# **Chapter Five**

# Implications for College Instructors

So far, this book has presented some of the conflicting theories and research of the learning disability field, and it has shown that most professional discourse in Composition Studies does not begin to explore this controversy. While various writing theorists focus on "basic writers," few recognize (or even mention) the significant number of students who might have a different way of processing linguistic symbols. What an exploration of the LD controversy will do for college writing instructors and their students is not yet entirely clear. Any pedagogical changes that might arise from a study of LD issues are perhaps less important than attitudinal changes on the part of students and especially on the part of instructors. How professors perceive students' difficulties with reading and writing influences how they attempt to address those difficulties. Instructors responding to student texts should be careful about using those written texts as a measure of that student's intelligence, educational background, or parents' reading habits. The idea of a learning difference is still hypothetical. However, a sensitivity to it as a possibility should alert college writing instructors to cues they might otherwise overlook or attribute to something not applicable. If nothing else, an awareness of the LD controversy will inform composition instructors about relevant laws and give them a direction for needed research.

In Chapter Three, we saw that the intense tutoring of one young child has suggested several things about learning. First, O-G methods, by themselves, could not motivate Joey. Second, whole language practices, based as they are on assumptions of a basic intuition for reading and writing, were extremely motivating but pedagogically inadequate for Joey, who does not easily intuit linguistic structures. For him, an intense interest in the subject matter was vital, but not by itself enough. He also required explicit instruction and multisensory inroads, but the O-G lessons bored and frustrated him. Learning occurred when he was both deeply engaged in wanting to learn *and* when he had some kind of structured associative link with which he could connect the linguistic symbols he needed to use. Similarly, the three college students interviewed in Chapter Four had successful learning experiences when they were deeply engaged in reading and writing approaches made as multisensory as possible and tailored to their individual learning styles.

What does all this mean for writing instructors, and what should they do differently? Unfortunately, because this issue has not been adequately addressed by composition professionals, there are many gaps in the pedagogy that need to be filled. As Sherrel Lee Haight observes, even those professionals with doctorates specializing in learning disabilities are often frustrated by expectations that they perform "miracles" or find a definitive "cure" for learning disabilities. She points out that the many types of disabilities prevent any one treatment from being universally applicable. Her analogy regarding the treatment of cancer is interesting. Often a diagnosis of cancer will invite different treatments-surgery, chemotherapy, radiation, or nutritional therapy-from different physicians. Similarly, a diagnosis of learning disability might be treated with different recommendations by various experts in the same field (Haight 1980, 47-49). Those disclaimers offered, this chapter will lead the reader through a course of action to take if one suspects that there are LD students in a writing class.

# **Recognizing the Learning Disabled College Writer**

What remaining processing difficulties will Joey have ten years from now? If he were to appear in a college writing course, what would his essays look like? First of all, it is clear that learning disabled children *do* show up as learning disabled adults attending college. As with everything else in the learning disability controversy, the statistics vary regarding how many college students today are LD. One study says that about 2 percent of college students are LD (Wilczenski and Gillespie-Silver 1992, 198), while others estimate that the number may be anywhere from 3 to 11 percent (Houck et al. 1992, 687). Paul LeClerc, former president of Hunter College, reported at a 1993 conference in Albany, New York, that the number of LD students at that school tripled from 1987–1993. The numbers regarding how many of these students graduate also vary. One 1990 study indicated that only 6.5 percent of one group of LD students remained in college programs (Whinnery 1992, 32). However, in a study done by Vogel and Adelman, the graduation rate of LD students was slightly higher than that of non-LD students, although the former group typically took lighter loads and one more year to complete their studies (1992, 440). Some LD students will come to college already identified by their high school records and may spend several semesters in a basic or preparatory writing course or program. Therefore, professors who teach creditbearing composition or writing-intensive courses might not encounter LD students until those students' second or third semester.

If instructors are not informed about LD students, the following cues might help alert them to students who may need different strategies for learning. These indicators, listed here without explanation, have been described in more detail in earlier chapters. (See also O'Hearn's [1989] and Richards' [1986] articles.) It should be kept in mind that these manifestations may be due partially to a combination of other factors such as carelessness, dialect interference, inexperience, and other social factors, so they should not, by themselves, be used by a writing teacher to diagnose learning disabilities. They are only cues to a possible condition that would need more careful investigation by LD specialists.

As Carolyn O'Hearn points out, although writing instructors are not LD experts qualified officially to test or treat such a student, they may be the first ones in a position to notice a severe problem with writing. Also, although having an LD label entitles students to many accommodations, it is not a classification too many people want following them around in their records for the rest of their professional lives. While some students gladly announce themselves as LD, others will go to any lengths to avoid that label, which is, of course, their right. Therefore, as O'Hearn points out, if we suspect that some of our students might be learning disabled, we are faced with a dilemma. If we ask them about their academic past, what classes they were in or what special problems with writing they may have had, we risk insulting them and losing their trust. On the other hand, if the college provides a tutoring program and accommodations for LD students, and we do not broach the subject with them, we may risk having them become discouraged and drop out of college when perhaps they could have been helped (O'Hearn 1989, 301). Here, then, are some of the possible idiosyncratic features of texts written by LD students, some typical error patterns, and some traits the students themselves might show.

# **Possible Indicators of Learning Difference**

### I. Textual Features

A. Words

- 1. omission of prepositions and articles
- 2. omission of verbs and word endings

3. dropped letters

4. trouble with small words (be, by, of, it, at)

- 5. trouble with abstract words (were, where, that)
- 6. trouble with prefixes and suffixes
- 7. odd use of apostrophe ("I have to put ga's in my car.")

8. high number of spelling errors, some bizarre

9. patternless, inconsistent spelling errors

10. use of "has" for "as"

11. use of "dose" for "does"

12. misuse of pronouns

13. odd malapropisms ("sequoistered" for "cloistered" for "sequestered")

14. words used are rarely more than three syllables long (C. Johnston 1984, 387). Note that other studies suggest the vocabulary of LD students may be just as diverse as that of non-LD students (Gajar 1989, 129).

15. dysnomia (commonly known as the "tip-of-the-tongue" phenomenon, usually a feature of oral language, but sometimes evident in writing as blank spaces left for words that could not be recalled)

B. Sentences

1. unusually high number of punctuation errors, especially commas

2. errors in parallel structure

3. twisted idioms

4. incoherent sentences or phrases (which, in a conference, the student may easily explain orally)

5. may have comparable number of T-units (independent clauses), as "regular" papers, but these are not punctuated properly (Vogel 1982, 524; Gajar 1989, 125).

6. trouble forming and punctuating complex sentences (Wiig and Fleischmann 1980, 45).

C. Appearance of the paper

1. if handwritten, an unusual mixture of capitals and lowercase letters

2. if handwritten, all text written in block letters

3. if handwritten, some backward or reversed-sequence letters 4. typed papers far more readable than handwritten (or printed ones)

5. all one paragraph

6. every sentence a different paragraph

II. Content

A. Papers rich in sensory detail

B. Narratives (once deciphered) both unconventional and creative

C. Essays shorter than other students' essays (due to time and effort involved in composing)

III. Students

A. May seem much more intelligent in person than what an initial glance at his or her written work might indicate

B. May be able to *talk* about a subject much more coherently than he or she can *write* about it

C. May be very perceptive of nonverbal cues such as other people's moods, as expressed in facial expression and tone of voice. D. May notice obscure details in pictures or illustrations (Kahn 1980, 43)

E. May become totally absorbed in a story, essay, or poem that is read aloud

F. May do much better on work completed at home than on timed work done in the classroom (C. Johnston 1984, 387).

G. May compensate for difficulties by working very hard: rewriting everything, coming for extra help, seeking help in a writing or tutoring center, asking for "extra credit"

H. May compensate for difficulties by avoidance of writing situations: skipping classes and conferences, handing in assignments late or not at all, appearing bored by the assignment, finding excuses for not doing well

I. May claim to have always "hated" English

Let me emphasize that this list is a more of a collection of how various people, who do not all agree, have characterized the writing and the actions of people reputed to be LD. It should be used merely as a point of departure for the following discussion.

There have been many studies comparing the writing of LD students to that of their peers. While there are without question substantial problems judging such characteristics as quality, coherence, organization, and clarity, other features such as sentence complexity, spelling, vocabulary, and punctuation are more easily measurable. Vogel and Moran summarize a variety of studies, many of which have contradictory findings (1982, 211–13). In general, however, LD students' writing is not significantly different from that of non-LD students on a syntactic level (though a few studies indicate otherwise). In Vogel and Moran's study, many differences between LD and non-LD students' writing "diminish considerably" when errors in punctuation and capitalization are ignored (219).

They also summarize a study by Critchley in 1973 that showed dyslexic students using less sophisticated vocabulary than that used by non-LD groups. According to Vogel and Moran, Critchley "attributed this difference to a limitation in the dyslexics' word knowledge" (213). This assumption, however, should not be made hastily. Professors who assume their students know sophisticated vocabulary but cannot summon it up or spell it correctly (and therefore avoid it), will act differently toward their students than will those who automatically assume their students have a "limitation in word knowledge." Whether instructors have high or low expectations for their students is no small matter. If LD students use a less sophisticated vocabulary in experimental studies, researchers' speculations about the reasons why should be made very carefully. Other studies Vogel and Moran cite, however, indicate little difference in vocabulary level between LD and non-LD groups. The spelling differences are, as might be predicted, quite significant (212).

Research on writing is one area that cries out for collaboration between disciplines. Much of the research on LD students' writing has been done in the Educational Psychology field, which prepares its professionals for research but does not explore much Composition theory. Those in the field of Composition are more familiar with some of the pitfalls involved in attempting to assess writing, but they could benefit from their colleagues' background in experimental methods and statistical analysis. Whether or not LD students' writing differs in important ways from that of their non-LD peers is a question that has yet to be reliably answered. Future research projects addressing this question should be designed by professionals representing the perspectives of several fields. A mutual respect for each other's research methods, however, is essential, as Stephen M. North argues in The Making of Knowledge in Composition. He also points out the substantial, perhaps irreconcilable, differences in ideology that may render such collaboration difficult or impossible (1987, 346-47).

The many remaining questions regarding surface features notwithstanding, composition instructors may occasionally find a paper with so many of the indicators listed previously that they suspect the writer may have a learning difference. Whether or not an instructor should approach a student about pursuing testing and whether or not that student should decide to do so are complex questions with many practical, ethical, and possibly legal ramifications.

