

Association on
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Journal of Postsecondary Education and Disability

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FROM THE EDITOR

DAVID R. PARKER

After transitioning from the roles of high school special education teacher and private school director to that of disability service provider in 1992, I learned a great deal by reading back issues of this Journal and the pamphlet-sized “AHSSPE Proceedings” found on new colleagues’ bookshelves. Over time, JPED has grown in size, format, and frequency of publication. Its mission, however, remains focused on ways that science can enrich the human art endemic to our work with individuals with disabilities.

Building on the success of previous JPED editors, including most recently Dr. Jim Martin’s remarkable leadership, each volume of the Journal will now consist of four issues per calendar year, with one special issue devoted to a timely topic. This growth would not be possible without the dedicated professionalism of the Journal’s astute editorial review board members. The first page of each article has been reformatted to include all citation information. In addition, JPED is now published in a variety of media formats to universally enhance access for its wide range of readers. This issue includes seven articles that reflect the multi-faceted dimensions of postsecondary accessibility and culture shaping. There are five research articles, a practice brief, and a book review. Jim Martin accepted the first three research articles and the practice brief while still editor.

Lyman Dukes III extends his work on AHEAD’s Professional and Program Standards by introducing the iEvaluate tool for DS program evaluations. Read how he conducted a Delphi study to develop a very practical tool in this era of measurable outcomes.

Using a focus group design, Ozlem Erten presents qualitative insights into the postsecondary experiences of female Canadian students with disabilities. Her article makes a timely addition to the literature on undergraduate and graduate voices about attitudinal barriers while revisiting the intersection of OSD practices and student resilience.

Parker, Field Hoffman, Sawilowsky, and Rolands report findings from a pilot study on ADHD coaching. They investigated the impact of weekly coaching

sessions conducted by phone on the academic success and emotional well-being of undergraduates with LD and/or ADHD. Photographs and descriptions of student “artifacts” enriched the qualitative aspect of this mixed-methods study.

In an investigation of paired associates learning, Cooper, Shearer Lingo, Whitney, and Bott Slaton provide an instructive description of their rigorous methodology for studying the efficacy of a reading and test-taking strategy. While strategy instruction is frequently provided on college campuses, most research into its efficacy has focused on secondary students. Their findings offer empirical implications for postsecondary students with and without disabilities.

Readers familiar with *Murderball*, a documentary about wheelchair rugby players, will no doubt compare that film to Wessel, Wentz, and Markle’s compelling account of student-athletes who participated in a power soccer program. By grounding their study in Social Role Valorization theory, the authors link participation in this club sport to student development practices. They offer practical suggestions for campus personnel, even those who may not work with a large cohort of students with physical or mobility impairments.

While exploring the needs of Division 1 student-athletes with disabilities, Margaret Weiss offers a thought provoking practice brief. Her case study describes a Learning Assistance Program, created as a hybrid of athletic service supports and Disability Services. This article’s insights about identity formation provide a meaningful counterpart to the study by Wessel et al.

Finally, Linda Nissenbaum combines her experiences as a DS administrator and private ADD coach to present an informative review of *Ready for Take-Off: Preparing Your Teen with ADHD or LD for College*. This new book by Drs. Theresa Laurie Maitland and Patricia Quinn helps parents support high school students’ transition to college in a manner that appears congruent with self-determination theory.

The iEvaluate OSD Guidelines and Exemplars: A Disability Services Evaluation Tool

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Abstract

Program evaluation is rapidly becoming the norm in higher education and this includes disability services. Postsecondary institutions increasingly encourage disability service programs to demonstrate accountability specified through appropriate benchmarks. However, professionals in disability service offices typically report that while they understand and value the need to evaluate their programming, they are often too overwhelmed with the daily needs of individual students to find the time to engage in program evaluation (Goodin, Parker, Shaw, & McGuire, 2004). Experts in service provision for students with disabilities at the postsecondary level were asked to participate in a study that would culminate in an assessment tool for the purpose of evaluating a disability services office. The outcome of the study is the iEvaluate OSD assessment instrument. Included as an appendix is an iEvaluate OSD evaluation form that can be reproduced free of charge for office evaluation purposes.

