Learning Disabilities and Foreign Languages: A Curriculum Approach to the Design of Inclusive Courses

Jonathan F. Arries


Stable URL: http://links.jstor.org/sici?sici=0026-7902%28199921%2983%3A1%3C98%3ALDAFLA%3E2.0.CO%3B2-W

*The Modern Language Journal* is currently published by National Federation of Modern Language Teachers Associations.

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at http://www.jstor.org/about/terms.html. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at http://www.jstor.org/journals/nfmlta.html.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is an independent not-for-profit organization dedicated to and preserving a digital archive of scholarly journals. For more information regarding JSTOR, please contact support@jstor.org.
Learning Disabilities and Foreign Languages: A Curriculum Approach to the Design of Inclusive Courses

JONATHAN F. ARRIES
Department of Modern Languages and Literatures
College of William and Mary
Williamsburg, Virginia 23187-8795
Email: jfarri@facstaff.wm.edu

Most universities require 1 or 2 years of foreign language (FL) study in at least 1 program as part of their general education requirements, yet many students with learning disabilities (LDs) find it extremely difficult to complete traditional FL courses. In this paper I describe some of the salient characteristics of these learners and common pedagogical assumptions of FL faculty that may make it difficult for students with LDs to complete the FL general education requirement. I list specific strategies that, according to students with LDs that I have interviewed, address some of their needs as FL learners. I then propose a systems approach to instructional design that faculty teams could use to redesign beginning Spanish language classes in order to accommodate students with LDs. I conclude that faculty, with administrative support, can collaborate in the design of inclusive FL courses in which all students—both those with LDs and those without—can experience success.

IN THE LAST DECADE, THE FACULTIES AND administrators of many four-year colleges have been astonished by sudden and dramatic increases in the enrollment of students with learning disabilities (LDs). Some universities that reported one or two dozen individuals with LDs in the 1980s now find that this population on their campus numbers several hundred (Vogel, 1987, 1993). According to Henderson (1995), approximately 9% of college freshmen in 1994 reported having a learning disability, three times the number in 1978. It is likely that postsecondary institutions will continue to see significant increases in the number of students with LDs; one recent report estimates the number of children and youth with disabilities at five million nationwide (Office of Special Education, 1994). In a survey conducted by Rojewski (1996), more than 30% of the high school seniors with LDs reported that they plan to graduate from college and another 9% expect to obtain a Master’s, Ph.D., M.D., or other equivalent degree. In order for students like those in Rojewski’s study to attain their goal of one or more university degrees, however, they will likely need to study a foreign language (FL) to fulfill a general education requirement. More than three-fourths of the universities surveyed by Ganschow, Myer, and Roeger (1989) require 1 or 2 years of second language (L2) study in at least one undergraduate program.

Although some students who are identified as having LDs may do very well in L2 courses with few or no modifications to the curriculum, there are three reasons why a great many find it nearly impossible to complete traditional FL courses successfully. First, LDs can manifest themselves as language processing (decoding/encoding) difficulties (Ganschow & Sparks, 1993, 1995; Javorsky, Sparks, & Ganschow, 1992). In other words, the study of a foreign language may be uniquely difficult for university students with a LD because success requires the use of precisely those language skills in which they are weak in English, their native language. Second, these students’ underlying disabilities with English language may not be apparent to FL faculty; Henderson (1995) refers to “invisible” disabilities. This invisibility may be the result of services the students receive
in elementary and secondary school or the compensatory strategies that they have developed naturally over many years in order to communicate successfully in their native language, or both. Some students may be unaware that they have a disability until they begin studying a FL, and others may be reluctant to approach faculty and to admit they have a LD. As a result, faculty may find that their previously effective approaches to teaching FL are inexplicably ineffective for an increasing number of students. Unless faculty are informed directly by the Office of Disabled Student Services or by a student, they may have no idea that modifications to their teaching strategies are indicated. Third, the design of a FL course that will provide both reasonable and successful accommodations for students with LDs is a complicated process for which FL faculty are not prepared in traditional degree programs, such as linguistics, literary studies, or even L2 acquisition. Yet if faculty and their institutions cling to traditional ways of organizing the FL general education courses under such circumstances, they may find themselves with a dysfunctional curriculum that fosters ever-increasing rates of attrition, academic failure, and petitions for waivers and course substitutions. In this essay I offer a curriculum perspective on the issue of LDs and FL study. I describe some typical characteristics of the students with LDs that I have taught and, in addition, certain common assumptions and practices in FL courses that may contribute to a dysfunctional learning environment for students with LDs. I list specific strategies that I have adapted for an inclusive classroom that, according to the students with LDs that I have interviewed, address some of their characteristic needs as FL learners. Such efforts by individual faculty to identify useful techniques and strategies, however, are time-consuming and yield results that may be neither generalizable nor sufficient. I therefore propose a systems approach to instructional design, a step-by-step, collaborative process that FL faculty can apply to the re-design of beginning language courses to include students with LDs. Inclusion refers to the education of children with disabilities in a general education classroom, with specialists working together with classroom teachers to identify appropriate teaching strategies and accommodations (Zions, 1997). This collaborative, interdisciplinary team model is, I believe, a superior alternative to course design by individual faculty that will facilitate the design of inclusive FL courses in which all students can experience success.