If it is obvious that a student could greatly benefit from untimed tests, scribes, tutors, access to computers, or other accommodations to which identified LD students are legally entitled, it makes sense for both student and instructor to do everything possible to secure the kind of practical assistance that could make the difference between academic failure and success. If, however, some instructors still harbor unfounded, negative assumptions regarding the intellectual abilities of learning disabled people, or if they associate the LD label with students they believe to be avoiding the "standards" that everyone else must meet, students must consider if changed teacher expectations due to the label would have a negative effect on their overall education. In one survey, faculty respondents indicated some doubt about LD students' graduation chances, as well as their ability to succeed in any major (Houck et al. 1992, 683). Given the sad but real possibility that the LD label could create limiting prejudgments of students, writing instructors also need to weigh both sides of this ethical dilemma.

In the final chapter of Rhetorical Traditions and the Teaching of Writing, Knoblauch and Brannon point to reader-response theory to help us better understand evaluation, and their observation is relevant here: "the extent to which readers' awareness either of the authority of the writer or of their own authority to be judges affects their perceptions of texts." Further, "in the absence of confidence in the authority of the writer, ... readers will tend without hesitation to cite any idiosyncrasy of form or technique, idea or style, any authorial choice that challenges their personal preferences, as an 'error'" (1984, 161). In other words, the very fact that teachers, or any readers, have the authority to judge students' writing means that they will, indeed, judge it—and usually negatively. If they also are privy to knowledge that the writer is LD, they might inadvertently be less or more critical of that writer's text, based on their preconceived notions of LD people in general. Whether or not to invite students to identify and possibly stigmatize themselves in such a culture, in spite of the accommodations that would then become available, is a decision that should not be made lightly. As was seen in Chapter Four, the three students interviewed had mixed feelings about this, although they did seem more supportive of the label in higher education than in the earlier grades.

Critics of the learning disability field are accurate in their estimation that much of the terminology used to describe LD "clients" has negative connotations, and no group is more aware of this than LD students themselves. Written into existing legislation and therefore necessarily appearing in forms, institutional policy statements, and professional journals, terms such as *disabilities*, *limitations*, *disorders*, and *deficits*, when taken together indicate a troubling preoccupation with what is wrong (Johnston and Allington 1991). Like the resource room students Nick described in the previous chapter, there may be many labeled high school students who are "mad and stubborn" and programmed to feel that college is not an option.

Dependency is a related issue that students and professors need to consider when planning a course of action. While the three LD students I spoke with were labeled at different times in their lives, none of them took vocational courses or spent much time isolated in special education programs. Although each experienced frustrations in the mainstream, they were all spared the kind of dangerous dependency students can sometimes develop in the resource rooms of some non-progressive school districts. In an article called "Helping College Bound Clients with Learning Disabilities," which appeared in the Journal of Rehabilitation, the authors rightly advise counselors to consider many factors in assessing a student's chance of success in college (Satcher and Dooley-Dickey 1991, 48). Overall, the article seems to be in the students' best interests, but there also seems to be a disturbing assumption that the responsibility for "determining reasonable expectations" regarding a student's college career rests not primarily with the student, but with the vocational counselor.

While good, attentive advising is a valuable resource, it may be detrimental if advisors place unconscious restrictions on what students can and can not do. Also, since there is some evidence that traditional measures of academic promise "underpredict" the performance of college LD students (Wilczenski and Gillespie-Silver 1992, 201), even careful, sensitive career counselors may not be able to judge accurately whether or not students should attempt college. Students, of course, ultimately make the final decision, but they may be unduly influenced by the disabling terminology in which they may have been steeped during many years of "support," and they are to some extent at the mercy of those who write their recommendations. Satcher and Doolev-Dickey recognize that some students may not want to disclose their LD label. They therefore advise that "VR [Vocational Rehabilitation] counselors will want to include self-identification and request for support services as part of the client's IWRP [individualized written rehabilitation plan]" (1991, 49). While this disclosure is intended to help students, it may deny them the choice of whether or not they wish their new professors and peers to know their past academic history.

After carefully considering these issues, suppose a professor does decide to speak privately to a student whose struggles with written language do not seem to be caused by lack of effort, unenlightened high school teachers, or less-than-model family reading habits. Great care must be taken in how this subject is broached. It is illegal for classroom instructors to inform a student that she is learning disabled, and it is illegal to ask a student if she is learning disabled. Sally Townsend, a colleague of mine with a degree in LD, pointed this out, adding that we would never dream of trying to diagnose alcoholism or brain damage in our students or of asking them outright if they thought they might have these conditions (Townsend 1994). She suggested that instructors instead ask general questions designed to let the student know that help was available should they decide to seek it out. For example, Sally has asked questions such as, "I'm having lots of trouble reading your writing. Have other people ever said anything to you about this? Have you had similar experiences before this class?" (Townsend 1994).

At this point, the student knows the professor is open to ways of helping, and it is the student's decision to maintain the status quo or to pursue channels of help, which the professor can explain or help seek out, providing the student is interested. Sally emphasizes student responsibility in this matter. As all three students in the last chapter said in different ways, what matters most is whether students view these private chats as threatening or supportive. If a professor's tone is respectful, positive, and interested, students will have an easier time deciding what, if anything, they wish to do about any learning difficulties they may have.

If the conference described above results in a student's requesting information on LD or accommodations (or if a student comes to the college already identified as LD), professors and student should turn first to whatever resources their college already provides.

#### Resources

Whether LD students come to college already diagnosed, or whether they are diagnosed after demonstrating many of the above characteristics and being tested, they are of special concern to administrators since the passing of the 1973 Rehabilitation Act, especially Section 504. According to Susan A. Vogel, this law provided that colleges receiving any federal assistance must accommodate LD students, allowing them to "participate fully in all programs" (1985, 179–80). As this is usually interpreted, colleges are not required to *test* for LD (although many do), but they must provide services for students already labeled LD. (For a partial listing of tests, see Ostertag et al. 1982). Since the passing of the 1990 Americans with Disabilities Act, issues regarding who will finance these services and accommodations have become more critical, and, as discussed in Chapter One, are currently and slowly in the process of being decided through case law.

What follows is a list of places on campus where help for LD students should be available. LD specialists and services are often located in offices and departments that might be called by different names on different campuses. There are often overlapping services (for example, tutoring available in both a writing and a math learning center). Interested composition instructors should read their own institution's student or faculty handbook, or the college catalog to see what services are available. Below are names of offices interested faculty members may look to for advice and help regarding students they suspect may be LD.

Academic Support Services Office of Handicapped Services Evaluation Center Guidance or Advisement Office Counseling Services Library or Media Center Reading Program Learning Center Writing Center and/or Math Center Tutoring Services Health Services Academic Dean's Office Student Services

The kind of help the student receives will vary, but support services may include testing, counseling, advisement, tutoring, scribes, or supplementary materials. Ideally, the LD specialist will communicate with the student's classroom instructors in order better to coordinate the work done in all settings.

Fairleigh Dickinson University, for example, began a program in 1988 that allows learning disabled students to be mainstreamed into regular college classes but provides a campuswide support system. This includes tutoring offered for every course taken during their first year. Regular faculty and staff receive training to be aware of the characteristics of and accommodations for learning disabled students. Time limits for testing may be extended, and a note taker or tape recorder may be provided. In addition, first-year students in the LD program take a course called "Metacognitive Strategies," which helps them become more aware of their particular learning process (Farleigh Dickinson University 1991). Other colleges may have more compartmentalized services of which individual faculty members are unaware, but determined composition instructors should be able to find someone on campus knowledgeable about learning disabilities. (For a further discussion of services offered see Cordoni 1982; Vogel 1982; and Ostertag et al. 1982.)

It may be that eventually the best way to handle alternative teaching or studying options will be to make them available for all students. Rochester Institute of Technology, for example, makes many resources in its Alternative Learning Department available not just to labeled LD students, but to everyone—faculty and students, labeled or not. While funding for the more individualized levels of support does depend to some extent on the official label, the department is open for all. Anyone can use available texts on learning differences, and there is a generous approach to sharing taped textbooks, lecture notes, and other materials. According to Jacqueline Lynch Czamanske, chair of the department, while non-LD students are "not coming down in droves," the idea of making "all education special" would help reduce the stigma connected with the LD label (1994).

Other options that might reduce unwanted attention to LD students and also improve higher education in general is to make information and materials that are usually restricted to LD students available in a more neutral site to everyone. Tape recordings of classes could be kept in the school library, behind the reference desk, to be used much like reserve materials. Any student could sign out the tape and headphones for several hours to listen to a missed class or one she would like to review. A professor's lecture notes might be available to the whole college community in much the same way. In addition, the "inside information" regarding instructors' teaching styles might be printed in the course schedules of classes. Courses might be coded as being primarily lecture-based, or as requiring much writing or oral discussion. While there may be some legitimate objections to making such information and materials public, the overall benefits in destignatizing LD students and in opening collegewide dialogue about teaching and learning styles would probably outweigh any disadvantages.<sup>1</sup>

Composition specialists interested in additional information outside their field have vast resources. The ERIC files list many essays on learning disabilities, usually in publications such as the Annals of Dyslexia, the Learning Disability Quarterly, and the Journal of Learning Disabilities, as well as in journals dealing with reading, education, medicine, or psychology. There are also many articles in other publications not primarily focused on LD. Marc E. Helgeson and T. Hisama's (1982) article on using a "Multi-Modality Approach" to teach illiterate prison inmates appeared in the *Journal of Correctional Education*. In *Adult Literacy and Basic Education* was an article by Binnie L. Peterson entitled "One Approach to Teaching the Specific Language Disabled Adult Language Arts" (1981). Other articles on alternative teaching methods for the learning disabled appear in the following periodicals: Brain and Language; Clinical Neuropsychology; Educational Psychologist; Journal of Educational Psychology; Journal of Classroom Interactions; Journal of Reading Behavior; Academic Therapy; Support for Learning; Reading Research and Instruction; Perception and Motor Skills.

There are many dissertations on LD-related topics such as "dyslexia" and "multisensory," but these are usually for people obtaining doctoral degrees outside English or Composition Studies. Nancy Le Sanders Royal's 1987 dissertation studied the O-G-based method of multisensory teaching developed by Beth Slingerland, a remedial approach designed for LD students that is either strongly endorsed or vehemently condemned, depending on one's position in the LD controversy. Other dissertations studying the usefulness of O-G methods fulfilled requirements in the following fields: Special Education, Education (Curriculum and Instruction), and Clinical Psychology. These texts are but a sampling of the information on LD available across the disciplines. Countless documents and pamphlets are available from federal and state agencies, especially following the passage of the ADA, and the Internet is an ever-growing source of information and discussion opportunities. (One useful LD listserv, or electronic discussion group, is LD-List@east.pima.edu).