Program evaluation is rapidly becoming the norm in higher education and this includes disability services. Given the significant budget reductions at many postsecondary institutions and the expectation of effective outcomes for campus divisions and departments, this trend is not surprising. College administrators now expect divisions and departments to implement activities that clearly meet their respective goals and objectives. Because faculty salaries are a fixed cost, institutions will be challenged to maintain funding for services (e.g., tutoring, counseling, advising) that do not produce effective results (S. Shaw, personal communication, January 29, 2010). Programs that do not demonstrate that they add value may well find their budgets frozen, reduced, or eliminated entirely (Parker, Shaw, & McGuire, 2003).

To better define the profession and provide a baseline for demonstrating program outcomes, a number of general benchmarks or principles for postsecondary disability services were developed in the last dozen years. Standards that were adopted include: (a) Professional Standards (Shaw, McGuire, & Madaus, 1997) that identify skills and knowledge required of service providers and define the profession as a whole, and (b) Program Standards and Performance Indicators (Shaw & Dukes, 2006) that provide direction regarding

services intended to ensure equal access to postsecondary education for students with disabilities. "The development of standards for professionals operating in postsecondary disability service settings sends a clear message that the profession has reached a new level of maturity" (Dukes & Shaw, 1998, p. 208). However, maturity will only truly be demonstrated when programs rate themselves based upon an established set of Office for Students with Disabilities (OSD) standards (Goodin et al., 2004).

A Rationale for Program Evaluation

Postsecondary education has become a requirement for entry into most jobs in the United States (Carnavale & Fry, 2000). Many students with disabilities and their families are well aware of this trend as evidenced by the fact that the transition plans of four out of five students with disabilities indicate a desire to participate in postsecondary education (Cameto, Levine, & Wagner, 2004). Students with disabilities represented just 2.6% of the postsecondary education population in 1978, and have tripled to more than 9% today (Henderson, 1999). The response to this enrollment trend has been a rapid expansion of services for students with disabilities at postsecondary institutions over the past 30 years (Dukes, 2006). Yet, most postsec-

ondary institutions have not maintained follow-up data nor have they conducted consistent evaluation of service effectiveness. (Mull, Sitlington, & Alper, 2001).

Historically, there have been few resources available to evaluate office or program effectiveness. The methods currently used include the following:

- *AHEAD Program Standards*: The standards offered by AHEAD have been touted as a tool for comparing office practice to a set of benchmarks endorsed by the profession (Shaw & Dukes, 2006). However, this is not a formal assessment tool nor does it include instructions for conducting such an evaluation.
- *CAS Professional Standards*: As with the AHEAD Standards, the Council for the Advancement of Standards (CAS) has published Standards for the OSD. These Standards also come with a tool for rating one's OSD based upon the Standards. It is this author's understanding, albeit formally unsubstantiated, that many OSD professionals would prefer an assessment instrument designed specifically by and for experts in the OSD profession.
- *Outside Evaluators*: Historically, this has been the primary vehicle for office evaluation. However, there is no formal means for accessing an outside evaluator. Typically, such persons are found through word-of-mouth or on a listserv specifically directed at OSD administrators.

“Given the fiscal, administrative, and legal accountability of the OSD, it is vital that the personnel responsible for ensuring equal educational access conduct a periodic self-assessment of their performance” (Dukes & Shaw, 1999, p. 28). Yet, service providers have indicated that even thinking about program evaluation is discouraging (Dukes, McGuire, Parker, Refsland, & Reustle, 2007). Moreover, OSD professionals typically report that while they understand and value the need to evaluate their programming, they are often too overwhelmed with the daily needs of individual students to find the time to engage in program evaluation (Goodin et al., 2004). The author and a professional colleague (Goldstein et al., 2006) informally collected data at an international conference for OSD administrators that indicated the following:

- 95% of respondents were currently considering completing a program evaluation;
- The vast majority of respondents indicated a desire to be directly involved in an office evaluation; and
- The vast majority of respondents indicated a desire to use an existing program or tool for an office evaluation.

