students with FL learning problems.

**Diagnosis of FL Learning Problems**

Sparks and colleagues have recommended that diagnosticians use a comprehensive evaluation procedure for the assessment of students with FL learning problems (Ganschow & Sparks, 1993; Sparks, 1995b; Sparks & Ganschow, 1993d; Sparks, Ganschow, & Javorsky, 1992). This procedure involves four components: (a) a review of the student’s developmental history; (b) a review of his or her academic (native language) learning history; (c) a review of the student’s FL learning history; and (d) administration of standardized measures of native language skill (i.e., reading, phonological/orthographic processing, grammar, spelling, writing, vocabulary, oral language) and FL aptitude (i.e., the MLAT). In the evaluation process, diagnosticians should focus primarily on determining whether a student has a documented history of, and current, difficulty with native language learning as well as a verifiable record of failure in, or inordinate struggle with, FL courses. Test results should reveal overt or subtle difficulties with native language learning in the phonological/orthographic, syntactic, and/or semantic components and low FL aptitude on the MLAT. Students’ records should indicate grades in previous FL courses that were well below average or failing (i.e., D’s and F’s).

Some colleges and universities have permitted students to substitute other courses for (or, in a few cases, waive) the FL requirement because they were diagnosed as LD. However, in our study of one institution (Sparks, Philips, & Ganschow, 1996), we found that slightly less than half of the petitioning students met the minimum criteria for the diagnosis of LD. We recommend that neither the diagnosis of a learning disability nor FL course failure alone should be the sine qua non for waiver or substitution of the FL requirement if the university permits these options. We also recommend that a student’s score on the MLAT, an FL aptitude test, should not be used as the sole criterion in determining whether he or she should enroll in or withdraw from an FL course. In addition, we do not recommend using a discrepancy between a student’s IQ and his or her score on the MLAT as either the basis for a diagnosis of LD or an indicator of a student’s inability to learn a foreign language. Such a procedure is psychometrically and theoretically unsound because both the MLAT and IQ tests are aptitude tests.

If university policy allows students to apply for a substitution or waiver of the FL requirement, we recommend that they present a verifiable history of native language and FL learning difficulties. Unverifiable data (self-reports of learning difficulties without other substantiated data) should not be used as the basis for recommending FL course substitutions or waivers (or for the diagnosis of LD). If the university has a waiver/substitution policy, we suggest that petitioning students present to the university a verifiable record of recent testing by a qualified diagnostician. We also recommend that universities and their service providers insist that petitioning students meet currently accepted criteria for the diagnosis of LD. We believe that a record of withdrawal(s) from FL courses should not be the determining factor as to whether or not a student continues in FL courses. Instead, we suggest that a student having difficulty with FL learning try to remain in the FL course. The student should be candid with the FL instructor about his or her need for extra assistance (and describe the kinds of problems she or he is having), take advantage of in-class accommodations, and seek help from qualified tutors long before considering a course substitution or waiver (if this option is made available). Rather than dropping out and trying first one and then another FL, the student should consider retaking the same language he or she had in high school and starting again in college with the first semester of that language.

**Teaching a Foreign Language to Students with FL Learning Problems**

Stern (1983) reported that until recent years, direct teaching of the phonological/orthographic (sound-symbol) and grammatical rule systems of an FL was an integral component of most FL teaching methodologies. In the last decade, however, most FL educators have advocated teaching a foreign language through “natural communication” approaches to learning, which emphasize the contextual and meaning aspects of FL learning and deemphasize the teaching of the sound, sound-symbol, and grammatical rule systems (Omaggio, 1986). Sparks et al. (1995) have observed that natural communication approaches to FL teaching are similar to whole language approaches to teaching reading and writing in native language education (see, e.g., Goodman, 1986). However, research evidence has failed to demonstrate that whole language approaches to literacy are more effective than other approaches to the teaching of reading and writing; furthermore, the basic tenets of whole language methods of teaching reading (e.g., students learn to read “naturally,” in the same way that they learn to speak) have been found to be demonstrably false (Adams & Bruck, 1993; Foorman, 1995; Liberman & Liberman, 1990; Stahl & Kuhn, 1995; Vellutino, 1991). Likewise, FL educators have not generated evidence demonstrating that natural communication methodologies are more effective in teaching the written and oral aspects of an FL than are other methodologies (e.g., the audio-lingual method). Rather, studies seem to indicate that for poor FL learners, direct teaching of the phonological/orthographic (and grammatical rule) system is essential.
School Policies for Students with FL Learning Problems