#### **Alternative Approaches to Teaching and Assessment**

Whether or not students are receiving outside help with their reading or writing, there are classroom techniques that not only accommodate LD students, but also broaden opportunities for everyone.

It should be pointed out again that some experts claim that by the time learning disabled students get to college, they really cannot be easily remediated—that if they have not overcome their disability by their eighteenth year, their best hope is that their teachers will help them find ways to work around their learning differences. From her research at McGill University, Maggie Bruck found that adult dyslexics' phonological awareness skills—that is, the ability readers need to distinguish syllables and phonetic sounds—never reach the skill level of normal readers (1992, 882). Nancy Pompian and Carl Thum, in their discussion of LD students at Dartmouth College, recommend "accommodation rather than remediation" (1988, 281), that is, helping LD students and college instructors adapt to each other rather than begin (once again) a remedial process that may be a disheartening waste of time for all concerned. As mentioned earlier, some may argue that this is a defeatist attitude —that by attributing students' problems to "learning disability," and relying on accommodations rather than renewed instruction, we may be putting limits on their progress.

As discussed in Chapter Four, the debate over whether or not to use "bypass" methods or more remediation is ongoing. While some teachers at Landmark College are on record as being against bypass methods (Meyer 1986, 30), Jackie Czamanske at Rochester Institute of Technology bases the philosophy of her Alternative Learning Department on the idea that "We do not remediate." She and her staff help students identify and take advantage of what they do well, and regularly discuss with students and professors across the disciplines Howard Gardner's theory of "multiple intelligences" (Czamanske 1994). Gardner believes that conventional intelligence tests unfairly privilege linguistic ability while they virtually ignore other intellectual capabilities which, were they identified, could be more fully developed and used (Gardner 1985, xi-xii). This emphasis on what talents their students do possess, the philosophy that drives RIT's Alternative Learning Department, is one that other institutions would do well to emulate.

In writing this chapter on "Implications for College Instructors," I am struck repeatedly with the enormity, perhaps even the impossibility, of the task. Whenever strategies, methods, or approaches are discussed, there is always the danger that they will be tried on and then discarded like so many platform shoes headed for a garage sale. I include ideas here more for what they may generate in readers than for the ideas themselves. What is important is not the "alternative learning strategies" but the larger concept of alternative learning. Rather than presenting a how-to on adapting to the status quo, I would like to describe this chapter much the way Jackie Czamanske summed up her program at RIT. She said her philosophy was about a "shift in values." Instead of concentrating on finding out if people are "learning disabled," she advises asking the question, "What do you do well?"(1994).

The suggestions I propose are here to spark questions about what happens in our classes, our courses, and our institutions, and how that might change if we really did conceive of learning in different ways, if we committed ourselves to finding out what our students did well and allowed them to teach us. What if we really did change our views of intelligence, and broadened our definition of "writing" to include much, much more than it currently does in academia? What if we took seriously Freire's concept of "co-intentional" education—that "Teachers and students (leadership and people), co-intent on reality, are both Subjects, not only in the task of unveiling that reality, and thereby coming to know it critically, but in the task of re-creating that knowledge" (Freire 1970, 56). How would college—or the world—change if we were to turn the teaching/learning model upside down? It is in the impractical spirit of challenging conventional ideas of teaching, learning, assessing, writing, and thinking that I approach this somewhat practical next section.

The strategies discussed below are not blanket recommendations. Some techniques will be appropriate for certain LD students but not others. MacLean Gander, English Department Chair at Landmark College, says there is no such thing as the way to teach students with language-processing differences. Their needs vary (Gander 1991). Instructors need to talk with and listen to their students individually, to take advantage of whatever metacognitive strategies students may already have. For example, they may already know whether they learn better by hearing words read aloud or by seeing them on paper, so they may have suggestions about how instructors can best help them. Instructors need to find out (diplomatically) what, if any, supplementary help these students are already receiving through a learning center or tutorial program. That way, the student's efforts can be reinforced rather than unnecessarily repeated. Finally, before any modifications in teaching or evaluating are made, the instructor and student must examine together the student's writing to determine strengths and weaknesses.

#### **Teacher-Centered Instruction**

Before beginning a discussion of what *to* do, I'd like to talk about what *not* to do. Some of the most time-honored institutional practices may be the worst possible way for LD students to approach learning. One person speaking from a lectern before a large group of students who are expected to write selected notes may present frustrating, often unnecessary hurdles to an LD student. Students able to absorb information orally might understand the actual lecture, but having to organize the information and quickly write readable notes is another story. For visually oriented students, the lecture might be almost useless. If LD students sit in the back of a large classroom or lecture hall (as many are wont to do), the instructor's facial expressions and eye contact, which might especially help LD students, will probably be lost. Being expected to read many chapters of material or long pieces of fiction at home and in isolation from other students may overwhelm LD students, whose reading level, by ordinary measures, may not be what their professors assume it is. Also, these students may need much more time to read what other students, or their professors, can read in much less time.

In general, LD students perform much more poorly on timed tests, especially the "objective," multiple-choice variety, than they do on work they either can take home, or at least have as much time as they need to complete. The added stress of completing work by a certain time adds to the difficulties they may have in reading and interpreting the test questions, and on keeping the *a*'s, *b*'s, and *c*'s straight on both test and answer sheets. Even an essay exam, if timed, may undermine everything they have been taught about taking their time and being careful to revise and proofread.

Many professors still require one long paper, due near the end of the semester. If an LD student's writing demonstrates the kind of severe surface and sentence problems discussed earlier, the professor might not become aware of it until much too late in the semester to do anything about it. In addition, LD students might require some guidance in completing the project in stages, rather than in one flawless package due on a given date. Also, if the long paper is unacceptable, little time is left for the student to revise it.

However, if institutional restrictions or practical considerations require that a course be taught by traditional methods, there are modifications that can be made even in this restrictive model. If a professor *must* lecture, the talk could have some kind of multisensory link. A clearly organized outline, either on a blackboard, an overhead projector, or a slide might accompany the lecture. Colorcoded diagrams or charts, where possible, could supplement explanations of concepts, and a mix of bold and regular print on handouts is also useful. Landmark College uses "manipulatives," colorcoded objects to teach abstract concepts (see Chapter Two).

Good teaching practices from methods courses should be resurrected: briefly reviewing old material, introducing new material in a way that relates to previous knowledge and to the students' lives, and a preview of what the basic structure of the lecture will be (Kahn 1980, 41). If a student asks permission to tape a class, the speaker might pay particular attention to the organization of lecture notes. Susan Vogel gives the practical suggestions that instructors speak more slowly and allow for students to occasionally provide copies of their lecture notes to each other (1982, 523). My colleague Sally Townsend suggests that LD students come up with a prearranged, nonverbal cue to inform the instructor they are struggling to keep up with the lecture or large-group discussion. This might be coughing, putting on or taking off a hat, or some other noticeable act. The point is to communicate without causing undue embarrassment. Providing some class time to discuss note-taking and summarizing might help all students see what is important and also might allow instructors to monitor how much review is needed. As I was walking across campus one day, I overheard one student say to another, "I have to have someone read my notes to me out loud before I can even *start* studying." I do not know the subject being discussed or if the speaker was LD, but this snatch of conversation reinforced for me the importance of the oral modality for some people.

If much outside reading is required, the instructor might require or encourage the formation of study groups, either in or out of class, so that students will begin to discuss what they are reading with each other. That way, students having trouble with the reading level may benefit from an oral discussion of the material. As we saw in Chapter Four, both Nick and Monica highly recommended study groups. Beverly Dexter points out that diagnosed LD students may be able to have their books tape-recorded through Recordings for the Blind, Inc. (1982, 346). While LD students are not visually handicapped, listening to a required novel or textbook chapter while walking or driving to school may help them to better manage their time if they are slow readers.

By expanding their knowledge base in whatever ways are available in an electronic age, LD students who do not read fast might partially compensate for years of negative "Matthew Effects"-Keith Stanovich's phrase for "the rich get richer and the poor get poorer" syndrome that applies to students and their reading habits. Those who read well and like to read do read widely and expand their prior knowledge, thus increasing the possibility that they will better understand progressively sophisticated materials on a wide range of topics. Those students for whom reading is a struggle, avoid it. This limits their knowledge base, further reducing the chances that they will understand subsequent texts they are asked to read. What this means for college writing instructors is that they too should consider alternative ways for their LD students to familiarize themselves with whatever readings might be required in the course curriculum. For example, instead of the entire class being required to read Elbow's Writing With Power on their own time, a small group could collaborate on an oral summary of it.

Short literary pieces particularly appropriate for oral reading could be read aloud in class by a teacher or a competent student. For example, Mark Twain's acerbic "The War Prayer," an excellent piece with which to provoke written response, can be read aloud in about five minutes. Not only is this method more dramatic than a home reading, where multiple distractions or reading difficulties can prevent students from reacting to the piece fully, but an oral reading is a community experience that can spark lively discussions. A writing-intensive Shakespeare class could take advantage of excellent film productions now available on videotape, such as Zeffirelli's films *Romeo and Juliet* and *Hamlet*, which can be used to supplement a student's struggle through seventeenth-century blank verse on her own.

If students must read large portions of material at home, their instructors might heed some sound advice from reading specialists: tell them what to expect from the readings, what topics will be discussed, and what sections are most important. Required texts should always be discussed or reviewed. Bernice Wong points out something reading teachers know but writing instructors may need to review: students need to be aware of how they read and what strategies help them best to comprehend or make meaning out of what they read (1988, 191). These "study skills" are often considered the domain of student support services rather than of classroom instructors. With an awareness of the LD student's typical problems and assets, teachers can construct assignments and evaluation tools in ways that are more compatible with their particular discipline and with different styles of learning. English professors who themselves enjoy reading need to be alert for possible multisensory options for those students who might not have the same facility with reading. Reading, of course, should still be encouraged, but not to the extent that it causes capable students to drop classes because of reading (or writing) assignments that are unnecessarily rigid.

Susan Vogel offers recommendations if multiple-choice exams cannot be avoided. First, LD students might be provided with a reader, so that they can *hear* the questions and possible choices. Second, they could be allowed to give their answers orally, so that they do not accidentally put down the wrong one. (Oral exams and readers are welcome options—and legal rights—for both Monica and Janine.) If students must write their answers, they should at least have the option to avoid the fill-in-the-dots answer sheet. The stems and answer choices should be free of complicated, overly modified sentence structure and double negatives. Finally, if possible, the untimed essay should be used in favor of the objective test (1982, 527).