The iEvaluate OSD Assessment Tool

Experts in service provision for students with disabilities at the postsecondary level were asked to participate in a study that would culminate in an assessment tool for the purpose of evaluating a disability services office or program. The outcome of the study, described here, is the iEvaluate OSD assessment instrument. The tool is intended to capture, in the fewest number of questionnaire items possible, common daily practices of a typical disability student services office. An iEvaluate OSD evaluation form that can be reproduced free of charge for office evaluation purposes is available (see Appendix). The research question that guided the development of the iEvaluate OSD assessment tool was: “What service components do postsecondary disability service experts perceive as essential for inclusion in an office or program evaluation instrument?”

Method

The current study was designed to identify OSD service components appropriate for inclusion on a questionnaire that will be used by disability service professionals for the purpose of office or program evaluation. Specifically, postsecondary disability service experts were asked to indicate the importance they would place on a set of service delivery guidelines and their corresponding exemplars for inclusion in an office evaluation questionnaire. Following each guideline, a list of office practices was provided that serve as model exemplars of the respective guideline. The exemplars spell out actual office practices that indicate compliance with the respective guideline. Study participants rated the importance of 10 guidelines and 162 exemplars (service components) across 9 domains using a 5-point Likert scale (1 – Not Important, 2 – Slightly Important, 3 – Moderately Important, 4 – Very Important, 5 – Essential).

Research Design

The Delphi method is based upon the notion that experts in a particular discipline can reasonably forecast its future practices (Anderson, 1998). Delbecq, Van de Ven, and Gustafson (1975) defined the Delphi technique as a “method for the systematic solicitation and collection of judgments on a particular topic through a set of carefully designed sequential questionnaires interspersed with summarized information and feedback of opinions derived from earlier responses” (p. 10). This is accomplished by having experts in a profession complete multiple rounds of a questionnaire. Each participant is provided the opportunity to, first, numerically rank all individual survey items and also provide qualitative comments regarding each ranking. Subsequent rounds of the survey allow respondents to review mean ratings and qualitative comments for any item that did not reach consensus during the previous round. Then, those survey items are again ranked, at which time respondents are provided the opportunity to justify their ranking or change their ranking based upon the mean ranking and qualitative commentary from other participating experts. Subsequent rounds follow in the same manner. Study participants remain anonymous, thus allowing each participant to freely respond without the influences inherent in face-to-face group interactions.

In education, the Delphi method has been used in some of the following ways: to establish competencies and practices of practitioners, to develop curriculum, to forecast changes in postsecondary education, to identify essential functions of disability service professionals, to identify essential service components for LD services at postsecondary institutions, and to identify the AHEAD Program Standards and Performance Indicators (Anderson, 1998; Dukes, 2006; Friend, 2000; Shaw, et al., 1997). In the current study, expert panelists ranked office or program practices for possible inclusion in a disability services assessment tool across 3 survey rounds. Following Delphi protocol, during rounds 2 and 3 panelists had the opportunity to reconsider their rankings for items that did not reach consensus during the previous round. The development of the questionnaire will be described next.

Questionnaire Development

Items included in the *iEvaluate* OSD survey instrument were crafted following an extensive review of literature on service provision for college students

with disabilities. Relevant research such as the original AHEAD Program Standards (Shaw & Dukes, 2001), Anderson’s study (1998) of essential LD service components, and the Madaus (1996) study that identified OSD Professional Standards provided guidance. Two publications, the AHEAD Program Standards and Performance Indicators (Shaw & Dukes, 2006) and the Council for the Advancement of Standards in Higher Education (CAS) professional standards for disability support services (Dean, 2006) were particularly influential during the instrument development process. This process resulted in a set of 10 guidelines and 162 exemplars. Exemplars are tasks that represent the respective guideline in practice.

