Self-Reported Written Language Difficulties of University Students with Learning Disabilities

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Abstract

*The current **descriptive** study used structured interviews to explore the nature of written expression problems experienced by 31 university students with learning disabilities. Participants commented on (a) perceived postsecondary setting demands for written expression; (b) specific areas of writing difficulty; (c) strategies used to complete written requirements; and (d) writing accommodations requested and received. Primary areas of difficulty included proofreading/detecting errors, spelling, grammar, and writing speed and legibility. Eighty-one percent who requested accommodations said professors were usually willing to grant their requests. Suggested accommodations and implications for university faculty are presented.*

Empirical studies **indicate** that limited written-language competency may impede the academic success of university students with learning disabilities (Gajar, 1989; Gregg & Hoy, 1989, 1990; Leuenberger & Morris, 1990; Morris-Friehe & Leuenberger, 1992; Richards, 1985; Vogel, 1985b; Vogel & Moran, 1982). This research has repeatedly found written expression of university students with learning disabilities (LD) to be both quantitatively and qualitatively inferior to that of non-LD college students. Several publications suggest strategies and guidelines for working with students with writing disabilities (Gregg, 1983; Raskind & Scott, 1993; Vogel & Konrad, 1988). However, there remain practically no studies reporting effective interventions for this population (Hughes & Smith, 1990).

Self-report studies comprise an area of research that may help secondary-level transition planners and postsecondary service providers identify potentially successful interventions. Group comparisons of students with and without LD seem less beneficial than documentation of successful strategies used by the students themselves to overcome and compensate for academic problems. A review of previous self-report studies indicates that many students with LD are aware of their problems with written expression, including mechanics, organization, and handwriting (Bireley, Landers, Vernooy, & Schlaerth, 1986; Cowen, 1988; Vogel, 1985a). However, these studies

provide limited information concerning the writing demands encountered by these students, the identification of specific components of the writing process that cause them difficulty, and strategies they use to overcome or compensate for these problems. The current exploratory study used structured interviews of university students with LD to describe: (a) perceived postsecondary setting demands for writing; (b) specific areas of difficulty with written expression; (c) strategies used to complete written requirements; and (d) writing accommodations requested and received.

Method

Participants

All students identified as having learning disabilities (n=50) at a large northeastern state university were sent a letter soliciting their participation; 31 students (21 males and 10 females) representing 21 different majors consented to participate. Identification as having a learning disability was based on a severe discrepancy between achievement and ability as determined by performance on the Woodcock Johnson Psychoeducational Battery (n=27). Mean cluster scores on the Woodcock-Johnson Tests of Achievement were: Reading, 97 (SD=12.68); Math, 103 (SD=14.80); Written Language, 94 (SD=11.77); Knowledge, 105 (SD=12.37).

Of the 31 participants, 26 had Wechsler Adult Intelligence Scale-Revised (WAIS-R) scores on file. Mean scores were as follows: Verbal IQ, 101 (SD=22.37); Performance IQ, 103 (SD= 12.62); Full Scale IQ, 104 (SD= 11.54). Mean age of participants was 23.5 (SD=6.62); mean grade point average was 2.7 (SD=.51) on a 4-point scale, and average semester standing was 5.0. Fifty-five percent (n=17) had been diagnosed as having learning disabilities by public school personnel, 16% (n=5) by private clinics, and 29% (n=9) via a diagnostic battery conducted through the university educational psychology program. At the time of the study, 21 were receiving tutorial services in a program run by the Office for Disability Services and the Special Education program, five were receiving services such as recorded texts and untimed tests, and the remaining five were not receiving any support services.

Instrumentation

A structured interview form was developed (Hughes, Smith, & Suritsky, 1989) to sample frequency of university setting demands, as well as perceived areas of difficulty, coping strategies, and accommodations used to meet these requirements. Content areas within the interview included taking tests, studying for tests, time management, lecture-notetaking, reading, writing, speaking, and foreign language. Hughes (1991) and Suritsky (1992) have reported results of the test taking and notetaking aspects of these interviews. The portions reported here pertain to participants' perceived writing demands, related areas of difficulty, coping strategies, and accommodations for written requirements. A structured interview format was chosen to facilitate information gathering from students who may have difficulty with reading and writing. Consistently worded questions and

specific prompts were designed to elicit responses that would be comparable across all participants.