**COMMON CHARACTERISTICS OF STUDENTS WITH LDS**

FL instructors will find that searching publications on LDs and FL acquisition to identify the key method or the best instructional strategy is a futile and even a misleading exercise; there is no consensus whatsoever on any single method or approach for teaching a L2 to students with LDs. Some researchers recommend activities that incorporate movement, usually Total Physical Response (TPR), developed by Asher (1988), or music and art, like Suggestopedia (Prichard & Taylor, 1978; also Moore 1995). Others, such as Javorsky, Sparks, and Ganschow (1992), warn against "whole language" approaches and mention specifically TPR as a type of strategy that will not work for students with LDs because it does not include explicit instruction in the phonetic or syntactic codes (p. 41). In contrast to that opinion, Mabbott (1994) attributes the failure of a fluent speaker of Spanish to succeed in a Portuguese course to a grammar-centered curriculum. She explains that the individuals with LDs in her case study prefer a communicative approach (p. 312). Yet another opposing point of view is offered by Myer, Ganschow, Sparks, and Kenneweg (1989), who describe the Orton-Gillingham approach and warn that "Instruction that places a heavy emphasis on oral communication may pose serious problems for the students who have language learning difficulties" (p. 113). The confused reader is left asking what to do with these students and how to begin.

One way to begin is to identify the nature of frequent disabilities that FL faculty encounter. Since my first experience teaching a university student with a LD nine years ago, I have had the opportunity to teach and to observe approximately 40 students who were admitted into my beginning Spanish courses upon the recommendation of the Office of Disabled Student Services. The two most common disabilities among these students were difficulties with phonological processing and dyslexia, although others experienced difficulty due to attention deficit, medication that impeded memory, or traumatic brain injury. In spite of the variety of circumstances that led to their referral, I observed many of the following commonalities described below.

**Intelect**

None of the students appeared to differ in any significant way from their non-LD classmates in terms of intelligence. They had gained admission
to a university that required SAT scores and high school graduation. As Vogel (1993) points out, individuals with LDs exhibit a range of intelligence and may score in the superior range on IQ tests. Clearly, gifted and learning disabled are by no means mutually exclusive categories (Brody & Mills, 1997; Sapon-Shevin, 1987).

Inability to Mimic and Poor Reading Skills

Phonological processing difficulties were evident on those increasingly rare occasions when I attempted traditional, slot-substitution pattern practice activities (Dartmouth Drills). Many of these students could not utter a correct substitution, even after multiple prompts from their non-LD classmates, and had extreme difficulty being consistent in their pronunciation of Spanish vowels due to interference from English. It was also quite common for the dyslexic students to experience difficulty reading aloud accurately, even the textbook "cultural readings" that appear in English. Both types of students often failed to understand Spanish instructions for textbook exercises that I assigned as homework assignments.

Memory Difficulty

My students who had experienced brain trauma or who required medication because of other injuries found it difficult to retain vocabulary and grammar. Ashbaker and Swanson (1996) note that short-term and working memory difficulties are typical of adolescent readers with LDs, but that memory improves with rehearsal or item association (p. 206). It is not surprising, therefore, that university students with LDs may have difficulty remembering vocabulary if textbooks utilize a minimum of graphic reinforcement or if they simply choose to study vocabulary lists at a chapter’s end rather than to use associative strategies. They may also find textbook explanations of Spanish syntax difficult to remember if the explanations are not followed by contextualized practice.

High Anxiety

A study by Sparks, Ganschow, Patton, Artzer, Siebenhar, and Plageman (1997) maintains that students with high anxiety about learning FLs score lower on tests of reading, writing, listening, and speaking. Ganschow and Sparks (1996) propose that anxiety may reflect low skills in certain components of native language competence such as phonology, orthography, and syntax. The students with LDs that I taught tended to be highly anxious learners. In my inclusive course, they were very aware of the effects of their disability, yet observed that their classmates seemed to have little difficulty with the material. Students with LDs may also be unaware of how to compensate as they do in other subjects, may lack effective study skills, or fail to understand the purpose for different activities in the class hour. High-stakes tests that weigh very heavily in the calculation of the final grade may also produce extreme levels of anxiety and, as a consequence, yield artificially low measures of achievement.

Distractability

Some students with LDs were distracted more easily than are other students in class, during independent study and in testing situations. In the first two settings, this caused the student to miss explanations, which made it impossible to complete assignments or perform a task. The resulting hesitation could be misinterpreted by an instructor as evidence of a lack of motivation or intellect. Distractions during a test may cause the student to overlook examples or even instructions and consequently score far below his or her real ability. Welsh (1994) describes the symptoms of attention deficit hyperactivity disorder (ADHD) as inattention, impulsivity, and hyperactivity. Individuals with this LD may find it difficult to identify goals, to create plans to accomplish goals, or to monitor their progress.