A modified Delphi procedure was used to solicit the expert opinion of study panelists across three rounds. The modified Delphi is a slightly different method than the full or traditional Delphi technique.

The major modification consists of beginning the process with a set of carefully selected items...The primary advantages of this modification to the Delphi is that it (a) typically improves the initial round response rate, and (b) provides a solid grounding in previously developed work (Custer, Scarcella, & Stewart, 1999, para. 6).

During round 1 of the current study, panelists rated pre-selected items and provided qualitative written feedback regarding those items. During rounds 2 and 3, respondents re-rated items that had not reached consensus during the previous round and also re-rated those items that had been reworded or moved to another category as a function of written panel feedback. In addition, respondents rated any new items recommended by respondents during the previous round. Qualitative written feedback was solicited during all survey rounds. Expert panelists were encouraged to provide feedback regarding the following: the wording of guidelines and exemplars, whether there were any missing guidelines or exemplars, the goodness-of-fit of an item with its category, and the elimination of any items that were repetitive.

Questionnaire Validation

The questionnaire development process met survey design specifications (Gable & Wolf, 1993). Demographic information regarding experts was collected to ensure each met criteria for participation. Information

regarding the respondent, her or his respective institution, and the characteristics of the program or office was solicited. Experts chosen to serve as panelists represented a cross-section of institutions in higher education (e.g., two- and four-year institutions, public and private, etc.). The participants selected for the study were chosen as a result of their demonstrated expertise as disability service professionals. Both the CAS professional standards and the AHEAD Program Standards and Performance Indicators were used, along with other relevant literature, to produce the round 1 iEvaluate OSD survey instrument. The initial survey was reviewed by both the author and another disability services expert with more than 30 years experience prior to being finalized. Round 1 of the survey provided further opportunity to address content validation. That is, as a part of the round 1 process, expert panelists were asked to comment on item clarity, relevance, and potential repetition. In addition, they made suggestions regarding any missing items and also had the opportunity to comment on the goodness-of-fit of each item with its respective domain. As a function of round 1 feedback regarding content, 18 items were added, 33 items were re-worded, and raters suggested moving three items prior to round 2. Panelists had the opportunity to again employ content validation processes during the completion of round 2. Prior to round 3, the expert panel added 10 items, and reworded 25 items.

Panel Selection

Linstone and Turoff (1975) indicate that panel participants in a Delphi study must have both a thorough knowledge of and experience with the topic being examined. In fact, the validity and reliability of the results depend to a great degree upon the panelists who agree to participate (Anderson, 1998). Criteria for participation in the current study were as follows: (1) at least 5 years of recent experience in postsecondary disability services, (2) a reputation established through presentations related to disability services, or (3) experience providing training and / or consultation related to services for college students with disabilities. Panelist selection was also impacted by the desire to select experts who reasonably represent the diverse array of postsecondary institutions in the United States. Panel participants represented both public and private schools, both two- and four-year institutions, multiple levels of competitiveness with regard to institutional entry criteria, and small, medium, and large

institutions (based upon student population).

For studies whose goal is to meet informational objectives, a small panel size is suitable (Friend, 2000). In addition, group homogeneity is important if a small panel is used. The current study participants all held a Master's degree or higher in a health, rehabilitation, or education field. Furthermore, all held (and in one case had held) an institutional position as an OSD coordinator, director, associate director, or Dean. Dalkey (as cited in Linstone, 1978) indicated 7 as a minimum panel size for Delphi research. Potential study participants were selected from an expert list generated by the researcher and another disability services authority with more than 30 years experience. Of the 13 postsecondary disability service experts solicited, 9 agreed to participate in the current study. At the time of the study, all participants were also members of AHEAD, the professional organization that represents disability service providers. Respondents were informed that results would only be analyzed and reported at the group level, thus ensuring anonymity. Approximately two weeks following the mailing of each round of the survey, an electronic mail was sent to any non-respondent. Seventy eight percent of the respondents participated across the 3 rounds of the survey. Response rates by round are provided in the upcoming "results" section.

