
The study compared perceptions of high school and college faculty regarding the characteristics and preparatory needs of secondary learning disabled (LD) students. The analysis was based on a survey of 288 high school teachers (246 regular and 42 special education) and 82 college teachers. Separate factor analyses identified three academic factors (reading strategies, organizational skills, test-taking skills) and two social factors (interpersonal skills and self-sufficiency) considered important by both college faculty and special educators. Differences between these two groups occurred in issues related to college access (e.g., information about LD college programs, preparation for a college admission interview, and the need to provide secondary students with assignments similar to those required in college). Although regular teachers and college faculty demonstrated similar perceptions of LD learner characteristics, differences occurred in all preparation areas with regular high school faculty indicating they were unable to provide the academic, social, or guidance services deemed important by college faculty. Although the study did not find major differences among groups, it did suggest that knowledge acquired in the special education setting is not being generalized and/or reinforced by mainstream regular teachers; and that higher level cognitive skills and strategies could be facilitated by effective teaching procedures including the direct instruction model. (DE)
A COMPARISON OF THE PERCEPTIONS OF
HIGH SCHOOL AND COLLEGE FACULTY
IMPLICATIONS FOR PROGRAM DEVELOPMENT
FOR SECONDARY LEARNING DISABLED STUDENTS

Pearl L. Seidenberg
and
Ellen Koenigsberg

Long Island University Transition Project
Learning How to Learn: A High School/College Linkage Model
To Expand Higher Educational Opportunities for Learning Disabled Students

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Abstract

One of the factors that may be implicated in the reported lack of effective secondary instructional programs for college-bound learning disabled (LD) students is the different perceptions of high school and college faculty regarding the characteristics and preparatory needs of secondary LD students. The purpose of this study was to define the extent of these differences. In this study, 288 high school teachers (246 regular and 42 special education) and 82 college teachers responded to a questionnaire addressing attitudinal and educational issues relating to the preparation of secondary LD students. Separate factor analysis identified five similar factors (2 attitude scales and 3 preparation scales) for the two groups. There were significant differences among the three groups on four of the five scales and multiple comparison tests were performed to determine which groups differed. The results of the survey suggested that the perceptions of special education and college teachers relating to the academic and social competencies needed by LD students were similar with differences between the groups for issues relating to the characteristics and counseling needs of LD students. However, the difference between the groups found for a single item on the Academic scale suggested that the two groups may have different orientations toward the goals and achievement outcomes of secondary preparation programs for LD students. Significant differences were also found on all three preparation scales between regular high school and college teachers. The implications of these findings for program development in secondary settings are discussed.
The transition from school to work or to post-secondary training is a critical period for all students. For those learning disabled (LD) high school students, who have the potential to pursue higher education, colleges and universities offer an age-appropriate, integrated environment in which they can expand personal, social and academic abilities leading to an expansion of career goals and employment options. However, the transition of LD high school students to higher education settings has been made difficult by inadequacies in the preparation they have received in secondary schools. There is an apparent paucity of appropriate programs for the LD college-bound student and secondary schools still face serious difficulties in developing effective instructional programs for the mainstreamed LD high school student. (Woodward, 1981; Seigel and Gold, 1982; Mangrum and Strichart, 1983). This lack of effective secondary programs for LD students probably accounts for the fact that many LD high school students do not perceive post-secondary education as a viable option or fail to successfully complete college programs (Cordoni, 1982; Vogel, 1982).

If the LD adolescent is to be adequately prepared for post-secondary education then the secondary curriculum that LD students participate in must reflect those skills and competencies that are important for coping, initially, with the college admission process and then with the demands of a college setting. The curriculum content of the secondary program must provide LD learners with the skills necessary for access to and success in college programs (Seidenberg, 1986).

The process of transitioning LD high school students into post-secondary settings has emphasized the need for better communication between secondary and post-secondary faculty with regard to what is important in educating the college-bound LD student. One of the reasons for the lack of effective instructional secondary programs for LD students may be discrepancies in perceptions between high school and college faculty due to different experience bases and philosophies regarding the competencies necessary for access to and success in college settings.
Given the current press for more effective secondary services for LD students and the inappropriateness of secondary instructional programs for many of these students, one question which emerges is: How do the perceptions of regular and special education high school teachers and college faculty compare with regard to the characteristics and preparatory needs of college-bound LD secondary students? An opinion survey was designed to address directly the issue of similarities and differences between secondary and post-secondary educators. The survey was developed because no hard data on this question is available in the literature. Therefore, the present investigation was undertaken to ascertain whether regular and special education high school teachers and college faculty really do have different perceptions regarding the characteristics and preparatory needs of LD secondary students and to determine whether or not the network of variables contributing to their perceptions are similar.