Although written work is essential in evaluating students' progress in a writing course, other options are possible in other

disciplines. For example, oral reports, diagrams, prepared videotapes, or three-dimensional models are all ways in which LD students might better demonstrate their understanding of literature, science, math, etc. First drafts for LD students can take the form of a visual or graphic concept rather than something with words. Pat Fennelly at SUNY Albany has students sketch on the blackboard their reactions to a reading before they write about it (1990). Donna Richardson uses a "drawing-to-learn" method as a way into Wordsworth's poetry. By having students sketch, for example, the narrator's physical approach to Lucy's cabin in the poem "Strange Fits of Passion I Have Known," she allows students to do a kind of "visual paraphrasing" that might be an important first step in making meaning out of a text (1990, 141-45). While the option to do sketches was not designed specifically for LD students, it may very well be that this technique is an appropriate outlet for those who get a visual image of an idea prior to forming a linguistic one. I typically begin my Introduction to Literature classes with a few minutes of directed. informal writing. One day last semester I instead asked how we might sketch the plot development of Steinbeck's Cannery Row. Several people volunteered to put their five-minute diagrams on the whiteboard, and the discussion following their explanations was one of the most invigorating of the semester. Their visualizations taught me something about the novel, as did the process of sketching.

Carolyn Oliver, Director of Admissions at Landmark College, believes that although there are many kinds of learning disabilities, at least one-third of LD students are primarily oral learners. They need to speak often in class discussions, and they may need to compose orally. She recommends a teaching approach that emphasizes speech communication, and the writing classes at Landmark College have oral communication as a substantial component of their curriculum (1991). It should be noted, however, that the English classes at Landmark College (called "nation's costliest college" by The Chronicle of Higher Education) are typically composed of six to eight students. It is conceivable that virtually any approach to teaching would succeed in such conditions. By itself, this teacher-student ratio allows a luxury of individual attention and small-group contact most people cannot financially afford. The oral projects and closely monitored revision strategies possible in a group this size may not be practical in the classes of twenty to thirty that are typical at public four-year or community colleges.

Oliver also believes that some LD students may need to have structures of sentences, paragraphs, and essays made explicit. It is inappropriate, of course, to teach such patterns to students who can intuit them or discover new ones independently. However, some LD students may need concrete strategies for how to begin an essay or ways to get from one paragraph to another. MacLean Gander points out that even the much-maligned five paragraph theme (although he himself does not teach it) was a structure one LD student found extremely useful. After a tutor made that form explicit to him, the student produced what he considered his best piece of writing (Gander 1991). While explicit teaching of structures may be unnecessary, or even limiting, for most LD students, it may be crucial to the learning of *some* learning disabled people.

#### Student-Centered Instruction

As stated previously, the student-centered pedagogy being written about in many contemporary journals and being discussed at recent conferences might appear to be more widespread in actual practice than is actually the case. Everyone seems to know about freewriting, nongraded journals, peer response groups, one-to-one studentteacher conferences, multiple drafts, and so on. Often, however, "group work" consists of a class of twenty-five sitting in a circle with the teacher leading the discussion. The concept of "multiple drafts" degenerates into the instructor essentially editing the student's work and the student typing it over, and informal journals are sometimes graded for their grammatical correctness.

LD students must learn to question their own ideas, to view their writing from various perspectives, and to become their own editors. In this sense, they are no different from "normal" college students. However, LD students seem to have a greater need than other students do for an awareness of when and how they learn best, especially since the circumstances under which LD students learn are likely to be different from those of the majority, for whom most pedagogies are designed.

Response journals and reading logs, if used properly, help some LD students find their strong points and develop confidence and voice. Writing teachers sometimes abandon journals because they are often voluminous, error-ridden, or boring. However, experienced instructors' advice regarding selective or random reading of journals still applies, and there is no law saying teachers must read every word. The purpose of journals is to help writers develop fluency and explore ideas. Learning disabled students are especially in need of the positive feedback and encouragement that comments from professors or from other students can provide. The journal is useful for establishing a format through which other members of the writing community can respond substantively to creative ideas expressed by LD students in sketches, cartoons, or diagrams, forms that should be suggested and encouraged. Often, by seeing their ideas in another form, LD students can then write about them. Handwritten journals provide evidence of word problems students might be experiencing. Because students often write about their interests, alert readers can help them generate ideas for future writing projects. Usually unstructured and untimed, journals and reading logs might be some of the best outlets through which LD students can experiment with their written expression. Writing teachers should do everything in their power to make journal writing a positive experience for all students, but especially for LD students. Journals should not be graded on grammatical correctness.

For many of the same reasons, freewriting-focused or unfocused, uninterrupted writing-should also be encouraged. Those convinced they have nothing to say are free to write that opinion. As Peter Elbow explains it, the purpose is simply to get words down on paper without pausing to think about it (1973, 1-11). To be most effective, freewriting should be repeated over time so that it can be given a chance to do what it is supposed to do-encourage attention to ideas (not spelling and punctuation); develop fluency and voice; and convince inexperienced, tentative, or learning disabled writers that they *can* express themselves through words if, as the Nike slogan puts it, they "just do it." Providing a few minutes at the beginning, middle, or end of a class period in which students may do some informal, focused freewriting will demonstrate to them how much they can get down on paper in a short time. Nongraded freewriting is especially important for some LD students because it may give them success in a medium (writing) they may not have succeeded in previously. As Carolyn Oliver points out, however, freewriting may be less successful, even frustrating, for those LD students who do not yet have the automatization of basic word or sentence skills that most children have by seventh grade. Freewriting is often promoted as a way for students to overcome writing blocks, but for certain kinds of learning disabled students. even freewriting presents structural obstacles that must first be overcome by explicit teaching (1991).

Jackie Czamanske suggests a tape-recorded free flow of ideas as an alternative to freewriting or written journal entries. If the purpose of these strategies is to generate ideas and to make connections, some students may benefit more from this kind of articulation than from struggling with a notebook or even a word processor. Students should not be required to transcribe this tape; instructors could simply listen to portions the student might select, or the tape could be made only for the student's use (1994). This option to "free-talk" could be available to any student who might occasionally benefit from it, for instance when driving or walking, but the class community would need first to determine the purpose of this exercise.

For most LD students, it is especially important that smallgroup discussions and peer response be incorporated into the writing class. Of course, most students require some modeling and instruction on ways to respond to each other's work, and they should be encouraged to offer observations and questions rather than criticism and suggestions. Group work is especially helpful to LD students because it provides an opportunity to involve another sense (hearing) in their learning and writing process. It is multisensory because they can associate what is said with the person doing the talking. By listening to essays read aloud, they may be better able to understand the potential power of the written word. By reading their own texts aloud, they may read smoothly through many surface flaws, giving a more accurate presentation of their ideas. On the other hand, some students like Nick and Monica may loathe reading out loud in class and should not be forced to do so.

Revising through a multiple-draft process is especially important for LD students. No doubt used to having their spelling and grammar-related errors pounced upon, it might be a refreshing change to have their *ideas* responded to first. When reading an early draft by an LD student, instructors may have a special need for Peter Elbow's "believing game" (1973, 147–91). That is, teachers might need to make a special effort to *believe* there is an idea embedded in what might be a morass of poorly punctuated sentences and unusual spelling. By responding first to the student's opinions, validating creative descriptions or raising questions about convictions, instructors show that writing is important.

At the proofreading stage, the teacher/student conference is useful. It does little good for the instructor to spend time editing and fixing a student's errors. It is time-consuming for the teacher, discouraging for the student, and frustrating for both. Students need to develop editing skills if they are to succeed in the academic or business world. One method that seems to work well with LD students is to meet with them individually, providing both teacher and student with an uncorrected copy of the latest draft. Having students read each sentence out loud will help them detect many idiomatic or punctuation difficulties. Any remaining errors can be hinted at or directly pointed out by the instructor. If there is a spelling rule or grammar convention that is useful, both parties might pool their creativity to find a mnemonic device or multisensory trick to help the student remember it. Carolyn Oliver suggests that students point to and say aloud each word in their text. The multisensory aspect of this strategy (using hand, eye, and voice), will help keep the LD student focused. For high school and college instructors who wish to help LD writers improve their spelling, Beyond the "SP" Label: Improving the Spelling of Learning Disabled and Basic Writers by McAlexander, Dobie, and Gregg offers an extensive, systematic approach involving error analysis, useful rules, and memory aids. These one-to-one conferences are timeconsuming but essential in establishing the human connection and the personal reaction LD students need for their writing. Conferences also help determine what kinds of surface errors the student is making and what approaches will best eliminate them. By taking notes on each meeting, students can begin to monitor their own progress and learn to check for themselves subsequent writing projects. Also, conferences often reveal a student's outside interests, suggesting engaging subject matter for future essays or papers.

Both student and teacher, however, need to determine how much time to invest in close editing. In fixing repeated errors, they may quickly reach a point of diminishing returns and decide to lean more heavily on a generous roommate to help out with proofreading. To what extent students should be encouraged to seek substantial editing assistance is something that needs to be addressed at cross-disciplinary meetings, workshops, or seminars. What some instructors may describe as "plagiarism" others may view as sensible, time-saving, legitimate collaboration. This is another controversial element that could have a "both/and" solution if students, faculty, and administrators conversed more frequently about such questions.

# Computer Technology

That LD students should have more access to word processors and sophisticated editing software is one of the few noncontroversial conclusions most everyone makes. Much of what has been written in various disciplines about LD students has been speculation. However, many studies about word processing have been done that sufficiently demonstrate its special value to LD students. For more than three years, Terence Collins has worked with LD students at the University of Minnesota. He quotes one LD adult as calling word processing "liberation technology," and another as saying, "I can *see* my thoughts." In this study, LD students were enrolled in regular writing classes, but all students had access to computers. Collins reports that LD students, by using computers, were able greatly to reduce their fear of writing (1989, 4).

Numerous studies summarized by Marshall and Durst, in a *Research in the Teaching of English* Annotated Bibliography, deal with word processing and substantiate the findings of Collins and his colleagues. One study cited in the May, 1988, *RTE* was Carole McAllister and Richard Louth's "The Effect of Word Processing on the Revision of Basic Writers," presented at the 1987 CCCC in Atlanta. They concluded that word processing seemed to improve the students' revision practices (1987, 19–20). Also listed is Evelyn J. Posey's dissertation, "The Writer's Tool: A Study of Microcomputer Word Processing to Improve the Writing of Basic Writers." Although writing improvement could not be definitively measured, Posey found students became more motivated and took their work through more revisions (1986, 39).

Simply having access to a typewriter may be particularly valuable to learning disabled students. To illustrate this, I return briefly to my nephew Joey. The only word that he can write in cursive is his first name (see Figure 5–1).