Results

The research question that guided the development of the iEvaluate OSD assessment tool was: "What service components do postsecondary disability service experts perceive as essential for inclusion in an office or program evaluation instrument?" Service components included in the completed assessment instrument met the following criteria: (a) A mean of 4.0 or greater on a 5.0 Likert rating scale, and (b) 66.66% of the expert panel rated the component in either the same or an immediately adjacent category (e.g., a rating of "5" or a rating of "4," that is immediately adjacent to "5" on the rating scale). Studies that employ the modified Delphi method commonly use similar rating criteria. Ten out of 10 Guidelines and 155 out of 190 (including the 28 items that were added by participants during following rounds 1 and 2) Exemplars representing nine categories (or domains) met the rating criteria described above and were included in the final version of the iEvaluate OSD assessment instrument. It should

also be noted that it was possible for an item to reach consensus for exclusion from future iterations of the survey. In fact, some items were deleted from the survey in this manner. In total, 17 items were eliminated from consideration for the final instrument as a function of consensus for exclusion. The Appendix reflects all items that were rated essential and, thus, included in the assessment instrument.

Round One

During round 1, respondents completed two sections of the *iEvaluate OSD* survey. The first section requested demographic information from respondents, which served as a second check that each met criteria for inclusion as an expert panelist. Part 2 of the survey included the guidelines and exemplars to be rated. Each respondent was asked to rate the importance of each guideline and exemplar for potential inclusion in a tool for office / program evaluation purposes. A 5-point Likert scale was used to rate each item from 1 – Not Important to 5 – Essential. Respondents also provided written feedback that shaped the second and third iterations of the questionnaire. Participant ratings and qualitative feedback led to the removal, by consensus, of 7 items and the addition of 18 new items for the Round 2 survey. The expert panel identified 9 guidelines and 107 exemplars as essential for inclusion in the *iEvaluate OSD* instrument during round 1. Seven of nine participants (78%) participated in round 1 of the survey.

Round Two

The round 2 survey identified those guidelines and exemplars that had reached consensus in round 1 and asked respondents to re-rate items that had not reached consensus as well as those items that had been reworded, moved, or added. To facilitate the reconsideration of items that had not reached consensus, the round 2 survey included mean ratings for each item to be re-rated and also any written comments that had been made by participants about the respective item. Those items that had been re-worded, as a function of round 1 expert feedback, had their new language noted in bold, italicized print, so as to easily distinguish the changes in the item. The item was also noted as *item re-worded due to panelists' recommendation*. During the re-rating process panelists were asked to consider both the mean rating and the panel comments regarding the item when providing a round 2 rating. If an

expert chose to rate an item differently than the mean rating, then he or she was asked to justify the reason for doing so. The purpose of requesting a justification for disagreeing with the mean rating (i.e., consensus rating) was to encourage panelists to gravitate toward consensus. In this round, no additional guidelines were rated essential, however, 43 additional exemplars were rated essential. Four items were excluded by consensus. Ten new items were added to the survey for inclusion in round 3. Six of nine participants (67%) responded to round 2 of the survey.

Round Three

The round 3 survey format was identical to that used during round 2. Again, guidelines and exemplars that had not reached consensus were re-rated in light of their mean ratings and the remarks made by participants about respective items. Items that had been re-worded included the new language in bold, italicized print so that the new terms were easily distinguished. As in round 2, it was also noted that the item had been re-worded. Those items that had reached consensus during rounds 1 and 2 were noted as such. In the survey instructions for this round, expert panelists were oriented to the study goal of consensus, and asked to justify their item rating if that rating was not consistent with the panel mean. During round 3, one additional guideline and five more exemplars were rated as essential. Six items were excluded by consensus while five items on the survey never reached consensus for inclusion or exclusion and were, therefore, not included in the final version of the assessment tool (see Appendix for guidelines and exemplars rated essential by the expert panel). Eight of nine (89%) participants responded to round 3 of the survey.