The FL requirement at the secondary and postsecondary levels of education often poses difficulties for students with FL learning problems. At the postsecondary level, Ganschow et al. (1989) surveyed colleges and universities to determine their FL requirements. They found that 60% of the institutions required an FL in at least one program, 75% had a formal or informal policy for substitution or waiver of the requirement, and 80% required and 15% strongly encouraged the diagnosis of a handicap (e.g., LD) to precede any course substitution.

Sparks and his colleagues have recommended to both FL and LD audiences that school policies include a continuum of interventions to assist students with FL learning problems, and they have provided detailed descriptions of such a continuum (Ganschow & Sparks, 1993; Ganschow et al., 1995; Sparks & Ganschow, 1993d). One intervention on this continuum is the use of in-class accommodations, such as offering untimed tests, slowing the pace of verbal instruction, and pairing oral language in the FL with a visual example (e.g., writing the FL words on an overhead). A related intervention is the use of tutorial support. Another intervention on the continuum is separate course placement with intensive focus on the structure of the native language (see Demuth & Smith, 1987) or the use of specialized techniques for teaching an FL (Hill, Downey, Sheppard, & Williamson, 1995; Sparks et al., 1991).

In some cases, FL teachers could evaluate the student on his or her skill in listening to and speaking, but not reading and writing (or vice versa), the FL, or make allowances for spelling. These accommodations and adjustments would allow the student with FL learning problems to take an FL course and, quite possibly, be successful in the endeavor. The most restrictive intervention on the continuum is substitution or waiver of the FL course requirement. We recommend that if secondary and postsecondary institutions allow for waiver or substitution of their FL requirement, they make available clearly articulated policies and procedures for the process by which a student petitions for the substitution or waiver. (Ideas for consideration in formulating such policies can be found in Freed, 1987; Ganschow et al., 1989; and Philips, Ganschow, & Anderson, 1991.)

Recent findings (Sparks, Philips, Ganschow, & Javorsky, 1998a) have suggested that in terms of test scores on cognitive and achievement measures, there is virtually no difference between students who had difficulties learning an FL and yet pursued and completed the college FL requirement, and those who had difficulties learning an FL and received petitions to substitute the FL requirement. Other findings (Sparks, Philips, Ganschow, & Javorsky, 1998b) have shown that students classified as LD who were permitted to substitute courses for one university’s FL requirement did not display statistically significant differences on cognitive and achievement measures when grouped by level of discrepancy between IQ and achievement (i.e., < 1.0 SD, 1.0 to 1.49 SD, ≥ 1.5 SD). In the same study the students were divided into two groups according to whether they had passed or not passed at least one college FL course and then compared on measures of IQ, academic achievement, graduating GPA, FL aptitude, and SAT/ACT scores. Results of the comparisons showed no significant differences between students who had passed and those who had not passed at least one college FL course on any of the aforementioned measures. Similar results were obtained when the petitioning students were divided into two groups (i.e., < 25th percentile, ≥ 25th percentile) on the basis of their scores on the MLAT and phonological/orthographic measures (i.e., word recognition, pseudoword reading, spelling). The authors speculated that, in studies of learners who exhibit FL learning problems, students identified as LD and those who exhibit IQ–achievement discrepancies (and/or a discrepancy between two achievement measures) may not perform significantly differently from non-LD students without IQ–achievement or achievement–achievement discrepancies. Rather, a key distinction between those who do and do not pass an FL course may be the degree of perseverance exhibited by those who succeeded. We therefore encourage students who experience FL learning problems to use the strategies described in this section. FL instructors can make accommodations in order to meet the needs of students who experience difficulties in their classrooms. Conversations with an LD specialist at the particular institution would be useful in helping the instructor decide on appropriate accommodations, as would attention to the student’s specific concerns. Sometimes a few minutes privately with a student can help the instructor determine what poses the most difficulty for him or her in the classroom, after which the instructor can assist the student in making the appropriate accommodations. (For additional suggestions for accommodations for teachers and institutions, see, e.g., Bilyeu, 1982; Hill et al., 1995; Mase, 1989.)