As can be observed, his signature is not easily read or written. He makes a recognizable *J*, fakes his way through the *o* and *e*, which



Figure 5–1 Joey's signature.

must be somehow tangled in his mind, and finishes up with something looking vaguely like a y. One day I sat him in front of an electric typewriter and told him to find the letters in his name and type them. He promptly typed *Joey* and squealed with delight at seeing the letters appear (for once) correctly on the paper, at having the typewriter keys obey in a way that his hand would not. Similarly, LD college students required to write their work on a word processor might discover a control they are unable to achieve with handwriting.

As technology advances and Computer Assisted Instruction (CAI) becomes more sophisticated, composition instructors need to be alert for those programs which might especially benefit LD students. For example, some programs help students analyze their sentence structure by separating out individual sentences and spacing them one by one down the page. This aids in the late-stage editing process of checking for sentence fragments, exceedingly long phrases, or punctuation problems. The electronic separating of sentences is particularly helpful for LD students, who often simply need help isolating a sentence so that they can more easily consider its structure and meaning. As Joel Nydahl points out in a College English essay, one need not purchase an expensive CAI program to do sophisticated maneuvers with text (1990, 904). Any simple wordprocessing system can be used to separate sentences. One need only press the "return" key twice after every period or other end mark and the "sentences" will be isolated. If students have been neglecting to include such punctuation marks, that will of course be immediately obvious.

Taking advantage of the ability to add, delete, replace, and move sentences and paragraphs around in the text might also open new possibilities for LD students. Even if electronic word processing is not available, students could do a kind of mechanical word processing. If only the fronts of paper are written on, students can use scissors to cut and paste sections of their essays, experimenting with deletion and placement, and utilizing yet another sense—touch. Graphics programs and desktop publishing options might help LD students incorporate their nonlinguistic talents into papers and reports. The potential of hypertext and multimedia is only beginning to be investigated, and LD students might be the people best qualified to explore the almost spatial qualities of this new technology.

In a recent issue of the *Computing Teacher*, Michael J. Speziale and Lynne M. La France recount how a high school class of LD students used *HyperStudio*, a computerized multimedia program, to create a study guide for the Pennsylvania Driver's Manual. These teachers credit the nonlinear, collaborative, multisensory nature of the project for the successful results they report. "They [the LD students] amazed visitors who saw the quality of their work and who at one point wanted to know if they were gifted students." The student project leaders were reportedly "among the lowest readers in the class. They simply excelled in using the *HyperStudio* program and in the teaching/learning process being employed" (1992, 34).

Some word processors today have a feature that allows the user to program often-used words simply by pressing one assigned key. This could help a student like Barbara, who was taking a psychology course and needed to write several papers in which she needed to write "psychology" many times, a word whose spelling always eluded her. If she could program it once and then let the computer's memory work for her, it would save her much time and perhaps many futile attempts at memorization.

In a recent issue of *Change*, Norman Coombs and G. Phillip Cartwright describe the latest adaptive computer technologies and a way to find out about them in their article "Project EASI: Equal Access to Software and Information." For physically challenged people for example, there is "a sip-and-puff straw," through which they can use morse code to work with a computer. The authors also explain how they use the Internet for "distance learning" seminars (1994, 43-44).<sup>2</sup>

Writing for the Times Educational Supplement, Sally McKeown reports that "overlays" and "predictive word processing" software such as PAL and MindReader can "'learn' what the writer typically writes, and can produce a short word list on request, often after the first two letters are typed in." McKeown also reports on the findings of the National Council for Educational Technology, which looked at sixteen different spell checkers in various price ranges. For one misspelled word, some programs offered an overgenerous list of forty suggested alternatives, which of course can result in the kind of confusion LD students do not need (1992, S11),-and which contributed to Janine's choice of decision for discussion and effect for effort, as we saw in the last chapter. According to McKeown, some of the better programs provide ways of controlling the spell checker's lists. She also discusses the advantages of a "speech synthesizer," now available, which could help the student who wrote this sentence hear it: "Every day I can't how money days it is to Christmas." Finally, McKeown makes a point that is sad and sometimes all too true: it is often the students who need this technology the most who may not be placed in courses most likely to feature exposure to this sophisticated machinery (S11).

As instructors and therefore part of the institution, we need to use whatever influence we have to ensure that all LD students have regular access to computers, not simply for remedial exercises or typing purposes, but as often and for as long as they want in order to compose, revise, edit, and experiment. They should be encouraged to take advantage of the most sophisticated spell checkers, grammar programs, CAI packages, hypertext, multimedia, assistive technologies, and so on. While there already are many intersections between computer science and composition, there should be a more concerted collaboration among disciplines, with the needs of LD writers specifically in mind. In the same way that conceptions of teaching need to be rethought, so do conceptions of almost every aspect of the technology connected with it.

In "Reconceiving Hypertext," Catherine F. Smith critiques most past hypertext theory for focusing too narrowly on what are assumed to be universal thought patterns and concepts of reality. She uses the analogy of "gendered virtuality," as illustrated in Virginia Woolf's explanation in Three Guineas of how men and women in Britain in the 1930s would view academic buildings through different social and economic lenses (1991, 229.) In much the same way that men and women view the world differently, Smith argues, hypertext users might view virtual reality in ways quite different from that of the original designers of the program. This failure on the designers' part to anticipate different worldviews or thinking styles prompts Smith to ask provocative questions: "Have the designers of virtual realities encountered our differences? Do the systems those designers design know about difference?" (1991, 233). These questions, I think, are relevant in this discussion of learning differences and computer technology. Hypertext has tremendous potential for those whose thought processes may thrive in multisensory, associative, multimedia environments; however, if conventional, linguisto-centric minds have conceptualized its design, even hypertext may present for LD hypertext users some of the same intellectual frustrations they encounter every day in traditional classrooms and texts. Near the end of her essay, Smith proposes that a "new hypertextual cross-discipline" should research the intersections of composition and hypertext, and also consider some of the questions she raises about individual differences in perception, virtuality, and cognitive activity.

# Peer Tutoring

In addition to the almost universal celebration of computers, another rare area of agreement in this controversial field is that LD students need confidence and self-esteem to help compensate for all the blows their egos have suffered as they progress through a school system that celebrates only good readers and writers. Edwin Cole, who has worked with dyslexics for over forty years, says, "An important part of therapy is to give the dyslexic child a morale boost" (1977, 56). Katrina De Hirsch summarizes Anna Freud's conviction that "in the theory of education the importance of the ego's determination to avoid pain has not been appreciated sufficiently" (1984, 96), and Vygotsky has emphasized how essential motivation and success are to learning.

By the time LD students get to college, many have figured out how to spare themselves the pain of failure at writing. They might avoid classes that require writing. They might feign laziness or boredom. They might blame late or incomplete assignments on the instructor, claiming that directions were not given or were unclear. If we are at this point unsure about using unconventional classroom practices, we nevertheless can be sure that confidence and moralebuilding activities will help LD students participate in reading and writing to their full potential.

In this vein, peer tutoring may be an untapped morale-boosting resource. One interesting outcome of peer tutoring, reported by several researchers, is its effect on the *tutors*. Thomas Scruggs and Lori Richter, in a review they did concerning the tutoring of LD students, reported that sometimes tutors gain more from the experience than do those being tutored. There is much anecdotal evidence demonstrating that tutoring improves the self-esteem of the tutor (1988, 285). In *Children as Teachers* (1976), V.L. Allen also discusses the advantages of having learning disabled students do the tutoring.

Another incident concerning my nephew has confirmed these findings for me. I said earlier that seven-year-old Joey had no problem typing his name on my electric typewriter. He also was particularly able at changing the ribbon cartridges, the kind of mechanical activity at which he seems to excel. When his four-year-old brother wanted a turn at the typewriter, I told Joey to show him how it worked. Joey, relishing the chance to demonstrate what he was actually good at, said proudly in an unusually clear sentence for him, "This how you do it, Beaner"—becoming, in a sense, a sevenyear-old peer tutor.

More recently, Joey's confidence is increasing, and his speech is improving. I don't know if one is influenced by the other, or which came first. I would like to take partial credit for the language improvement and for the confidence because of the tutoring sessions I spend with him. However, I suspect that the change is due not solely to the success he is having with a typewriter, but to a phenomenal talent he has for playing Super Mario Brothers video game. Joey is much more proficient at this than his father, who (not for any lack of practice) has been unable to progress to the more advanced "worlds," in which Mario (and Joev) have adventures. Joey's loquacious younger brother, in rare awe of his brother, does a running commentary on Joey's progress: "Joey has to watch out for that turtle and those ducks 'cause they can shoot at him and he can get killed. But Joey will know what to do. He has to jump up just in time or he'll fall down that chimney, but Joey can do that." The same child who has so much trouble making an S or a P demonstrates an impressive fine motor coordination operating the Nintendo joy stick. The praise that Joey receives for his prowess at computer games, his new capability at swimming, and his recent conquering of a dizzvingly high slide at a local park-all these successes help him, I think, with his language skills. The moraleboosting activities that he's good at, the respect that he gets for his other accomplishments, and the resulting feeling that he is a successful part of a family or day-camp community-all these things may give him the confidence and the courage he needs to undertake something he knows does not come easily for him: writing. For college students, who have had, undoubtedly, many more years of failure at language skills than Joey has, confidence and morale are even more crucial.

As educators who know something about the importance of self-esteem in learning, we need to help LD students find what it is that they do well and help them to capitalize on it, whether or not it eventually helps them with their writing. When I was in elementary school, there was a classmate of mine who regularly and miserably failed our weekly spelling quizzes. His oral reading was embarrassing for us and for him, and his essays were hopelessly error-ridden. In science, however, he was the Einstein of St. Joseph's School. Every week he was allowed to go from class to class proudly showing his latest scientific demonstration of how the light bulb worked or how mud slides started. In working with his complicated three-dimensional models, he was always eloquent and clear. While we good spellers (who could barely use a slide rule) watched in admiration, David was allowed to forget for a moment his humiliation in writing and to star in his own scientific show, to repair his self-esteem by shining at that at which he was good. With all respect to our teachers, I do not think anyone back then consciously realized what David's homemade scientific experiments were accomplishing-maybe not even David. He was a peer tutor in the fullest sense, before it was a fashionable term. Today he is a successful engineer, no doubt spelling as badly as ever (and making much more money than his linguistically talented classmates who became English teachers).

#### Orality

While many students and instructors rely on written peer comments or computer technology to help students compose and revise, they may want to take more advantage of oral commentary. One study reported that when LD students were interviewed regarding changes they might make in another person's draft, they "were able to apply some substantive criteria when cast in the role of editor" (Graham et al. 1991, 93). There could be several reasons for this. As Knoblauch and Brannon point out in showing how reader-response theory connects with composition practice, when readers are simply given the authority as editors to comment on a draft and judge it, they will inevitably do so (1984, 161).