Discussion

What is a Guideline? What is an Exemplar?

The intent of the *iEvaluate OSD* evaluation tool is to provide OSD professionals with a practical means of assessing office or program performance. OSD professionals typically report that while they understand and value the need to evaluate their programming, they are often too overwhelmed with the daily needs of individual students to find the time to engage in program evaluation (Goodin et al., 2004). One of the primary functions of *iEvaluate OSD* is to streamline the process of program evaluation, thus making this

vital task a manageable and consistent component of the OSD professional's office practice.

The iEvaluate OSD assessment tool includes Guidelines and Exemplars across 9 domains. The domains are as follows: *Campus / Community Collaboration, Information Dissemination, Office Administration, Office Policies and Procedures, Office Evaluation, Self Determination, Universal Design, Educational Access, and Educational Preparation and Professional Development*. Included in each domain are both guidelines and exemplars. A Guideline is a general statement that articulates a practice in which any OSD should be engaged. Exemplars spell out the means by which an OSD implements each guideline. Exemplars are examples of each guideline *in practice*. As a component of the tool, a rating scale follows each exemplar. It must be pointed out that these exemplars will not be relevant for every OSD. Those that are not relevant may simply be marked by the instrument user with the rating "NA" for *Not Applicable*.

What Do I Do With the iEvaluate OSD Evaluation Tool?

As Parker et al. (2003) stated in their article, "Program Evaluation for Postsecondary Disability Services," OSD professionals should begin by clarifying the purposes of the evaluation. Service providers are encouraged to consider whether there are any immediate issues that require attention or whether there are aspects of the program that are not fully understood (Parker et al., 2003). Once the evaluation purpose has been identified, the OSD professional is in a position to pinpoint the specific iEvaluate OSD domains that apply to the specified evaluation purpose. Given the potential time and personnel commitment necessary to conduct a thorough office evaluation, it may be sensible to break the evaluation up into segments that are completed across an entire year. Given that a detailed account of the necessary steps to conduct a full office evaluation is beyond the scope of this manuscript, readers are strongly encouraged to see the aforementioned article by Parker et al. (2003), and the AHEAD publication, *Program Evaluation of Postsecondary Disability Services: From Theory to Practice* (Goodin et al., 2004). These two resources both provide a detailed account regarding how to make a tool such as iEvaluate OSD a part of the larger process of comprehensive office evaluation. Instructions for use of the iEvaluate OSD assessment instrument are provided as part of the Appendix.

Limitations

The study outcomes must be considered in light of the methodological concerns associated with the Delphi research method. Given that the expert panel determines the product of the study, it is imperative that it includes a set of well-qualified experts. In the present study, expert panelists all met specific criteria for participation that included a national reputation for presentations, training and / or consultation in disability services. Demographic data provided by participants indicated that the vast majority of the expert panel had between 10 and 14 years of experience. In addition, the author attempted to ensure that the panel represented a diversity of institutions (e.g., public / private, large / small, competitive / non-competitive).

Consideration must be given to the fluctuation in response rate across each round of the study. The significant time commitment and motivation required to fully participate in a Delphi study has the potential to impact expert involvement across all rounds of the process (Anderson, 1998). The multiple rounds of the current study took approximately nine months to complete. Additionally, completion of each round reportedly took anywhere from 30 to 90 minutes. Thus, fluctuation in sample size is not uncommon in studies that employ the Delphi method. Average response rate for all rounds of the survey was 78% indicating that in spite of the time and thought necessary to participate the vast majority of the panel took the obligation seriously.

Clarity and comprehensiveness are also possible limitations of the Delphi method. One objective of the Delphi process is to allow respondents to question item language and also suggest changes. Based on panelist remarks, 58 items had language changed and 28 items were added to the survey for subsequent rounds. The multiple-round procedure used in a Delphi study should assist in minimizing language ambiguity as a function of the opportunity to clarify meaning and suggest different terminology. Comprehensiveness can also be considered a potential limitation. It is reasonable to assume that there are services provided by some offices that are not reflected in the iEvaluate OSD survey instrument. All efforts were made (e.g., extensive literature review, examination of current OSD standards and indicators) to ensure the questionnaire spanned the universe of content.