Writing demands. Participants were asked to rate the frequency of various writing requirements (i.e., out of class papers/reports, questions based on readings, and other written assignments such as lab reports and article critiques) on a scale of 1 (never) to 5 (almost always). In addition, each subject was asked to rate the degree of difficulty experienced with meeting these requirements using a scale of 1 (not difficult) to 5 (most difficult). For items rated four or five, participants were asked to explain the type of difficulty experienced.

Areas of writing difficulty. Using the same rating method described above, each subject was asked to rate the degree of difficulty experienced with various aspects of preparing a major written assignment such as a term paper. Similarly, subjects were asked to explain why they had difficulty with areas rated four or five.

Next, the following scenario was read: Suppose I gave you an assignment to write a five-page paper on nuclear disarmament. I will grade on grammar and spelling as well as content. How would you approach the task? What would you do first? What would you do next?

Writing accommodations. Subjects were asked what things professors could do to facilitate managing written assignments, whether they asked for accommodations or alterations in meeting written requirements for any courses and, if so, whether professors were willing to make these accommodations.

Procedures

The instrument was pilot tested for clarity and content on three students with learning disabilities and three persons without learning disabilities. Interviews were conducted on an individual basis by the three authors of the structured interview form (Hughes et al., 1989). Responses to Likert-type items were recorded directly on the interview form. Open-ended questions were transcribed and categorized; interrater reliability was established by randomly selecting eight audiotaped interviews and calculating point-by-point agreement of response categorization by two reviewers. Agreement ranged from 95% to 100%, with a mean agreement of 97% (Hughes, 1991).

Results

Writing Demands

Median demand and difficulty ratings, as well as the percent of participants rating a component as four or five, appear in Table 1. The median, rather than the mean, was chosen as a measure of central tendency because the data are ordinal level.

Demand and difficulty of writing requirements. Twenty two of the 31 participants (71 %) reported they sometimes, often, or almost always are required to complete major term papers as out-of-class assignments. Twenty (64.5%) indicated they experienced extreme difficulty meeting this requirement. Most frequently reported problems included organizing ideas, spelling and grammar, and carrying out multiple revisions. Other difficulties included getting started, finding/locating information, and/ or translating ideas into a written product.

Table 1 Demand and Difficulty Ratings for Writing Requirements

Area of Difficulty	Median Demand Rating(a)	Median Difficulty Rating(b)	Participants Rating Difficulty at 4 or 5 N	Participants Rating Item Difficulty at 4 or 5 %
Writing Requirements				
Out of Class papers/reports	3.0	4.00	20	64.5
Questions based on readings	2.0	2.75	6	19.4
Other (e.g. article critque)	3.0	3.00	6.0	19.4
Aspects of Writing Difficulty				
Detecting errors/Proofreading		5.00	22	71.0
Grammar		4.00	20	64.5
Spelling		4.00	17	54.8
Writing (speed/legibility)		4.00	16	51.6
Organizing thoughts		3.00	15	48.4
Locating relevant information		2.00	6	19.4
Typing/Word Processing		2.00	6	19.4

Note: a=1-5 scale (1 =never,5=always); b=1-5 scale (1 =not difficult,5=most difficult)

The least frequent class requirement for this group of students was answering questions on readings (e.g., study questions). However, participants who rated this requirement as difficult (n=6,19.4%) gave reasons relating to organization, motivation, reading comprehension, mechanics, and translating thought into written words. Similarly, six participants (19.4%) who reported difficulty with other types of written assignments such as lab reports and article critiques related it to problems with organization, time, and reading in the content area.

Aspects of Writing Difficulty

Detecting errors/proof reading. The area with which participants experienced the most difficulty was proofreading (n=22; 71%). Eleven individuals (35.5%) stated they cannot see or recognize errors. Inability to proofread was blamed on poor spelling, poor language structure, difficulty reading, and poor grammar. Coping strategies mentioned were use of other people to proofread, and use of computers with spell checkers.