MISTAKEN ASSUMPTIONS

In the preceding paragraphs I have identified five characteristics of the students with LDs whom I have taught, observed, and interviewed about the nature of their difficulties in beginning Spanish courses. The analysis of common effects of student disabilities is an important aspect of understanding the learning process of students with LDs, but a second, equally important aspect is the analysis of pedagogical assumptions that inform faculty instructional practices. Such an examination provides a broad perspective on the postsecondary FL curriculum. In the following section I describe common assumptions about FL learners, and one about FL faculty, that may contribute to a dysfunctional FL curriculum.

Assumption 1: Students Learn Vocabulary and Grammar Best from Textbooks

We use textbooks because they provide instructors and students with a convenient source of
information about a FL and organize information according to a theory of learning. However, even recently published textbooks may not reflect the latest research about L2 acquisition; Shrum and Glisan (1994) point out that grammar exercises are often not well contextualized and differ little from the mechanical practice of the audio-lingual method that influenced FL textbooks during the 1950s and 1960s (p. 25). It is also not clear that the contextualized presentation of vocabulary in textbooks means that students necessarily understand that it is important during their independent study to focus on vocabulary in context rather than refer simply to the ubiquitous summary vocabulary list at the end of any given chapter. Students with or without LDs require repeated (and accurate) practice of language in context in order for L2 acquisition to take place, and instructors need a repertoire of strategies that they can use to supplement the textbook whenever necessary.

Assumption 2: Students are Innate Mimics and Learn Languages through Imitation

Although children learn their first language through imitation, adult learners with LDs may not be able to mimic sounds as easily as children nor be able to process (decode) messages as quickly. This means that if students cannot identify the sounds that their instructor utters, they receive little or no comprehensible auditory input and, consequently, will be unable to produce comprehensible responses. Such students need explicit instruction in the phonetic code in order to acquire a L2 (Ganschow & Sparks, 1995; Javorsky, Sparks, and Ganschow, 1992; Sparks & Ganschow, 1993a).

Assumption 3: Students Can and Should Learn Most, if not All, of the Grammar Presented in the Book

The first of two underlying assumptions here is that language “learning” is the same as language “acquisition.” Krashen and Terrell (1983) argue that learning and acquisition are very distinct processes. The conscious learning of rules—the implicit goal of an ambitious grammar-based syllabus—may actually impede acquisition. The second assumption is that the amount of grammatical content in a textbook is related to a pedagogical theory followed by expert authors. In reality, the amount of grammatical material in a textbook may have less to do with authorial intent than marketing strategy. Textbook publishers are motivated by sales and profit and might choose to include past perfect subjunctive in first-year Spanish textbooks, for example, because they believe it will make their product more competitive, not because the authors believe that beginning learners must acquire the ability to narrate about emotions in the past tense. It is appropriate that FL faculty choose those objectives that they feel meet the needs of their students and select the relevant textbook content based on those objectives.

Assumption 4: Lessons that Consist of Homework Assignments, Oral Response to Questions, and Audiotape Exercises Will Prepare Students Well for Exams

Traditional students may do very well on exams or quizzes when taught with such lessons, especially if the exams reflect accurately the specific material that the instructor assigns. Yet even if faculty pay close attention to the content validity of quizzes and exams, students with LDs tend to perform poorly on listening comprehension activities and on test items. Some researchers speculate that short-term memory is affected adversely when students are unable to process auditory input fast enough (Ganschow & Sparks, 1995). Many of the students with LDs that I have taught find audiotapes nearly unintelligible unless they can read a tape script as they listen (see also Javorsky, Sparks, & Ganschow, 1992; Sparks & Ganschow, 1993a). As I have mentioned previously, students with LDs may not understand the instructions that precede textbook assignments, particularly if these are written in Spanish; the same problem applies to the instructions that precede exercises on audiotape, even if students use a tape script. Students with LDs need clear information about instructor expectations, precise descriptions of assignments or instructions, and practical, comprehensible, and contextualized exercises in order to prepare wisely for and perform well on quizzes and exams.

Assumption 5: Attentive Students Do Not Need Sample Items (Examples) on Quizzes and Tests

Two related assumptions lead some instructors to resist the use of examples in exam instructions. The first is a lack of clarity about the precise objectives that they wish to measure. These instructors would believe that a sample item to accompany a direction such as “Conjugate the following verbs” would reveal too much information, abrogate the students’ responsibility for knowing grammatical
terms, and make the quiz or exam too easy. Those
who design quizzes and exams, however, must ask
themselves what their principal objectives are; al-
though students ought to know the meaning of
conjugate, for example, is it more important to
measure their knowledge of that verb or their abil-
ity to perform the task? I believe that most instruc-
tors would find it more important to measure stu-
dents' achievement of skills directly related to
performance in the L2 (acquisition) rather than
to measure students' knowledge of rules or gram-
matical terminology (learning).

The second related assumption is that anxiety,
if not subject to the individual's self-control, is an
unavoidable aspect of any assessment. However, it
is not uncommon for faculty to be surprised at
non-LD students' misinterpretation of exam in-
structions. Students with LDs may also make such
mistakes. Some of my students also reported that
they simply "drew a blank" when taking a test not
because they were inattentive, unmotivated, or
unprepared, but rather because they were anxious.
The presence of examples may help to avoid the
artificially low measurement of students' achieve-
ment by reducing their anxiety.