METHOD

Instrumentation

A questionnaire was designed to incorporate a number of attitudinal and educational concerns relevant to the successful transition of LD secondary students to a college setting. Questions were included which were pertinent to the respondents' knowledge and perceptions regarding the issues and concerns most frequently found in the research literature dealing with the LD adolescent as well as the research dealing with the transition of the LD high school student to a college setting (Deshler, Schumaker, Lenz and Ellis, 1984; Palloway, Smith and Patton, 1984). The questions were compiled from three main sources: a pilot questionnaire, interviews with high school and college faculty and a review of the literature. The final version of the questionnaire was composed of three major sections. The demographic section for college faculty contained five items regarding institutional affiliation, professional background and experience, level of courses...
taught and contact with LD students. The demographic section for high school faculty contained similar items. The demographic items were primarily open-ended or "yes/no" in nature.

The next section contained nine items and employed a 5 point, forced choice, Likert scale (strongly agree = 1, agree = 2, neutral = 3, disagree = 4, strongly disagree = 5). Information was requested regarding the respondents' attitude toward and understanding of the characteristics of LD students.

The final survey portion of the questionnaire, contained 14 items and dealt with the extent to which the respondents were able to provide (e.g., high school faculty) or considered important (e.g., college faculty) preparation for LD students in specific academic areas, and in interpersonal and college counseling areas. A Likert scale (never = 1, almost never = 2, sometimes = 3, almost always = 4, always = 5) was also used for this portion of the questionnaire.

School Selection

Six (6) school districts in two suburban counties in New York state were included in the high school sampling population. In order to be sensitive to curricular differences in districts with differing college-bound populations, the districts were selected according to the percentage of high school students who attended college after graduation. Three school districts reported that 90% of their students went on to higher education while the remaining three school districts reported less than 50% of their students went on to post-secondary settings. The entire high school faculty in one high school in each district was asked to complete a questionnaire at a school-wide faculty meeting. In addition one high school in an urban setting which reported that 60% of graduates went on to higher education was also sampled.

College faculty at two campuses of a private university, one in an urban setting and the other in suburban setting, were selected for inclusion in the study. The number of questionnaires sent to each school within the university was
stratified according to the composition of the different departments within each school. Faculty in those departments that are responsible for teaching introductory level undergraduate courses were asked to complete the questionnaire. The deans in each school distributed the questionnaires to faculty through department chairs. The overall return rate was 65.6% (82 of 125).

RESULTS

Demographic Profile of College Faculty

A total of 82 college faculty were included in the study. Of the college faculty respondents 29.3% taught in an urban setting and 70.7% taught in a suburban area. A wide variety of departments were represented including Business (29.3%), Art (15.9%), Music (8.5%), English, Math, Physical Education (4.9% each) with most (75.6%) respondents indicating that they did teach introductory courses. As a group, the college staff was experienced with 60% having worked in education for seven or more years.

Profile of High School Faculty

A total of 288 high school teachers comprised of 246 regular teachers and 42 special educators were included in the study. Of the high school respondents, 10.9% taught in an urban setting and 89.1% taught in suburban areas. The high school staff tended to be even more experienced that the college faculty surveyed. Almost 81% had worked in education for seven or more years with over 27% having worked for over twenty years. Their education level was also high; 90% had, at least, a Master's degree.

Factor Analysis

Separate principle-component factor analysis was performed on the responses of the high school and college teachers to the survey items and five internally consistent factors were identified for the two groups. Both high school and college staff responded to nine statements regarding attitudes towards and understanding of the characteristics of LD students. Separate factor analysis of the high
school and college responses indicated that the factor structures of the two groups were essentially the same. Two factors were identified. The first consisted of five items characterized by statements such as: "An LD student is easy to recognize" and "A learning difficulty can be dealt with in the regular classroom but a learning disability cannot." The factor appears to be concerned with the practical implications of dealing with LD students in a classroom setting and was named LD: Practical Implications for Classroom (PIC). The remaining four items (e.g., "A learning disability is characterized by a significant discrepancy between I.Q. and achievement" and "Mary learning disabled students are characterized by deficits in language reception and/or production") loaded on the second factor which was labeled LD: Characteristics (LD: C).