Conclusion

It is worth pointing out that the *iEvaluate* OSD Guidelines and Exemplars are fundamentally different than the AHEAD Program Standards and Performance Indicators. The Standards and Indicators "... represent service components that are fundamental for ensuring equal educational access for postsecondary students with disabilities" (Shaw & Dukes, 2006, p. 25). The Guidelines and Exemplars, on the other hand, are service components that the expert panel thought were essential for inclusion in a tool for office / program evaluation. The study charge *did not* include a need to identify "... minimum supports that must be available to provide equal access..." (Shaw & Dukes, 2006, p. 16) Yet, there is significant overlap between the two documents. One of the stated purposes of the AHEAD Program Standards and Indicators was to help disability service professionals evaluate the effectiveness of their programs and services, while this is the explicit purpose of *iEvaluate* OSD. To that end, the *iEvaluate* OSD instrument includes instructions for use and is provided in a format that facilitates its use as an evaluation tool.

It should also be pointed out that this is but one aspect of a comprehensive office or program review. Program or office review could include other elements such as assessment of student satisfaction; surveying recent graduates, faculty and other student service program impressions of the OSD; and even the survey of students without disabilities. Program evaluation is often a popular topic at professional conferences for disability service professionals. Both the annual AHEAD conference and the annual Postsecondary Disability Training Institute, sponsored by the Center on Postsecondary Education and Disability at the University of Connecticut, are popular venues for these useful sessions. OSD personnel considering program or office evaluation are strongly encouraged to take advantage of these valuable professional development opportunities.

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Appendix

The *iEvaluate* OSD Assessment Instrument Instructions

A. Explanation of the *iEvaluate* OSD Assessment Instrument

The purpose of the *iEvaluate* OSD assessment tool is to provide disability service professionals with an instrument for self-evaluation of the office for students with disabilities (OSD). Users of the survey instrument can determine areas of strength and weakness in order to effectively plan for program or office improvement.

This section of the tool describes the organization of *iEvaluate* OSD and provides directions for use of the survey instrument. It is comprised of the following two parts: A. Explanation of the *iEvaluate* OSD assessment instrument, and B. How to use the *iEvaluate* OSD assessment instrument. Following this section is the *iEvaluate* OSD assessment instrument, which comprises the items to be rated by the disability services professional.

The survey instrument is made up of nine domains. Included in each domain are both Guidelines and Exemplars. A Guideline is a general statement that articulates a practice in which any OSD should be engaged. Exemplars spell out the means by which an OSD implements each Guideline. Exemplars are examples of each Guideline in practice. It is important to bear in mind that not all Exemplars will apply to every institution. If the evaluation team determines that an Exemplar does not apply to their particular program, then it is appropriate to respond “NA” for “Not Applicable” to the respective survey item. A rating scale and text box follows each Exemplar. Users rate performance with regard to how well the office is meeting that particular responsibility. The text box is used to document evidence of the assigned item rating. In addition, under each Guideline is a text box that is labeled “Additional Exemplars to be measured.” This is where raters may add any additional Exemplars to be rated that are not reflected in the *iEvaluate* OSD instrument. The nine domains that make up the instrument are as follows:

- I. Campus and Community Collaboration
- II. Information Dissemination
- III. Office Administration
- IV. Office Policies and Procedures
- V. Office Evaluation
- VI. Self Determination
- VII. Universal Design
- VIII. Educational Access
- IX. Educational Preparation and Professional Development