Assumption 6: Faculty Working Alone Can
Redesign Courses

University faculty are accustomed to evalu-
ations based on their work as individual teachers
and researchers. However, as will be seen later in
the discussion of instructional systems design,
the reorganization of a FL course is a compli-
cated and time-consuming enterprise. Faculty
who are prepared in traditional degree programs
in linguistics, literary studies, and even FL educa-
tion or L2 acquisition may be unprepared for
this role; of the 19 universities that granted
Ph.D.s in the fields of FL education or L2 acqui-
sition in 1996, not one produced a dissertation
on the topic of LDs (Benseler, Scinicariello, &

There are two possible ways to correct this
pedagogical misconception. First, faculty and de-
partments must reevaluate the common overem-
phasis on individual performance in teaching
and in research and must consider ways to foster
collaborative action research teams. Action re-
search is described by Cohen and Manion (1994)
as an eight-stage method with the goal of imple-
menting a "small-scale intervention" with "close
examination of the effects of such intervention"
(pp. 186, 198–199; see also Markee, 1997). Sec-
ond, faculty teams should pursue internal fund-
ing or grants from agencies such as the National
Endowment for the Humanities (Education De-
velopment and Demonstration Grant) to support
summer curriculum development projects. A
combination of these two approaches may be nec-
essary to facilitate the involvement of faculty who
will invest significant amounts of time in the de-
sign and implementation of inclusive courses.

INCLUSIVE COURSE DESIGN

The characteristics of students with LDs and
the pedagogical misconceptions that I have just
described may interact to create a significant dys-
function in traditional approaches to managing
instruction in FL classrooms. This dysfunction
occurs because traditional instructional strate-
gies were developed in times when there were no
students with LDs in FL classrooms. In this era of
increasing numbers of students with LDs, there
are essentially three options from which institu-
tions may choose to correct this dysfunction: (a)
permit waivers and course substitutions, (b) de-
sign specific courses to meet the needs of stu-
dents with LDs, or (c) redesign FL courses to
incorporate instructional modifications that
make them inclusive of these students. Latham
and Latham (1994) note that currently many
universities tend to waive certain general educa-
tion courses, such as FLs, that can prove difficult
for students with LDs. As Demuth and Smith
(1987) point out, however, waivers do little for
the self-esteem of the individuals who obtain
them. In addition, the recent reports of success-
ful FL learning experiences for students with LDs
make any policy of automatic waivers for students
with LDs seem particularly spurious (Arries,
1994a; Barnett & Jarvis-Sladky, 1995; Ganschow
& Sparks, 1993, 1995; Lerner, 1991; Mabbott,
1994; Moore, 1995; Raynor, 1991; Sandperl,
1991; cf. Ganschow & Sparks, 1987; Sparks, Gans-
chow, Arzter, & Patton, 1997). Substitutions are
an expedient and perhaps even a necessary op-
tion in some instances, but it is difficult to imagi-
ne a single course that can offer the student the
same combination of linguistic, historical, and
cultural information as a L2 class (see Arries,
1994a, p. 112).5 The third option of specific,
separate courses for students with LDs, such as
that described by Sheppard (1993), can be prob-
lematic for two reasons: first, smaller classes are
more expensive to the institution and therefore
may be eliminated in times of fiscal austerity. Sec-
ond, Section 504 of the Rehabilitation Act of
1973 and the Americans with Disabilities Act of
1990 prohibit discrimination because of disabil-
ity, and therefore preclude forcing students into
segregated courses (Scott, 1994). This means, for example, that a student who is qualified to enroll in a FL course that is specifically designed for students with LDs may choose to enroll in a standard section to avoid a schedule conflict and request accommodations there.

In my opinion, the best solution to the problem of a dysfunctional curriculum is to design inclusive beginning language courses to accommodate students with LDs and simultaneously to meet the needs of all students. Inclusion is a concept that is generally associated with the placement of children with disabilities in general education classrooms in public elementary and secondary schools. Although public schools and universities have very different goals, there are several aspects of inclusion in schools that may have direct applications in the postsecondary setting. Zionts (1997) distinguishes full inclusion and selective inclusion models; full inclusion accommodates all students with disabilities in one integrated setting with a maximum of three students with disabilities in any general education class. In addition, special education specialists provide support for the classroom teachers, but are not responsible for most instruction. The selective inclusion model is different in that special education professionals work in teams to determine which combinations of classroom environments, aids and services, or modifications constitute the best means to accommodate the individual student (pp. 16–17).

The collaborative approach that typifies selective inclusion may offer a practical model for FL faculty who coordinate or design beginning courses. The office of Disabled Student Services is usually the source of summary information for faculty about a student’s disability; participation of personnel from that office on a curriculum team would make sense for that reason alone. There are two additional reasons, however, why specialists in learning disabilities should form part of the team that identifies appropriate modifications for students with LDs in FL courses. First, the test scores that provide the basis for a diagnosis of learning disability are confidential; a student’s permission must be obtained for faculty to have access to diagnostic testing and clinical evaluations. Second, the scores on these instruments are different from most tests with which FL faculty are familiar, and the interpretation of these data often requires the specialized knowledge of those trained in the field of educational psychology.