The survey also included 14 items for which high school teachers were asked "To what extent are you able to provide the following for the learning disabled?" and college teachers were asked: "To what extent do you consider that high school preparation in the following areas would be important for the learning disabled college-bound student?" Despite the difference in instructions, similar factor structures emerged for high school teachers and college faculty. The three factors identified were ACADEMIC (e.g., "textbook reading strategies to improve comprehension and retention," "organizational skills needed for taking notes, preparing outlines and writing reports"), SOCIAL (e.g., "opportunities to develop good interpersonal skills," "opportunities and encouragement to become self-sufficient"), and GUIDANCE (e.g., "career advisement," "information about appropriate LD college programs").

Comparison of Regular and Special Education High School Teachers and College Faculty

One question on the high school staff survey asked whether respondents had worked with LD students in a regular classroom setting. Only 15% of the regular high school teachers answered "no" to this question. Their responses on the five survey scales were compared to those of the larger group who had indicated
experience with LD students in the regular classroom. Since the groups were virtually the same on all scales, they were combined for all further analyses.

Table 1 presents the means and standard deviations for regular high school teachers, special education high school teachers, and college teachers of the two LD attitude scales and the three scales dealing with the opportunity to provide LD students with preparation in different areas.

(Insert Table 1 about here)

As may be seen in Table 1, there were significant differences among the three groups on four of the five scales. Tukey HSD Multiple Comparison tests were performed in these cases to determine which specific groups differed. With regard to LD:C, the regular high school teachers and college teachers had similar means but these were significantly different from the mean of the special education high school teachers. Since the LD items were responded to on a 5 point scale with 1 = strongly agree and 5 = strongly disagree, the special education teachers' lower mean (2.05) indicates that they tended to agree more strongly with generally accepted characterizations of LD students than did regular high school teachers or college teachers whose means were higher (2.66 and 2.57, respectively). It should be noted, however, that regular and special education high school teachers as well as college teachers tended to agree rather than disagree with these statements as the means of all groups were below 3 which was labelled "neutral."

Items on the three scales dealing with preparation were responded to on a 5 point scale with 1 = never, 2 = almost never, 3 = sometimes, 4 = almost always, and 5 = always. Therefore, the consistently higher means of the special education high school teachers compared to the regular high school teachers indicate that they responded that they were able to provide these services to a greater extent than did the regular teachers.

Significant differences were also found on all three preparation scales between college teachers and regular high school teachers, but these must be interpreted in light of the fact that college teachers rated the the extent to which they
viewed the provision of services as important, while high school teachers rated
the extent to which they were able to provide these services. The consistently
higher means of the college teachers indicate that they rated the extent to which
provision of these services was important significantly higher than the regular
high school teachers rated the extent to which they were able to provide the
services. Although the special education high school teachers and college teachers
responded similarly to the Academic and Social scales, the college teachers rated
the importance on Guidance services significantly higher than the special education
teachers rated the extent to which they were able to provide these services.
Also, on the Academic scale the similarity in responses for the two groups broke
down for a single item dealing with "assignments similar to those required in
college". College teachers \(M=3.35, SD=.84\) rated the importance of this item
significantly higher than special education teachers \(M=2.48, SD=.83\) \(P<.001\).

Comparison of College Faculty Who Had An LD Student vs.

One question on the college faculty survey asked whether respondents had
ever had an LD student enrolled in their class. Of the 82 respondents 72% (59)
indicated that they had had an LD student in their class while 28% (23) indicated
that they had not had an LD student enrolled in their class. Table 2 presents the
means and standard deviations on the two LD attitude scales and the three prep-
paration scales for these two groups of college faculty.

(Insert Table 2 about here)

As indicated in Table 2 there were significant differences among the two
groups on only two of the five scales. With regard to LD: PIC the two groups had
similar means but differed on LD: C. The lower mean (2.46) for college faculty who
had an LD student enrolled in their class indicated that this group tended to agree
more strongly with the generally accepted characterizations of LD students than did
those college faculty who had not had an LD student in their class.

On the three scales dealing with preparation, the two groups responded
similarly to the Academic and Guidance scales and differed only on the Social scale. The college faculty who had had LD students in their class rated the importance of social interventions significantly higher than college faculty who had never had an LD student in their class.

**DISCUSSION AND IMPLICATIONS**

The responses of special education high school teachers and college faculty in the present study do not appear to support the contention that the overall perceptions of these two groups differ regarding the characteristics and programming needs of the college-bound LD student. However, the responses of the regular high school teachers appears to support the concerns that appear in the current literature with regard to the need for the provision of more effective secondary mainstream preparatory programs for college-bound LD high school students.