Grammar. Twenty participants (64.5%) rated grammar as very or extremely difficult. Specific problems included: dislike of English; inability to learn; poor or limited training in high school; and problems with specific mechanical aspects of writing (e.g., commas, sentence structure, tenses, capitalization). As one student stated, "To me writing is a different language than speaking."

Spelling. Over half of the participants (n=1 7; 54.8%) found spelling very or extremely difficult. Nine individuals (29%) simply stated that they had always had difficulty in this area. Reasons for difficulty included inability to remember or apply spelling rules, problems with memory, and an inability to sound out words. Two individuals apparently felt they were not in control of their spelling performance. One said that sometimes "the pen knows how to spell;" another stated that he would begin to spell easy words correctly but then just "keep on going."

Writing speed and legibility. Sixteen subjects (51.6%) rated writing speed and/or legibility as very difficult. Ten participants (32.3%) commented on slowness as a problem; eight (25.8%) mentioned that the legibility of their work deteriorated as they increased writing speed. Several students mentioned that the process of trying to put ideas down on paper often resulted in frustration. For example, one student said his head was running at 600 miles per hour, but he could only put down three words per minute. Specific problems pertained to letter size and proportion, motor control, sloppiness, spelling, small handwriting, and switching between manuscript and cursive.

Organizing thoughts. Nearly half of the participants (n=15; 48.4%) reported they had difficulty organizing their thoughts when preparing a paper. Problems were reported with keeping the topic in focus, simplifying and condensing information in an organized manner, as well as determining how thoughts go together or whether the paper would appear organized to someone else. Several individuals noted difficulty transferring their thoughts to paper (e.g.,"I know what I want to say, but it is not getting on paper.").

Typing/word processing. Typing may be an area of relative strength for individuals with written language difficulties. Only six people (19.4%) found typing or computer use very difficult. However, several indicated that they had limited training/practice in this area, and one individual had difficulty locating typographical errors.

Locating relevant information. Similarly, six subjects (19.4%) reported difficulty locating relevant information. Reasons included not knowing where to look for information, difficulty selecting/narrowing the topic, and problems choosing the relevant information from all that was available.

Writing Strategies

Specific strategies used by participants when writing papers are presented in Table 2. The most common strategy reported (n=25, 81%) pertains to collecting information on the topic; most participants said they would go to the library for information. However, students varied concerning the quantity of information they felt they should obtain on a topic, with some saying they located as many sources as possible and others deliberately limiting the amount of information they would use, Two persons said they would seek help in locating and screening information.

Other strategies reported were: asking someone else to proofread; outlining or otherwise organizing ideas before writing a first draft; revising; writing the paper on a computer/word processor; using a spell checker; taking notes/ using notecards. Less frequent responses included: dictating or getting someone to transcribe the paper; circling words that look wrong; and asking the professor if the paper was "on the right track."

Writing Accommodations

Accommodations requested/received. Participants were asked whether they requested accommodations or alterations in meeting written requirements, the type of assistance requested, and whether professors consented to their requests. Fifty-two percent (n=16) had requested accommodations including: (a) more time to complete written assignments; (b) grading emphasis on content rather than spelling; (c) feedback or direct assistance; and (d) further explanation of assignment criteria. Eighty-one percent of the 16 students who requested

Table 2 Percent of Respondents Reporting Use of Specific Strategy for Writing

Writing Strategy	Respondents reporting Use of Strategy %	Respondents reporting Use of Strategy N
Gather information on the topic	81	25

Get a variety of sources	29	9
Limit the number of sources	6	2
Ask someone else to proofread	65	20
Outline/organize ideas before writing first draft	58	18
Revise/correct errors	52	16
Write on computer/word processor	29	9
Use spell checker	13	4
Take notes/use note cards	13	4
Get help locating/screening sources	6	2
Dictate/get help locating someone to transcribe paper	6	2
Circle words that look wrong	3	1
Ask professor if I am on the right track	3	1

accommodations (n=13) said that professors usually were willing to grant their requests; however, five individuals reported that at least one professor was not willing to do so.