Subpart E of Section 504 of the Rehabilitation Act of 1973 notes that legally acceptable appropriate modifications may be an adaptation of “the manner in which particular courses are conducted” (Scott, 1994, p. 404), and a knowledge of a variety of instructional methods constitutes part of the expertise of the FL classroom instructor. The contribution to be made by FL faculty on an interdisciplinary curriculum team is the identification of those instructional strategies or interventions that might meet the specific needs of an individual as identified in the assessment. Teams will require more than the interpretive skills of specialists and an assortment of FL teaching techniques, however, if they are to meet the needs of three students with different disabilities. As I mentioned earlier in this essay, research indicates that some students with LDs find it difficult to identify goals, to create plans to accomplish goals, or to monitor their progress. It is therefore incumbent on instructors to assist their students if the lack of metacognitive skills is a hindrance to FL acquisition. Clearly, faculty need a systematic and comprehensive way to plan and to deliver instruction, a schema that enables them to engage in a critical analysis of the curriculum and identify potential impediments to learning for each individual with a LD. One approach to instructional system design is summarized by Gagné, Briggs, and Wager (1992 [based on the earlier work of Dick & Carey, 1985]) as a nine-step procedure. The following describes the process that an interdisciplinary team could follow to design an inclusive beginning language course.

Step One: Instructional Goals

At the high school level instructional goals are usually described in the curriculum guide, but in my experience there is no such guide in FL departments. Scott (1994) also notes that “This in-depth accountability [of identifying explicit goals] far exceeds traditional expectations of teaching in higher education” (p. 407). The FL curriculum team must study the tests and quizzes taken by students with LDs who have attempted L2 study previously in order to identify the difficulties or gaps in knowledge that they have in common with nondisabled peers. An analysis of student responses to a dictation exercise, for example, may reveal spelling errors stemming from the phonological processing difficulties of students with LDs; vento and veinte and veinte are three different Spanish words similar in spelling and pronunciation that have presented difficulties for my students with LDs. Novice students also mispronounce and misspell these words, however, and the team of faculty and specialists might identify
the knowledge of the sound system of Spanish as a primary goal in the curriculum and propose very traditional aural discrimination exercises (e.g., Rivers, Azevedo, & Heflin, 1988, pp. 148–162) as an appropriate intervention for students both with and without learning disabilities. If the problem is not common, on the other hand, the team might decide to recommend that remediation be assigned to the tutors who work with the students with LDs.

**Step Two: Instructional Analysis**

To analyze a procedure is to divide it into distinct steps. The formation of the present subjunctive, for example, is taught commonly as a series of steps that begins with the identification of the verb root, which usually derives from the first-person singular form of a verb in the present indicative tense, and is followed by the attachment of person-appropriate subjunctive endings. Other traditional FL course content, such as cultural behaviors, can be taught in the L2 as a process or a series of steps. For example, Arries (1994b) describes an event schema based on behaviors at a party in Puerto Rico for use in the beginning levels of Spanish. In this technique, known as a Gouin Series, students use language in context and remember it through movement, gestures, chronological sequence, as well as repetition.

**Step Three: Entry Behaviors and Learner Characteristics**

The instructors and learning specialists on a curriculum team can collaborate to identify learner abilities and traits through direct interviews of students with LDs, by means of questionnaires such as Oxford’s (1990) learning strategy inventory (pp. 283–291), and the LD specialist can provide an interpretation of individual measurement data that supports a diagnosis of LD. These resources, taken in combination, can enable the team to match types of activities to the needs of the students in a particular class. According to Gagné, Briggs, and Wager (1992), step three may occur simultaneously with step two.

**Step Four: Performance Objectives**

Detailed performance (instructional) objectives help the instructor to communicate clearly the measurable, intended outcomes of learning. Gagné, Briggs, and Wager (1992) describe the five components of performance objectives (p. 127). The following is a sample performance objective for the culture activity that I mention above in step two: “When asked to describe a party in Puerto Rico, the student states seven, third-person, present indicative sentences in Spanish to describe the chronology of events with 100% accuracy in sequence, 90% accuracy in grammar and vocabulary, and 75% accuracy in pronunciation of phonemes.” An objective for a student with a disability related to phonological processing might be as follows: “The student pronounces color-coded vocabulary with 90% accuracy with zero prompts from the instructor.” Well-defined performance objectives help faculty to evaluate instruction and assess student learning in a manner that demonstrates to students specific areas that warrant additional practice.