Summary and Future Directions

Over the past decade, with the help of our colleagues, we have developed an empirically based theory that has diagnostic, pedagogical, and policy implications for students with FL learning difficulties. Empirical evidence has been generated to support the positions that FL learning performance is related to native language learning, that most poor FL learners have overt or subtle problems with the phonological/orthographic (and syntactic) components of language, that affective differences are likely to be a consequence of successful or un-
successful FL learning, and that direct and explicit instruction of the language codes holds promise for these students. During a decade of research, we have built an empirical foundation to support our theoretical positions as well as our diagnostic, instructional, and policy recommendations.

A number of issues remain unresolved. Questions such as the following need further exploration: (a) Are some languages easier to learn for some students than others? Can we match a student with a specific foreign language? (b) Most of our studies to date have investigated the phonological/orthographic system. What kinds of difficulties do poor FL learners have with grammatical rule systems, and what instructional methods should be developed to assist them? (c) How might instructors best address the needs of students enrolled in FL classes who do not qualify for services but nevertheless experience continued learning problems in FL classrooms? and (d) To what extent can poor learners become proficient in an FL without the use of specialized teaching methodologies and instructional accommodations in FL courses?

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AUTHORS' NOTE

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NOTE

Several years ago, the authors changed the term deficit to differences in order to highlight the idea that there are individual differences in basic language skills, to clarify that language performance exists on a continuum, and to emphasize their hypothesis that there is not a distinct entity of a “foreign language learning disability” (see Sparks & Ganschow, 1995a).

REFERENCES


APPENDIX

Terminology of the Linguistic Coding Differences Hypothesis and Related Research

Foreign language (FL) aptitude
For the purposes of the studies in this article, FL aptitude refers to one's basic propensity for learning an FL in classroom settings (rather than via immersion in the culture). Carroll and Sapon's (1959) Modern Language Aptitude Test measures FL aptitude via the administration of five subtests found through factor analytic studies to be important for FL learning: Number Learning, Phonetic Script, Spelling Clues, Words in Sentences, and Paired Associates.

FL proficiency
FL proficiency as defined by the American Council on the Teaching of Foreign Languages (ACTFL) refers to "what an individual can and cannot do with an FL, regardless of where, when, or how the language has been learned or acquired" (ACTFL, 1989).

Linguistic Coding Difference Hypothesis (LCDH)
This hypothesis, developed by the authors, proposes that students who exhibit FL learning problems have overt or
subtle native language learning difficulties that affect their learning of a foreign language. Thus, the primary factors in successful or unsuccessful FL learning are thought to be linguistic, not affective (e.g., low motivation or high anxiety).

**Grammatical (syntactic) rules**
These rules govern the syntax of the language (e.g., word order, subject/verb agreement, parts of speech and their functions).

**Morphological rules**
These rules govern the use of prefixes, suffixes, and roots, that is, individual or combinations of morphemes and units of meaning (see Balmuth, 1992).

**Phonological recoding “factor”**
In this article the authors describe this factor as one involving the ability to reflect on the sound-symbol system of the language; it includes such abilities as reading low-frequency FL words, native language pseudowords, and unfamiliar words by extrapolating the phonological “rule” from more familiar instances.

**Phonology**
Phonology refers to phonemes, individual sound units, and sequences of phonemes that make up words (see Balmuth, 1992).

**Phonological/orthographic rules**
These rules govern the sounds and their representation by letters and letter sequences in words.

**Orthography**
These spelling rules govern one’s language, in particular, the permissible letters and letter sequences in words.

**Semantic rules**
These rules govern the meaning aspects of language.