The participating special education high school teachers and college faculty were very similar in the direction of their perceptions of the characteristics of LD students that impact on classroom performance and the academic and social needs of the LD learner. The special education teachers indicated that they were able to provide instruction for those academic (e.g., reading strategies, organizational skills, test-taking skills, etc.) and social (e.g., interpersonal skills, self-sufficiency) competencies that college faculty considered important. The differences between the two groups occurred in areas related to the more general characteristics of LD students and the provision of services specifically related to the issue of college access (e.g., information about LD college programs, preparation for a college admissions interview, etc.). Although there was concurrence for the two groups on many issues, it cannot be assumed that special education teachers and college faculty share the same belief system surrounding these issues. Although there were eight items on the Academic scale for which responses of the two teacher groups were in agreement, the similarity in responses broke down for a single item. The single exception was in response to the query as to whether...
high school LD learners need to be provided with or are provided with preparation that includes "assignments similar to those required in college". While the participating special education high school and college teachers were similar in the direction of their responses to those academic issues dealing with the content of instructional programs (e.g., reading strategies to improve comprehension, organizational skills, etc.), the difference between the two groups for this critical issue suggests that the two groups may have different orientations toward the goals and achievement outcomes of the preparation provided for LD secondary students.

The regular education and college faculty responses indicated that these two groups were similar in their perceptions of the characteristics of LD learners. However, major differences occurred in all of the preparation areas with regular high school faculty indicating that they were unable to provide the academic, social or guidance services deemed important by college faculty.

The findings of the present study appear to intersect with a number of concerns that persist with regard to the provision of adequate instructional programs for LD secondary students. A major concern voiced by a number of researchers is that the knowledge learned in a special education setting does not generalize to other instructional environments and/or transfer to the new higher level cognitive skills necessary for completion of many academic tasks (Deshler, Alley and Carlson, 1980; Zigmond, Kerr, Brown and Harris, 1984; Zigmond, Lenin and Laurie, 1985; Deshler, Schumaker, Lenz and Ellis, 1984).

The present findings appear to support the notion that the knowledge acquired in a special education setting is not being generalized and/or reinforced by mainstream regular teachers who do not perceive themselves as providing instruction to LD learners similar to the instruction provided by their special education counterparts; instruction that is also considered important by college faculty.

Unless LD students are successfully integrated into secondary mainstream college
preparatory classes that provide a curriculum that is matched to the performance demands of college settings, the transition to post-secondary education will continue to be made difficult for LD students.

In addition, much of the failure of LD secondary students in school-related academic tasks has been attributed to a lack of ability in the application of higher level cognitive skills or strategies. Students are often called upon to meet the increasingly complex format and task demands of secondary academic assignments without having acquired effective strategies for dealing with these tasks and completing them successfully. There is also a body of research dealing with teaching effectiveness that indicates that there is almost no instruction presented to LD students that addresses these higher level integrative cognitive skills (Ried and Hresko, 1980; Yselldyke and Algozzine, 1982; Beckel and Beckel, 1986). The research also points out that the learning of higher level cognitive skills that effect performance on complex academic tasks can be facilitated by effective teaching procedures that provide for direct instruction. At the same time, the research findings suggest that the use of a direct instruction model for the development of instructional programs is infrequent in both mainstream and special classrooms (Englemann and Carnine, 1982; Gettinger, 1982; Stevens and Rosenshine, 1981).

The findings of the present study appear to suggest that the complex format and task demands of secondary academic assignments are not being addressed by either special or regular educators in secondary LD instructional programs. Given the documented deficiencies of LD secondary learners in the successful application of those higher level cognitive strategies needed for success on academic tasks, an area for future research should be directed to examining whether LD secondary instructional programs are providing effective instruction for the amelioration of those learning strategy and problem solving deficits of LD secondary students that impact on achievement outcomes in secondary and post-secondary settings.
Finally, the findings of the present study also appear to support the contention of numerous researchers that adequate changes in LD secondary school programs are contingent upon revision of pre-service and inservice teacher education to include specific training for secondary special education teachers in the design of curriculum and teaching strategies more appropriate for LD secondary students as well as training that provides for the development of counseling and consulting skills (Johnson, 1984; White, Alley, Deshler, Schumaker, Warner and Clarke, 1982; Smith-Davis, Burke and Noel, 1984).