**Step Five: Criterion-Referenced Test Items**

Faculty develop testing instruments that measure the degree to which students have achieved a performance objective. Ideally, this step would include, in addition to an outline of examination topics, the scoring mechanisms that the instructors could provide to the students. This clarification of instructor expectations would help those students whose LD is characterized by an inability to identify goals or plan how to meet them: metacognitive skills that most students without LDs generally take for granted. Faculty could encourage the development of metacognition in students with ADHD, for example, with the very forms that they use to score speaking skills for students without LDs. Arries’ (1994b) modified scoring form includes, on its reverse side, the descriptors that specify instructor expectations in the areas of pronunciation, fluency, and vocabulary, as well as grammar (pp. 533–534). Although not designed specifically for students with LDs, this type of form may provide helpful feedback to students when viewing their own speech samples on videotape.

**Step Six: Instructional Strategies**

Just as instructors identify potential activities to help students to accomplish performance objectives, the curriculum team must identify the combination of strategies that will lead to a successful curriculum design that includes students with LDs. Strategies can be teacher-centered or learner-centered. An example of a teacher-centered strategy, based on Puerto Rico, would be to assign a cultural reading in the textbook, then give a formal or informal quiz to assess the students’ knowledge about the history, geography,
or political status of Puerto Rico. A student-centered module on Puerto Rico might begin with a statement of the objectives and a detailed guide to accompany the viewing of a videotaped news broadcast, and end with a series of multiple-choice instruments with which students could judge their own work.

**Step Seven: Instructional Materials**

The curriculum team selects the combination of instructional media (textbooks, films, computer programs) that seems to best meet the instructional goals identified in step one. It is important to underscore the appropriate sequence here; one should develop objectives first, then an outline of the appropriate test content, and finally select the best combination of media. To choose a textbook and its ancillary materials out of convenience is to yield control of the curriculum to a publishing company that cannot address the range of disabilities that an instructor might need to accommodate in any given classroom.

**Step Eight: Formative Evaluation**

The team designs field trials (tests) for the purposes of formative evaluation, a means to identify strengths and weaknesses in course materials or design. A field test is not just an achievement test, but rather part of a three-step process that begins with the designer’s interview of individual students—with and without LDs—to identify sources of confusion in evaluation instruments and in other course materials. In the second phase, the curriculum team compares those findings with the performance of a small group of similar students in order to obtain valid mean scores and to corroborate the findings from the interviews of individuals about sources of confusion. In the third phase, the team uses the findings from steps one and two, makes any necessary revision of the materials, and applies the test to an entire class.

**Step Nine: Summative Evaluation**

In the context of designing an inclusive L2 course, summative evaluation would likely take the form of an achievement test, but focus on the statistical comparison of test data between groups. If the data show positive results for students with and without LDs as compared to a control group, other institutions can justify replicating the course design.

**SUCCESSFUL STRATEGIES**

My attempt to apply instructional system design to an inclusive course, although I did not have the advantage of a team with whom to collaborate, helped me to identify strategies that seemed helpful to the students I have interviewed. In the section below, I summarize the strategies that correspond to the characteristics of students with LDs that I described earlier in this essay.

**Strategy 1: Enhance Phonological Processing**

The students that I have interviewed report that a mnemonic, color-phonics system (color-coding the vowel system [for examples, see Arries, 1994a, p. 115]), used with flash cards to introduce new vocabulary and to practice independently, helped correct pronunciation and improved listening comprehension (see also Tan & Nicholson, 1997). The primary differences between this technique and a traditional, Orton-Gillingham method described by Sparks, Ganschow, Kenneweg, and Miller (1991) is that the instructor, the student, or both prepare the cards outside of class and each vowel is drawn with a distinct, always consistent color. This permits the instructor to allocate frequent, even daily, reinforcement of the phonetic code during vocabulary review, for example, without taking time from conversation, grammar, or discussion of cultural information. This technique, although far from new (see also Gattegno & Hinman, 1966; Bannatyne, 1966), is one that students can use easily to make their own color-coded flash cards. A modification of oral reading assignments that reduces student embarrassment is to assign specific paragraphs the day before students are to read aloud. Students can practice their portion in advance and read more fluently in English, or even in Spanish if they have access to a color-coded script.

**Strategy 2: Facilitate Memory**

Memory difficulty can be linked to students’ learning style and to time constraints. The learning style of my students with LDs led me to reinforce their acquisition of vocabulary and pronunciation with pictures from magazines or with simple, hand-drawn images accompanied by color-coded subtitles and much choral repetition. Most FL teachers that I have observed unconsciously accommodate their students’ various learning styles, for example, when they clarify
textbook grammar explanations. Teachers do this because they perceive a miscommunication due to a style of discourse that does not correspond to their students’ previous experience. A different accommodation to learning style that my students with LDs found helpful in acquiring and retaining grammar was multisensory, kinesthetic exercises such as Gouin Series (Arries, 1994b; Grittner, 1977; Knop, 1976; Rivers, Azevedo, Heflin, & Hyman-Opler, 1976; Titone, 1968) and TPR (Asher, 1988; Moore, 1995). An important modification of these activities for use with students with LDs is the provision of written scripts of the kinesthetic activities so that students can study the utterances independently. The Gouin Series, essentially an application of Terrell’s “explicit grammar instruction” (1991) can include pauses for review that facilitate verbal short-term memory. Oakland, Black, Stanford, Nussbaum, and Balise (1998) state that drill, repetition, multisensory (nonlanguage) reinforcement of speech, sequential learning objectives, and explicit attention to metacognition are indicated for children with dyslexia.