The oral nature of the interview may also account for these students' ability to quickly create editorial suggestions, which might have taken them a long time to discuss on paper. Instructors of all writers could take much more advantage of oral channels of insight. In their book, Instructional Strategies for Students with Special Needs, Dan Bachor and Carol Crealock suggest having a student revise her draft after having heard it read to her (1986, 237). Now that computers can "read" drafts to their users, any possible embarrassment from having a friend stumble over one's errors is eliminated. As a way to encourage more global revisions in, say, an argumentative essay, Bachor and Crealock suggest having students pair up and try orally to persuade their partners to take the opposing view of an issue (240-41). In addition, class debates on a topic of inquiry might help all students crystallize their thinking and force them to consider other views. They can do this through reading different opinions, of course, but an oral discussion allows LD students to demonstrate an eloquence and insight that might not immediately be evident in their written language.

Another option for oral work is protocol analysis, a method by which tape recordings are made as students compose out loud (Brannon and Pradl 1984, 30). Although difficult to do, analyzing the tape can reveal to both teacher and student the recursive, often unpredictable process of writing. Although this research method, wellknown in Composition circles, has not been utilized widely in LD research, it should be explored as a way to help LD students develop a metacognitive awareness of themselves as writers. Because they can often say what they mean more successfully than they can write it, analyzing a written *and* oral account of their composing process might provide insights not obvious from just one mode.

To provide further insight into the writing and revising process, the instructor could model it by completing the assignment along with the students. Brannon and Pradl discuss the advantages of this strategy, among them finding out the difficulty level and usefulness of the assignment (34). If the instructor produces a rough draft, invites responses from the students, and then revises that draft with the input of student comments, all students are able to see the value of their own opinion as readers and to better understand the decisions writers must make. They also see firsthand the kinds of major revisions Elbow looks for in multiple drafts. The multisensory experience of seeing and contrasting the two drafts, as well as hearing the changes in them discussed in class, might particularly engage the LD student.

How an individual mind processes ideas is difficult to say. But it is possible that the synthesis of thought necessary for writers to make meaning need not come exclusively from work with pen and paper. For students talented in areas other than linguistic memory, a more visual, kinesthetic, three-dimensional, or yet-to-bediscovered process may be more appropriate. We might look briefly at the history of the writing across the curriculum (WAC) movement for some direction.

#### Writing Across the Curriculum

As many have pointed out (Russell 1991; Parker and Goodkin 1987; Martin 1976; Mahala 1991), the ancestor of WAC, the Language Across the Curriculum movement in Britain in the late 1960s, led by James Britton, had as its primary focus not student writing, but student learning. Note that it was called language across the curriculum. As David Russell observes, Britton and his colleagues believed, based on the work of Jerome S. Bruner, Jean Piaget, and Lev Vygotsky, that language and learning were inextricably connected. Therefore, written and oral discourse held the key to real thinking and learning beyond rote memory. No longer teaching only the children of the upper classes, the British reformers needed a way to invite the children of the working class into the academic world. Believing that students did not really "know" something until they could explain it in their own words, the early Language Across the Curriculum teachers employed various ways of encouraging students to use their own language: collaborative groups, class discussion, and informal writing. The movement caught on in the United States, argue Parker and Goodkin, after it was promoted as a solution to the "writing crisis," but many people embracing it were thinking of a fairly narrow definition of writing. Today, WAC still holds much promise, especially for LD students, because it emphasizes the connections between disciplines. But it can be effective only if it returns to its roots to include all forms of language and to encourage diverse voices, figuratively and literally.

# Portfolios

The use of portfolios in teaching and assessing work shows much promise for all students and especially for LD students. Most portfolios are completed in stages, have periodic input from instructors or peers, include a variety of writing tasks, and provide writers with opportunities to showcase their best work. Time constraints are usually less rigid, and often the process of assembling the portfolio is as important as the products it contains. Portfolios designed primarily as teaching tools, sometimes called "formative portfolios" and used to examine the process of learning, are assembled differently than "summative portfolios," which are designed primarily to assess or examine the finished product. Most well-designed portfolios require a metacognitive statement, an analysis the writer makes about her progress as a writer and learner. All these factors make portfolios one of higher education's most revolutionary changes. They also seem particularly suited to the learning styles of a wide variety of students.<sup>3</sup>

# Teachable Moments

In addition to providing LD students with the kinds of progressive writing practices described above, instructors should simply be alert for teaching opportunities that present themselves. The circumstances under which my nephew Joey learned—a combination of extreme interest in the subject matter and multisensory involvement—are no doubt fertile learning circumstances for older LD students as well. To take advantage of such situations, ripe for learning, instructors sometimes need only listen to their students.

One imaginative teacher of learning disabled high school students had tried several times in vain to help a boy divide into paragraphs his lengthy essay on how to change the oil in a car. The teacher asked the student to pretend to go through the procedure, miming the actual motions and explaining as he went along. The student positioned himself under a desk, pretending it was a car, and demonstrated how to change the oil. The teacher watched and listened. At one point, the teacher asked, "Why did you just now put down that tool and pick up that other one?" The student answered, "Because that part is done and it's time to do something else." Hearing himself answer that question, the student asked, "Would that be a good place for a new paragraph?" The same high school teacher once asked his students to include more sensory detail in their revised essays. One LD student, in describing stock car racing at Lebanon Valley, New York, wrote about the car engines revving so loudly that the roar vibrated the metal seats in the bleachers, which he could hear and feel. This student's vivid, sensory detail (although described with a halting, strangled syntax and spelling) surpassed the conventional descriptions churned out in Standard English by students in the accelerated class (Lindblom 1990). Being asked to include sensory detail gave this LD student an opportunity to demonstrate his ability to notice and describe what others might overlook.

#### Heuristics

Lee Odell has described a number of techniques that, although intended for students he calls "inexperienced," might be employed for learning disabled writers. Because Odell believes that thinking and writing are conscious and rational processes, he holds that they are teachable. Good writers, according to Odell, have a variety of "cognitive processes" at their disposal, useful in a host of different writing situations. These processes, which provide the basis for Odell's pedagogy, include focus, contrast, classification, change, physical context, and sequence (1977, 122). They are patterns of thinking reflected, according to Odell, more or less directly in writing.

Odell designs his teaching practice to help students develop these intellectual processes. Because they involve multiple senses, they might be ideal for LD students, whether or not Odell intended them as such. One of these techniques is to have students watch two-minute scenes from a television show, instructing them to take note of when the camera angle changes focus or perspective (1975, 50). Following a discussion of these various camera shots—long, medium, or close-up—or of shifts in detail or physical context, the students should have a more concrete awareness of detail and elaboration that they might then transfer to their writing.

A similar exercise involves the use of a magazine picture. By partially blocking out sections of the picture with pieces of construction paper, the student can see the effect of isolating a face, an eye, or another object. She can also see what happens when something is placed in the perspective of a larger background—for example a diver in isolation or a diver as a dot at the top of the cliffs of Acapulco. This mechanical manipulation of focus and detail should theoretically make the student aware of new possibilities for her writing (1977, 128). Odell and his researchers themselves had difficulties proving that any of these techniques "worked." Any attempt to measure writing development is, of course, complicated and always to a certain degree subjective. However, surmising what we do about LD students' sense of the concrete, their difficulties with linguistic symbols, and their generally positive response to multisensory pathways, it makes sense to explore unusual approaches such as these.

There are other strategies that some students may find helpful, depending, of course, on what they are being asked to do. Candace Bos recommends the use of "think sheets" to help students brainstorm ideas. Unlike conventional brainstorming exercises, this one invites students to "represent visually" some of their ideas (1988, 109). Jacqueline Lynch Czamanske and Carla Katz in the Alternative Learning Department at Rochester Institute of Technology have students use "mind mapping," a graphic sketch of their ideas, instead of standard freewriting, which depends heavily on how rapidly students can write or type.

Scaffolding can also be useful, if instructors who use it are theoretically aware of its benefits and limitations. Bachor and Crealock use "sentence shells" to help students generate ideas: "I believe \_\_\_\_\_\_\_\_ is the correct position to take because \_\_\_\_\_\_\_\_ " (1986, 240). In my research classes, I have used a more elaborate sheet (see Figure 5–2), designed to invite students to begin thinking about multiple sides of a controversial issue, in preparation for a longer investigative report that includes both primary and secondary research. In this project, they must ultimately take a position and support it.

Students in my class are given this self-response sheet after they have interviewed several people with opposing viewpoints and completed other primary research such as a survey or questionnaire. I came up with an earlier version of this sheet one frustrating day several years ago when I could not get students to stop listing dictionary definitions and purposeless facts. In a sudden fit of exasperation, I scribbled it on a piece of tablet paper and told a student to fill it out. The next day, after struggling overnight with that form, this student said his project finally had some direction. He told me that he had never thought about framing ideas that way before. On the one hand, I was pleased that he finally had some insight into this project, but I also mentally imagined Knoblauch and Brannon's objection to "practicing with mechanical 'invention heuristics' in order to find something to say" (1984, 5).

Inside my head, I argued with them. It is true that in using this fill-in-the-blanks sheet, there is a danger that students will think all arguments must be set up this way, and all they need do is plug ideas into an artificial frame and thinking and meaning making will

Figure 5-2 Scaffolding for a persuasive essay.

SELF-RESPONSE SHEET
In my investigative report, I am researching the controversy regarding Some people believe for several reasons. First,
Also On the other hand, some people feel that
They have several reasons for feeling this way:
After carefu considering all points of view in this controversy, I believe that I have several reasons for taking
this position:;

be done for them. I try to challenge that assumption by discussing in class this admittedly simplistic form and the limits of its use. And I do believe it has a use. Patricia Bizzell credits Mina Shaughnessy for pointing out in *Errors and Expectations* that advanced writers use much more often than do basic writers sentence structures that contain relational idioms. Bizzell observes, "Perhaps the very forms of sentences using relational words can be used as an heuristic to initiate students into the kind of reasoning acceptable in academic discourse" (1978, 355). One might also argue that this scaffolding supports and extends a Vygotskian "zone of proximal development" for new academic writers, LD or otherwise, guiding them toward the academic conventions of assertions and support and stretching their willingness to consider other perspectives (Vgotsky 1986, 187).

There is a possibility, however, that heuristics can truncate thought as well as stimulate it, and that their simple format can be a liability as well as a strength. It is for these reasons that such "recipes" should be used only after grounding them carefully in one's own philosophy of teaching. After much thought, I have decided to use these scaffolds because I do not think their advantages and disadvantages are mutually exclusive or theoretically contradictory. Furthermore, even if such exercises are problematic, I think students are capable of participating in theoretical debates regarding the use of heuristics; in fact, all pedagogy should be contextualized, discussed, and debated in the classroom. One point that RIT's Jackie Czamanske made is that students are not included often enough in the discussions of education's long-term purposes and goals (1994). All students should be participants in a class articulation of how a course, an assignment, or a writing project fits not only into their academic programs and their professional plans, but also into their daily lives. Even the humble think sheet can be contextualized in this way. And it should be.