<u>Participants' suggestions for university faculty.</u> Subjects were asked to indicate how professors could help them deal with writing requirements. The following suggestions were made: (a) grade on content more heavily than mechanics; (b) give clear criteria for assignments; (c) provide individual feedback; (d) break assignments into small components rather than one large assignment due at the end of the semester; (e) allow oral rather than written tests and don't rely heavily on essay tests; (f) allow increased time to complete assignments and more lead time for assignments; (g) allow proofreading; and (h) give more interesting assignments.

Discussion and Recommendations

The recommendations that follow are categorized as accommodations, compensatory and bypass strategies, and intervention strategies. Most recommendations from participants fall into the categories of compensatory or bypass strategies and accommodations. Raskind and Scott (1993) posited that basic skill remediation may meet with resistance by postsecondary students with learning disabilities who may not have the extensive time required for remediation of skills needed to meet their immediate demands. Additional resistance may occur because of "remediation burnout" by students who have received extensive, but unsuccessful, basic skill instruction prior to college.

Accommodations by University Faculty

Participants listed assigned papers and reports as their most frequent and most troublesome written assignments. Relatedly, their most frequently occurring suggestion for university faculty was that professors be very clear about criteria for written assignments (e.g., give very precise instructions and explain the format required). Undoubtedly all students would benefit from such explanations; in addition, the instructor is likely to be rewarded by receiving more satisfactory finished written assignments. Another suggestion, likely to be met with varied reactions from university faculty, pertains to giving separate grades for content and mechanics. The issue may be resolved more easily if instructors determine whether demonstration of technical written competence is an essential component of the assignment and, if so, whether it actually can be separated from content.

Organization of thoughts. Given the difficulty students reported with organization, some of the recommendations of individual participants seem appropriate. For example, one student suggested that instructors work with students individually to discuss ideas and "flow" of a paper. Other suggestions included giving feedback on rough drafts, helping students narrow topics that are too broad, and assigning component tasks for a major project throughout the semester.

Extended time to complete assignments. Over half of the participants experienced difficulty with speed and/or legibility of handwriting. As noted previously, legibility may deteriorate as students try to write faster. An obvious recommendation, based on this information, would be to allow students with learning disabilities extended time to complete written assignments, or alternative methods of demonstrating their mastery of course content (e.g., audiotaping). Extended time to complete assignments is likely to pose problems for faculty who read papers as a group so that grading will be consistent. If extension of deadlines is not feasible, an alternative accommodation might be to give students assignments earlier in the semester, thus providing more "up front" or lead time for students who need it.

Compensatory and Bypass Strategies

Proofreaders. The most difficult aspect of writing for participants in this study was proofreading or locating errors in their own work. As a method of compensation, 65% noted that they usually asked others to proofread their written work. This is comparable to the findings of another study by Cowen (1988), where 79% of subjects who were also university students with LD relied on others to proofread their papers. Proofreading is likely to create problems for professors who may view this practice as plagiarism (Chase, 1987). In a study of faculty at a small public university, Matthews, Anderson, and Skolnick (1987) found that they were willing to allow students to use proofreaders, but disagreed as to whether or not to allow proof readers to substitute higher level vocabulary for the student's own words. Faculty's concerns may not be unfounded. One subject acknowledged that he had to be wary to ensure that the finished paper was his own work because he sometimes had problems with proofreaders trying to change the content of his

writing. With the advent of computers with voice recognition capability, the problem of text alteration by proofreaders may eventually disappear (Rose, 1986). However, orally transcribed text is not error free, nor will it alleviate the need to check for grammatical and organizational errors. Therefore, one of the most effective strategies for university students to cope with inadequate mechanical skills may still be to ask others to look for the errors they cannot detect themselves.