The relationship between time and memory can be considered a ratio of the quantity of material in the curriculum to the total time on task available to the student. Important issues here are the number of course credits (total class time) and the demands on the student’s study time such as course loads and work responsibilities. There are two ways to maximize this ratio. The first is to reduce the syllabus and prioritize the mastery of fundamentals rather than the completion of a textbook. All the second-year textbooks with which I am familiar “reenter” basic grammar; that review can be condensed and the time thus saved reallocated to more advanced syntax when it is necessary for or appropriate to the students’ communication needs. The second is to maximize instructional efficiency. Lesson plan formats, such as those developed by Knop (1982) or Hunter and Russell (1977) are valuable tools for organizing instruction. Also instructive is the suggestion by Ganschow and Sparks (1995) that the poor short-term memory scores of students in their study were related to “the phonological/orthographic coding difficulties” (p. 115). The color-coding of vowels that I have mentioned previously may improve memory in the direct instruction of the phonological system.

My students with LDs often needed assistance organizing their study time, an objective that I met by arranging volunteer tutors, usually advanced Spanish students or undergraduate teaching assistants, who kept a log of each lesson. The log was a valuable source of information for me about student preparation, provided insight into individual students’ difficulties, and placed a student with a LD in direct contact with a successful learner who could share her good organizational skills. Welsh (1994) suggests that strategies that teach students with ADHD to monitor their performance may be appropriate. Sparks and Ganschow (1993b) mention metacognitive training as one strategy that may help students with LDs (see also Policastro, 1993).

Strategy 3: Reduce Anxiety

Block and Burke (1988) report that instructors’ attention to the issue of anxiety is a key factor in the success of students with disabilities (p. 198). The classroom environment and testing situations are two sources of anxiety in the curriculum that faculty can address. In my interviews of students with LDs, the most common recommendation was simply for the instructor to be patient and supportive; sufficient and convenient office hours were of course also considered important. I also found that students who were shy about speaking in class benefitted tremendously from brief pair-work activities. These offered students with LDs an opportunity to interact with non-LD classmates and to experience success in their collaboration. To ensure that success, I arranged for clear examples (demonstrated myself or by classmates) and encouraged students to applaud each other whenever they presented pair work, something which contributed greatly toward a supportive classroom environment. Occasionally, I recorded these brief presentations on videotape so that students could perceive their progress as well as areas in which to improve.

I preferred to avoid high-stakes testing and weighted the final exam 20% in the calculation of the final grade. In my inclusive course I also allocated 20% to frequent mini-quizzes that encouraged students to stay current and that also conditioned them to the format of some sections on quizzes and exams. Each mini-quiz generally lasted 5 minutes or less, focused on recent material, and had a weight of 1% of the final grade. I found that I was able to correct and return quickly these low-risk evaluative instruments, provide valuable feedback to students, and identify areas of confusion that I needed to address prior to a quiz or exam. This strategy also may have benefitted non-LD students, but the frequent review and the familiarity with testing formats seemed to meet the needs of students with
LDs who found it difficult to identify goals in the course and to organize their independent study.

Technology may offer students and faculty a convenient and efficient means to vary the drill that is a necessary component of L2 study, to access authentic cultural information, and to engage in real communication. As Cubillos (1998) points out, however, faculty must select software carefully in order to avoid programs that are not well articulated with the textbook or are de-contextualized to the point that they do not promote real communication. I have not located FL software designed specifically to meet the needs of students with LDs, but researchers have noted the benefit derived from software programs to remediate spelling in English (Van Daal & Van der Leij, 1992). Others have described the advantages in the efficient delivery of instruction available through videodisc and computer-assisted instruction (Carnine, 1989). Until there is more formal study on technology and the L2 acquisition of students with LDs, however, we can only speculate that it might offer the student a variety of ways to reinforce acquisition.

**Strategy 4: Reduce Distractions**

Reducing noise and other distractions during exams is common courtesy that faculty extend to all students. In some cases, however, I arranged for distractable students with LDs to take quizzes or exams separately from their classmates, either during an office hour or in a language laboratory. I took this courtesy a step farther because some of my students LD became increasingly anxious as they observed their classmates complete an exam or quiz much more quickly than they could. Such an arrangement also reduced some of the difficulties related to the logistics of untimed quizzes and tests. I also recommended that instructors review all exam instructions and as a general policy provide written examples in all sections, although some students with LDs may overlook them. I sometimes omitted parts of the examples and required students to copy the missing information from the blackboard directly onto the test in order to focus their attention on the examples and to ensure that students listened attentively as I read the instructions.