#### Mnemonics

One area of research that may have indirect applications for writing instructors is mnemonics—the use of associative links to aid memory. In Chapter Three, we saw how Joey learned to recall "motorcycle" through an associative, kinesthetic, and auditory link, the kind of deliberate memory trick Vygotsky describes as uniquely human behavior (1978, 51). This use of concrete memory aids could be used more effectively even in higher education.

Several researchers have had success with using mnemonics, or "keyword strategies," to help adolescents remember fact-based information and terminology. In research that appeared in the *Journal of Educational Psychology*, Pressley and Dennis-Rounds worked with students in helping them memorize cities and the products for which those cities were known. Students were first trained in mnemonic strategies. That is, to trigger the memory that the city of Lock Haven is known for paper products, researchers pointed out the concrete term *lock* and asked students to picture "an interactive image between a lock and a paper" and as an example they were shown a sketch of a lock on a newspaper (1980, 577). Students were encouraged to create their own interactive images for the cities and products they were then asked to memorize. Students trained in this strategy were able to remember the city/product pairings better than those in the control group, and the scores of those with the most instruction in keyword strategies were higher than the scores of those with the least instruction (578–81). Other researchers report success using mnemonics to teach vocabulary (Pressley, Levin, and Delaney 1982, 84) and spacial and associative learning (Scruggs et al. 1992, 160). In addition, researchers have reported success using mnemonics not only with LD students but with non-LD students and academically talented students as well.

Although there are many reports available on similar research, this keyword method has some obvious limitations, one of which is pointed out by Pressley, Levin, and Delaney in the *Review of Educational Research* (1982, 84). It really can be used only if the words to be linked sound somewhat alike or have a concrete term embedded in one of them (i.e., *lock* in Lockhaven). The researchers designing experiments on keyword strategies, of course, use words that can be readily associated, and the data from these numerous studies must always be read with that in mind.

Other critics rightly point out that mnemonic keyword strategies, even if they are successful, are applicable only to low-level memory tasks, and not to the higher-order thinking processes crucial to college work, such as critical reading and writing projects. What mnemonics may do for students, however, is to make easier whatever memorization tasks are still necessary in college courses. It may therefore indirectly aid in higher-order thinking by freeing time for more intellectual tasks. Writing instructors have in their classes students like Nick, Monica, and Janine, who may have spent large portions of the previous evening trying unsuccessfully to memorize the required technical vocabulary of their health science courses, leaving their drafts for writing class untouched. If mnemonic strategies can help make LD students' recall of multisyllabic words more efficient, that in turn may render the initial stage of the writing process faster and less frustrating. If mnemonics can help them use their study time more efficiently and succeed more often on the memorization exams encountered in other classes, it will boost their confidence and self-esteem—useful outcomes for college writing students.

We teachers cannot proceed as if ours is the only course or the most important one our students take. We need a more complete, holistic understanding of what our students' lives are like, not to be academic voyeurs, but to make sure we are not unnecessarily belaboring certain areas or working at cross purposes. To use an analogy: today, many people visit a variety of medical specialists to receive their various checkups or treatments. In a span of several years, an individual may visit an allergist, an internist, a podiatrist, a dermatologist, a cardiologist, and a chiropractor. Each specialist serves a purpose and may plan a course of action or write a prescription. If they are unaware of each other or have no clue what other medications the individual patient might be taking, their own diagnoses and treatments may do more harm than good. Wouldn't it be great if just once all those specialists sat down together, with the patient, and as a team constructed a unified strategy? In order for such a meeting to succeed, the participants would have to show mutual respect for each other, including the patient. What I am suggesting in the LD controversy is that all educators—students, researchers, theorists, instructors, administrators—at least be willing to sit down, metaphorically, at a *round* table, and with mutual respect for each others' expertise, talk about different ways of knowing, learning, researching, and writing.

### Strategy Instruction and Self-Efficacy

Related to mnemonics is other research in which students use selfmonitoring strategies both to generate and revise texts. At the University of Maryland, in the department of Educational Psychology, researchers have done much work with LD adolescents and composition skills. Using "contentless production signals," which are simply requests for students to write more, researchers analyze the texts produced by both experimental and control groups. Steve Graham's research indicates that LD students who received such "production signaling" did indeed extend the length of their texts, although not all of the expanded text was "functional." Graham defines "functional" text as that which provides "reasons or elaborations," and "nonfunctional" text as that which is repetitious or "unrelated" (1990, 782-87). In spite of some mixed individual reactions among the twenty-four fourth- and sixth-grade students who were prompted to "write (say) some more about this," Graham reported an increase in the quantity of student text and a slight increase in quality (787).

Expanding Meichenbaum's work from the 1970s, and influenced by Vygotsky, Steve Graham and Karen Harris have done a lot of work with LD adolescents in trying "to increase diversity of vocabulary and the quality of their [students'] written stories" (1987, 69). Their basic training method involves researchers (or selected participating teachers) explaining to students the "story grammar" elements outlined by Stein and Glenn such as "main character, locale, time, starter event, goal, action, ending, and reaction" (Graham and Harris 1989, 355). Students in the different groups are given different levels of training; those in the group getting the most instruction are taught to use a five-step mnemonic pattern to help them learn these grammar elements and are trained to ask questions of themselves as they write and revise their work. The questions include: "Who is the main character? Who else is in the story? When does the story take place? Where does the story take place? What does the main character want to do? What happens when he or she tries to do it? How does the story end? How does the main character feel?" (Sawyer, Graham and Harris 1992, 345).

Other studies include instructions such as, "write down storypart ideas for each part; write your story; use good parts and make sense." Students in the most highly trained group also received training to use "self-instructions or self-statements" such as "Take my time, good ideas will come to me"; "Let my mind be free"; and other statements the students conceive of themselves (Sawyer, Graham, and Harris 1992, 345). This is called "self-regulated strategy development," and researchers claim that the LD students who underwent such training had better structured, higher quality compositions, according to holistic scoring. (Graham and Harris 1987; Graham and Harris 1989, 357-60; Sawyer, Graham and Harris 1992). These researchers point out that this "procedural facilitation," also called "modeling" and "scaffolding," is a strategy "that will ultimately be run autonomously" (Graham et al. 1991, 104). If we accept for a moment that students' writing does improve or at least change as a result of these strategies, instruction in their use may encourage students to look again at their texts in much the same way critical readers might.

There are, of course, several problems with the assumptions informing this methodology, one of which is the arbitrary linking of adherence to conventional "story elements" with "quality." Certainly, whether or not one composition should be judged to be of higher quality than another, based partially on whether or not it has more than one character ("who else is in the story?"), is at the very least debatable. In addition, the instructions to "write your story; use good parts and make sense" do not seem particularly helpful. Had these researchers been better informed by reading a broader band of similar previous research, they may have better anticipated objections to their assumptions and provided more sophisticated explanations of their assessment procedures and pitfalls. They would have been aware of the relative failure of many large-scale, well-funded assessment attempts to establish once and for all what constitutes growth in writing and why it occurs. For example, in 1984, Knoblauch and Brannon warned against what they call "the myth of measurable improvement" (165), and Edward White has frequently and eloquently discussed problems inherent in assessment (see especially his book, *Developing Successful College Writing Programs* [1989, 99]). Paul Diederich's 1974 text, *Measuring Growth in English*, illustrated how evaluators often hold wildly varying assessments of students' texts, and only after much discussion and negotiation can graders arrive at anything approaching consensus.

Graham's recent research is arguably similar to the kind of cognitive process research and prewriting instruction done by Lee Odell in 1974 and explained in his RTE report, "Measuring the Effect of Instruction in Pre-writing." Both Odell and Graham investigate the effects of explicitly taught heuristics, and both attempt to measure the results of that instruction on student texts. Stephen North, in his section on "The Experimentalists" in The Making of Knowledge in Composition, writes a thorough review of Odell's piece and the control problems inherent in this kind of research (1987, 141–96). I agree with North's analysis, and space prohibits a complete discussion of Odell's or Graham's research here. However, when contrasting Graham's research of the late 1980s with Odell's research of the early 1970s, it is clear that they encountered similar problems but handled them differently in their respective research reports. In reporting the ratings of his students' post-instruction essays, Odell cites mixed results in determining their quality, although he does not use that term. The judges he used to rate the pre- and post-instruction writings "frequently disagreed" with each other "about the presence or absence of conceptual gaps in the essays they were scoring" (1974, 238). Odell, however, spends time and space in his Results section acknowledging this disagreement and asking important questions about why it happened. While Graham and his colleagues briefly mention that "many product characteristics, such as quality, have proven difficult to define, much less measure" (Graham et al. 1991, 90), and call for future research into judgments of quality (109), their research reports proceed with this important issue largely unproblematized, using quality and improvement uncritically, as if all readers have the same definition of those terms.

#### Dictation

The kind of research discussed above is quite widespread in the field of Educational Psychology, and researchers using these strategies consistently report that students trained in strategy instruction show changes not only in the quality of their texts, but also in more measurable elements such as increased length of composition, more diverse verbs, adverbs, and adjectives (Graham and Harris 1987, 69).

Graham and his colleagues have also done much work with LD students and dictation. They compared text produced in various modes: handwriting, word processing, "normal" dictation (speaking into a tape recorder), and "slow" dictation, a method used by Marlene Scardamalia and her colleagues in the early 1980s, in which an examiner, functioning as a scribe, transcribes the student's speech at a rate determined by the speed at which the student has written a previous essay. The researchers report that students generally produce longer essays during the "slow" dictation mode, but results were so mixed or qualified that it is difficult to get a clear idea whether this method is more or less helpful for LD students. For example, Graham reports that essays generated during "slow" dictation often contained more of what the researchers call "nonfunctional text," which they define as "repetitious" or "unrelated" segments (1990, 782). These terms are also unproblematized, with no acknowledgment that what may be deemed repetitious by some readers might be judged as emphasis by others. What some judges may view as "unrelated" segments might be viewed as an analogy or related example by others. Finally, what may be "nonfunctional elements" to the reader, may have been quite useful to the writer, perhaps helping her in her process of discovering or modifying ideas mentioned later in the "functional" segment.