Word processors with spelling checkers. Generally, word processors with grammar and/ or spelling checkers may be useful tools for students who have difficulty with handwriting speed and legibility as well as grammar and spelling (Collins & Price, 1986; Vogel, 1985a). However, limitations inherent in spell checkers may decrease their usefulness for the student who so grossly misspells words that the computer can't generate a correct spelling, or in situations where actual but inappropriate words appear (e.g., "form" for "from" or homonyms). In addition, a certain amount of technical expertise is required to use a computer and spelling checker. In the words of one participant, "My computer has a spell checker which I can't figure out how to run; it doesn't help me a lot." Typing and computer use were areas of relative strength for participants in this study; however, several commented on their lack of experience with computers and difficulty typing. Based on this information, a logical recommendation for educators working with college-bound students with learning disabilities is to incorporate word processing/typing skills into the student's transition plan. University students who lack computer expertise might try commercially available typing tutorial programs, enroll in word processing courses or workshops, or use writing laboratories that provide tutorial assistance in the use of word processing software.

Intervention Strategies

Given the reported difficulty using computers and spell checkers, universities with computerized writing laboratories might consider providing instruction in word processing and use of spell checking and proofreading programs. This service might be helpful for all students, not just those with learning disabilities, Also, the following interventions might be undertaken to assist with spelling and grammar difficulties (Hoy & Gregg, 1987; Richards, 1985): (a) instruction in self-monitoring of errors; (b) maintenance of an individual dictionary of vocabulary and spelling words that are frequently used and troublesome; (c) use of spelling dictionaries or lists; and (d) instruction in paragraphing, sentence structure, and organization.

Self-advocacy. Shaywitz and Shaw (1988) noted that university students with LD who self advocate are most successful academically. Secondary and postsecondary educators might consider teaching students appropriate self advocacy techniques to use in requesting accommodations. For example, in courses with demanding written requirements, students should provide appropriate documentation and requests for accommodations to instructors at the beginning of the semester, rather than waiting until they are in trouble or a deadline is near.

Similarly, students with writing difficulties need to be aware of their strengths and limitations and plan their course loads accordingly. They should inform their advisors and ask for help in matching courses to their strengths. For example, advisors may assist them in avoiding courses with technical writing or those in which writing performance comprises the majority of the grade. If such courses are not avoidable, students should be careful not to schedule too many in one semester.

Limitations

Results must be interpreted cautiously, given two obvious limitations: (a) the limited sample size of 31 subjects; and (b) the questionable validity of self-reported responses (i.e., whether students actually use the strategies they describe and whether their perceptions of their strengths and weaknesses are accurate). With regard to the former, the WAIS-R and Woodcock-Johnson scores of this sample are similar to intelligence and achievement test scores of subjects described in other studies of university students with learning disabilities (Cowen, 1988; Gajar, 1987; Ingram & Dettenmaier, 1987; Hoy & Gregg, 1986; Vogel, 1986). Concerning validity of responses, the reported written language difficulties of this sample are corroborated by the fact that the lowest mean score (94; SD= 11.77) on the Woodcock-Johnson for this group was on the Written Language cluster. Nevertheless, future research might replicate this study and compare the self -report data to direct observations of students as they undertake writing assignments.

Summary and Conclusions

Results of the current study indicate that this particular group of university students with learning disabilities experienced extreme difficulty with several aspects of meeting the written requirements for college courses. Their major difficulties were related to proofreading, writing mechanics (e.g., spelling and grammar), speed and legibility of writing, and organization of thoughts.

Whenever possible, university faculty should be encouraged to: (a) give clear descriptions of assignment components and grading criteria; (b) allow additional time for completion of written assignments; (c) provide alternative means of assessing student mastery of content material; (d) focus on writing content rather than mechanics; and (e) provide encouragement and feedback to students with learning disabilities. Many of the accommodations suggested would be helpful to all students, whether or not they have learning disabilities.

Finally, given the limitations of sample size and concerns regarding the validity of student self-reports, more research in this area is advisable. Interventions based on learning strategies, as well as strategies for self-advocacy and self-management of writing requirements, are areas that might be explored. Based on this study and prior research, ongoing investigation is needed to determine ways to assist university students in meeting the written requirements they encounter.

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