A lesson plan that includes anticipatory set, multiple activities and checks student comprehension through performance can minimize students’ distraction during the class hour. The anticipatory set is an introductory activity that focuses learners’ attention and highlights the instructional objectives. A variety of activities encourages on-task behavior because students must pay attention in order to participate and perform for assessment. Comprehension checks that require students to perform (e.g., ask or answer a classmate’s question appropriately, perform a series of movements or gestures in the proper sequence) allow the instructor to ascertain whether students have mastered a concept; if not, he or she can provide additional explanations and practice. In addition to the kinesthetic activities that I have previously mentioned, the instructor may wish to alternate fast- and slow-paced activities and to use volunteers from the class to lead certain activities. This use of students with LDs as a classroom resource, when they volunteer, is the kind of student-centered learning that Dunn (1995) believes is more effective and appropriate for students with LDs than traditional, teacher-centered approaches.

**CONCLUSIONS**

Some characteristics of learners with LDs and several commonsensical, yet misinformed pedagogical assumptions of FL instructors constitute a profound challenge to those who believe in the value of learning a L2. This challenge is not unique to FL study, however. In her discussion of LDs and English composition, for instance, Dunn (1995) points out that “time-honored” methods of teaching writing “may be the worst possible way for LD students to approach learning” (pp. 166-167). That author believes that a shift in values is needed so that faculty and students can create an environment where alternative learning can take place. The shift in values to which she refers is a change from a common, teacher-centered philosophy of education to one that is student-centered. A student-centered curriculum requires students to invest more of themselves in the learning process than they do in a traditional classroom. Students speak frankly with the instructor about their interests, learning styles, and disabilities. It also implies that FL educators, for their students’ sake, must recognize that their curriculum is a complex system with components that can and must be subject to processes of in-depth analysis and critique that epitomize our common mission in higher education.

Even if FL instructors can collaborate, they may still wonder, given the nature of academic work and the complexity of course design, how and when they can begin to create a student-centered, inclusive curriculum. In this essay I address the “how” as I describe widely known learning disabilities, mistaken pedagogical assumptions, and
the collaborative, instructional systems design that can enable faculty to develop practical strategies that can help students with LDs learn Spanish in an inclusive course. As stated by the National Standards in Foreign Language Education Project (1996), "Students once shut out of language courses prosper in classrooms that acknowledge that ALL students are capable of learning other languages given opportunities for quality instruction” (p. 8–19). I am convinced that FL curriculum approach that I describe here will serve a useful starting point for those who will undertake a collaborative search for more and better ways for all students to learn foreign languages.

NOTES

1 I am aware that many education specialists and researchers prefer to use terminology such as "learning difficulties" or "learning differences" rather than "learning disabilities" because they perceive foreign language aptitude and language ability as a continuum rather than as discrete categories. In this essay I use the term disability because it is the term used in all relevant legislation and also because the students who inform this study were referred to me by the Office of Disability Services at Old Dominion University after they requested accommodations and filed evidence of a disability.

2 Most, but not all, of the interviews to which I refer throughout this article were recorded by the author on videotape in the spring semester of 1994. Some have appeared in two teleconferences on learning disabilities: These were "Accommodating Learning Disabled University Students" (October 27, 1995), produced by Academic Television Services at Old Dominion University, and “Accommodating Students with Learning Disabilities: Minimum Pain, Maximum Gain” (April 30, 1997), produced by STARLINK of Dallas County Community College. It must be acknowledged that my conclusions are based clearly on a limited number of students, and cannot be considered generalizable.

3 The most commonly mentioned kinesthetic exercise is TPR. The Gouin Series, which was discussed in considerable detail by Rivers, Azevedo, Hellin, and Hyman-Opler (1976, pp. 19–22), is apparently not widely known among researchers in this field or is deemed perhaps too reminiscent of the audiolingual method. In any case, the omission of this strategy in a curriculum for students with LDs is unfortunate since the first-person statements that students memorize quickly in brief Gouin series enable them to respond immediately and correctly to second-person questions, a very important linguistic function.

4 The use of terms such as "haptic" and "kinesthetic" as synonyms of "multisensory" is one confusing aspect of the literature about LDs and FL acquisition. Haptic does not mean "moving and doing" as O’Brien asserts (1985, p. 86; also note Moore, 1995, p. 62). Haptic is a synonym of tactile; a haptic modality refers to information received through the sense of touch via fingers (e.g., Locher, 1985; Sawada, 1982; Wippich, 1991). In the FL literature I have been unable to locate a description of an activity for students with LDs that can properly be called “haptic." However, one example would be an exercise in which students touch objects as they name them in order to learn vocabulary. Kinesthetic is the correct term for movement, as in the multisensory approach of the 1940s called “V-A-K-T (visual-auditory-kinesthetic-tactile)” (Richardson, 1989, p. 12).

5 A certain amount of circumspection is in order regarding the substitution of sign language for L2 study referred to in the literature on disabilities (Ganschow & Sparks, 1987; Sparks & Ganschow, 1993). Although I have no doubt that American Sign Language (ASL) truly is a language, sometimes what is taught as sign language in community colleges and universities is not ASL, but rather signed English. I am aware of one unfortunate instance in which several university students with LDs were granted such a substitution only to find that they, unlike their classmates without LDs, had extreme difficulty with signing English accurately, and the instructor had neither the training nor the release time to develop accommodations.

REFERENCES