As learning disabled secondary students increasingly seek access to post secondary education, questions regarding the adequacy of program development and service delivery in secondary settings must be addressed if we are to assist LD students in the transition from high school to college. Research and program development and evaluation efforts that will provide constructive information in the areas outlined above need to increased. Information generated from these efforts can contribute to the development of more effective programs and services for secondary learning disabled students that will enhance their opportunities for success in post-secondary settings.

Table 1

COMPARISON OF REGULAR AND SPECIAL EDUCATION
HIGH SCHOOL TEACHERS AND COLLEGE TEACHERS

<table>
<thead>
<tr>
<th></th>
<th>REG. HS TCHRS. (n=246)</th>
<th>SP. ED. HS TCHRS. (n=42)</th>
<th>COLL. TCHRS. (n=82)</th>
<th>F</th>
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</thead>
<tbody>
<tr>
<td>LD: PIC</td>
<td>( \bar{X} = 3.61 )</td>
<td>( \bar{X} = 3.77 )</td>
<td>( \bar{X} = 3.70 )</td>
<td>1.96</td>
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<tr>
<td></td>
<td>SD = .58</td>
<td>SD = .53</td>
<td>SD = .51</td>
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</tr>
<tr>
<td>LD: C</td>
<td>( \bar{X} = 2.66 )</td>
<td>( \bar{X} = 2.05 )</td>
<td>( \bar{X} = 2.57 )</td>
<td>16.20*</td>
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<td></td>
<td>SD = .62</td>
<td>SD = .66</td>
<td>SD = .69</td>
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<tr>
<td>ACAD</td>
<td>( \bar{X} = 2.87 )</td>
<td>( \bar{X} = 3.81 )</td>
<td>( \bar{X} = 3.64 )</td>
<td>57.88*</td>
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<tr>
<td></td>
<td>SD = .71</td>
<td>SD = .62</td>
<td>SD = .73</td>
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<tr>
<td>SOC</td>
<td>( \bar{X} = 3.42 )</td>
<td>( \bar{X} = 4.00 )</td>
<td>( \bar{X} = 3.90 )</td>
<td>13.98*</td>
</tr>
<tr>
<td></td>
<td>SD = .91</td>
<td>SD = .81</td>
<td>SD = .88</td>
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<tr>
<td>GUID</td>
<td>( \bar{X} = 2.45 )</td>
<td>( \bar{X} = 2.94 )</td>
<td>( \bar{X} = 3.73 )</td>
<td>63.39*</td>
</tr>
<tr>
<td></td>
<td>SD = .91</td>
<td>SD = .95</td>
<td>SD = .84</td>
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</table>

* p < .001.

Note: For each scale, means that are not significantly different are underlined.
Table 2

COMPARISON OF COLLEGE TEACHERS:
HAD LD STUDENT vs. NEVER HAD LD STUDENT

<table>
<thead>
<tr>
<th></th>
<th>HAD LD STUD. (n=59)</th>
<th>NEVER HAD LD STUD. (n=23)</th>
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<tr>
<td>LD: PIC</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>X</td>
<td>3.74</td>
<td>3.60</td>
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<tr>
<td>SD</td>
<td>.53</td>
<td>.46</td>
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<tr>
<td>LD: C</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>2.46</td>
<td>2.83</td>
<td>-2.14*</td>
</tr>
<tr>
<td>SD</td>
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</tr>
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</tr>
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<td>SD</td>
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<td>3.81</td>
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<tr>
<td>SD</td>
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<td>.73</td>
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</table>

* P < .05
Reader's Evaluation of Material Read

In order to improve this material, so that it can be of the most help to you, we need to know your opinion. After reviewing this paper, please complete this brief questionnaire. Separate the survey from the booklet, fold and mail.

1. How satisfied were you with the overall contents?
   very satisfied  satisfied  unsatisfied  very unsatisfied

2. How satisfied were you with the completeness of this paper?
   very satisfied  satisfied  unsatisfied  very unsatisfied

3. How satisfied were you with the information provided in the references?
   very satisfied  satisfied  unsatisfied  very unsatisfied

4. How would you rate the ease in which you could implement this information in your setting?
   very satisfied  satisfied  unsatisfied  very unsatisfied

5. How would you rate how well this topic meets a need in your program?
   very satisfied  satisfied  unsatisfied  very unsatisfied

6. How satisfied were you with the current information presented?
   very satisfied  satisfied  unsatisfied  very unsatisfied