The rather loose employment of the term "functional" is the kind of word use that keeps this and similar research off the reading lists in Composition doctoral programs, and I am not suggesting here that we should read Graham et al.'s conclusions without a strong dose of healthy skepticism. However, if we disregard this work completely, we may also be disregarding what may indeed be one of the most empowering writing options for many LD students: dictation. If Graham and his colleagues can help us better understand which kinds of dictation might be more helpful to students, if he can help us ask better questions about this mode of composing whether he asks them himself or causes us to ask them—his research, no matter how flawed from our perspective, is worth reading with an open mind.

Graham and his colleagues, because they do extensive work with LD students, may be more sensitive than are mainstream composition researchers to the mechanical difficulties these students face when asked to put pen to paper or fingers to computer keyboard. In research not usually seen in mainstream composition journals, Graham et al. report that "when the mechanical demands of writing were removed, or when prompted to write more, these [LD] students were able to generate a considerable amount of new content" (1991, 94). It is, of course, much easier to measure quantity

than quality. Candace S. Bos, who has provided an overview of similar studies of LD and "normal" writers, says that LD writers "were five times more likely than the non-LD matched subjects to terminate the text prematurely" (1988, 128). If tape recorders and/or scribes are helping LD students compose more, that in itself is no small thing. If it is true that various forms of oral dictation provide a usable, viable option for LD students, then writing instructors need to look further into this area, especially if we allow our concepts of writing to expand beyond the niceties of surface correctness and are flexible enough to permit, even encourage, other forms of composing. For example, author Ruthie Bolton dictated into a tape recorder the text of her well-received autobiography Gal: A True Life.<sup>4</sup> A more inclusive conceptualization of writing, one that includes dictation, is the kind of re-formatting of thinking that could alter mainstream pedagogy, opening possibilities not just for the benefit of labeled LD students, but for society in general.

# **Re-Thinking Theory and Practice**

The research of Graham et al. with LD students and writing instruction is something college composition instructors should be aware of. Since it is at least arguable that some students might benefit from explicit instructions in pre-writing strategies, work in this area is important. These researchers' occasionally unreflective use of terminology invites readers outside their immediate methodological circle to dismiss their work-with North's explanation of "Diesing's law" applicable here: "Methodological sympathies cut across the boundaries of field, whereas methodological differencesdisagreements over how knowledge is made, what knowledge can be—can create insurmountable barriers" (1987, 365). While Graham acknowledges Marlene Scardamalia, Carl Bereiter, and their colleagues from the early 1980s as research ancestors with connections to the composition field, Graham does not include in his bibliography the work of Lee Odell or that of his predecessors in cognitive process research from the 1960s-Young, Becker, and Pike. It is significant that much of Graham et al.'s work appears in Learning Disability Quarterly and in the Journal of Educational Psychology, while Odell's appears in Research in the Teaching of English.

These journals represent different fields but are reporting on arguably similar investigations: how and if students' texts can improve after writers are given explicit heuristics. While the reports in *RTE* look more like the reports in the *Journal of Educational Psychology* than they do the essays in *CCC* or *College English*, I would guess that not many individuals have on their coffee tables both RTE and the Journal of Educational Psychology, much less those two plus College English and the Learning Disability Quarterly. And even if composition instructors, while waiting in their therapist's or dentist's office, should happen upon one of Graham's reports, it is likely that they would quickly dismiss his research at the first unproblematized use of "quality" or "improvement." Well aware of the subjective nature of reader response and the complicated nature of "quality," composition instructors who read research reports employing that term in an apparently naive way will not lend much credibility to the research. And that's a shame. While it is necessary to be critical readers and to be appropriately skeptical of research that makes unreflective assumptions, it may not be in all our students' best interests to play what Elbow calls "the doubting game" with every article not methodologically or philosophically in tune with our own interests (1973, 147-91).

Compositionists need to investigate research in other disciplines. They also might want to conduct their own studies in these areas, or better yet, to collaborate with their colleagues down the hall or across the campus on designing research projects together. As difficult as it might be, we need to nurture more of a "both/and" approach to qualitative and quantitative research. I say this, well aware of the deep philosophical and ideological differences between camps that North discusses in his book, especially in his critique of Scardamalia and Bereiter's 1983 essay, "Levels of Inquiry in Writing Research," when they call for similar collaboration (North 1987, 353–57). North's argument, that ideological differences are not easily dispensed with, is a compelling one, and one about which some of us probably remain too naively optimistic.

In the last few pages of his book, North also argues, if not for collaboration between and among these different groups, at least for more respect for differing "modes of inquiry." He writes that "All methods, and all kinds of knowledge, would have to be created equal" (370–71). These clinical experiments on heuristics, dictation, learning disabilities, and writing are being conducted now in Educational Psychology, not Composition, a trend North predicted in his discussion of the future of a Composition field increasingly segmented by discourse, methodology, and politics. While there may be valid professional reasons for researchers to remain intellectually committed only to their own narrow specialty, one result is that other groups' research, however flawed, which might productively alter concepts of "writing" both for us and for our students, is not merely being discounted in Composition circles; it is not even being read. There are ideological differences involved in this controversy that may indeed prove to be insurmountable, especially if we focus solely on the dichotomies. Ann E. Berthoff argues that what she calls "killer dichotomies," are "hazardous to both our theory and practice as writing teachers" (1990, 13). In the collection in which the Berthoff essay appears, editors Kate Ronald and Hephzibah Roskelly also warn against the danger of "either/or-ness" and of even creating categories at all. It can divide the discipline, they say, and make competition and exclusion inevitable. They call for a movement toward what they call "thirdness" (1990, 7). And James Zebroski, using the 1916 battle of Verdun as the epitome of modernist binary opposition, says that "post-modernism . . . accepts plurality and mixture . . ." and so should Composition (1990, 175).

There is a danger in dichotomizing "the controversy," with its two basic sides, as is done for much of this book. How one interacts with an LD student is dependent on how one perceives that person: different or disabled; normal or not normal; hardworking or lazy; smart or not-so-smart. Ease with written language occurs on a continuum unquestionably influenced by educational opportunities and other social factors. But it is also more of an innate talent for some than it is for others. People with frustrating difficulties with language may have a different neurological framework and they may be from an oppressed economic group and they may be speaking English as a second language and they may have emotional problems and they may be below average in intelligence. Some of those factors, however, automatically and legally place them in categories outside the definition of LD. To recognize categories is not to invent them. If some educators tend to think in dichotomies such as "smart" and "not-so-smart," and if they are consciously or unconsciously placing LD students in the latter group-and it is clear even from the three stories we heard in the last chapter about the way those students were treated that some people do think this way-then it is important to recognize these false dichotomies so that they may be challenged. LD students are not "slow." Granted, the IQ test and other measures of ability are problematic, and different schools may have a sliding cutoff regarding who gets labeled and who does not. However, it is obvious that many educated people do not even understand the legal definition of LD, much less the more complex issues surrounding it. The less we know about something, the more we may be tempted to find easy answers or more readily believe what one expert tells us. However, college writing instructors can no longer stand on the edges of an issue that so deeply affects some of their students.

Rather than cast theoretically based aspersions at our colleagues in Educational Psychology and other fields, it would be more productive to pool our collective knowledge about writing theory, selfreflectiveness, research methodology, assessment, and measurement -to "replace competition with cooperation," as Kenneth A. Kavale puts it (1988, 17). We may differ philosophically with regard to the "story grammar" taught in the educational psychology experiments. However, there is no reason why this research, with its promise and its flaws, could not be discussed in graduate composition courses and in college writing classes, where teaching styles and research methodologies should be contextualized anyway. So what if we never measure "quality" or "improvement" to everyone's satisfaction? If LD students can write more, dread it less, stretch their vocabulary, add evidence and elaborate more on examples by a combination of heuristics, mnemonics, dictation, and other options, and generally develop more confidence and voice, isn't that worth pursuing?

To study with at least a moment of belief the work of our colleagues in Educational Psychology and other fields, and to discuss the implications, if any, for Composition Studies is not to deny that writing and learning are, were, and always will be shaped as well by socioeconomic and political forces. To put research into boxes and to read only what fits neatly in "our box" is to adhere to the traditional binaries that more connected ways of learning are supposed to challenge. We must be aware of the methodological conflicts Steve North so clearly points out, and we must approach all research critically.

We can also read it with a bit of cautionary belief. What if "slow dictation" really does encourage LD students to "write" more than they might otherwise do in a more conventional setting, a setting we might prefer? What if experiments with heuristics and selfinstructional strategies, in spite of their glaring methodological gaps, can get us to rethink our own theory and practice? Charles Bazerman argues that such inter- and intradisciplinary conflicts, for example a field's discourse practices (and by extension its view of how knowledge is made) should be part of college curricula and that students should take an active part in such debates (1992, 61-68). The occasions for such potentially stimulating opportunities, however, are nonexistent if professionals in various disciplines remain so blindingly skeptical or ignorant of their colleagues' work that they cannot see connections to, intersections with , or even confirmations of their own work. If they read only a narrow band of research that is most philosophically similar to their own, they may be eliminating the kind of dialogic opportunities Freire argues are essential to the constant rethinking necessary for truly critical teaching.

#### Notes

1. I am indebted to my student Allicia for making the suggestions outlined in this paragraph.

2. See also Carmela Castorina's article on Project EASI in the same issue of *Change* (March/April 1994). For a humorous view of voice-activated computers see Linda Winer's "It Ain't Me, Babe," in *New York Newsday*, July 29, 1994.

3. Information on portfolios is abundant, but here are some excellent selections:

- Belanoff, Pat, and Marcia Dickson, eds. 1991. Portfolios: Process and Product. Portsmouth, NH: Boynton/Cook–Heinemann.
- Bishop, Wendy. 1990. "Designing a Writing Portfolio Evaluation System." The English Record 40: 21-25.
- Elbow, Peter, and Pat Belanoff. 1986. "SUNY Stonybook Portfolio-Based Evaluation Program." in *New Methods in College Writing Programs*, ed. Paul Connolly and Teresa Vilardi. New York: MLA, 95–105.
- Greenburg, Karen, and G. Slaughter. Nov. 1988. NOTES from the National Testing Network in Writing 8: ERIC ED 301-888.
- Roemer, Marjorie, Lucille M. Schultz, and Russel K. Durst. 1991. "Portfolios and the Process of Change." College Composition and Communication 42: 455–69.
- Tierney, Robert J., Mark A. Carter, and Laura E. Desai. 1991 Portfolio Assessment in the Reading-Writing Classroom. Norwood, MA: Christopher Gordon Publishers, Inc.
- Yancey, Kathleen Blake, ed. 1992. Portfolios in the Writing Classroom. Urbana, IL: NCTE.

4. See R.Z. Sheppards' article, "When Southern Gothic Is Real Life," in *Time*, June 27, 1994, 77.