B. How To Use the *iEvaluate* OSD Assessment Instrument

- Identify any critical questions you may have regarding program / office operations.
 - Identify the Guidelines / Exemplars that apply to the critical questions. For example, are there any immediate issues that require attention or aspects of the program that are not fully understood?
- Determine how much time you have to complete an evaluation.
 - Determine which Guidelines / Exemplars you will examine in light of the time available. If you have ample time, you may wish to conduct an evaluation of all 9 *iEvaluate* OSD domains or you may decide to focus only on those about which you have critical questions.
 - Develop a timeline for Guideline / Exemplar assessment.
- Determine who will participate in the assessment process.
 - Identify the rating team. You may wish to include only OSD personnel or you may wish to include people from outside your office or you may even decide that an evaluator outside of your institution may be best.
 - Identify any helpful campus resources (i.e., persons or offices who may be positioned to provide evalua-

tion assistance). For example, there may be graduate students on campus who are interested in assisting with the process of completing the iEvaluate OSD survey and examining the survey outcomes.

- Train the rating team
 - Ensure all participants understand the team charge (e.g., critical questions to be addressed).
 - Ensure all participants understand the meaning of the items to be rated.
- Complete the evaluation.
 - Rate each Exemplar and include evidence for the item rating.
 - Further examine or discuss items with a rating discrepancy or items with a low score among all raters.
- Use the data to develop a plan of action / report.
 - Identify office / program strengths and weaknesses.
 - Identify possible office / program action items (i.e., changes).
 - Identify due dates / persons responsible for action items.
 - Identify any staff development needs and identify potential professional development resources.
 - Revisit progress on action items quarterly.
- Distribute report to relevant campus constituents.
 - Highlight the office / program strengths.
 - Highlight the plan for improvement.
 - Highlight any resources necessary to meet the plan for improvement.
 - Highlight those areas in the report that may be important to each respective constituency who receives the report.

iEvaluate OSD Guidelines and Exemplars Evaluation Tool**Campus / Community Collaboration**

- 1.1 The Office maintains relationships with institutional personnel in order to ensure equal access to the institutional community for persons with disabilities.
- The office maintains an effective working relationship with the institution's legal counsel.
1 2 3 4 NA
Evidence of fulfillment:
 - The office maintains an effective working relationship with the institution's ADA compliance officer.
1 2 3 4 NA
Evidence of fulfillment:
 - The office maintains an effective working relationship with the institution's registrar.
1 2 3 4 NA
Evidence of fulfillment:
 - The office maintains an effective working relationship with the institution's administrators (e.g., President, Provost, Deans).
1 2 3 4 NA
Evidence of fulfillment:
 - The office maintains an effective working relationship with college administrative personnel (e.g., office staff).
1 2 3 4 NA
Evidence of fulfillment:
 - The office maintains an effective working relationship with the institution's faculty.
1 2 3 4 NA
Evidence of fulfillment:
 - The office maintains an effective working relationship with the institution's admissions office personnel.
1 2 3 4 NA
Evidence of fulfillment:
 - The office maintains an effective working relationship with the institution's counseling and mental health services personnel.
1 2 3 4 NA
Evidence of fulfillment:

- The office maintains an effective working relationship with the institution's student health services personnel.

1 2 3 4 NA

Evidence of fulfillment:

- The office maintains an effective working relationship with the institution's student academic assistance program personnel.

1 2 3 4 NA

Evidence of fulfillment:

- The office maintains an effective working relationship with the institution's career services personnel.

1 2 3 4 NA

Evidence of fulfillment:

- The office maintains an effective working relationship with the institution's IT services personnel.

1 2 3 4 NA

Evidence of fulfillment:

- The office maintains an effective working relationship with the institution's parking and transportation services personnel.

1 2 3 4 NA

Evidence of fulfillment:

- The office maintains an effective working relationship with the institution's facilities personnel (i.e., for purposes of physical access).

1 2 3 4 NA

Evidence of fulfillment:

- The office maintains an effective working relationship with the institution's library personnel.

1 2 3 4 NA

Evidence of fulfillment:

- The office maintains an effective working relationship with relevant community agencies (e.g., vocational rehabilitation, medical professionals, psychologists, social service organizations, secondary schools).

1 2 3 4 NA

Evidence of fulfillment:

- The office maintains an effective working relationship with academic advising personnel.

1 2 3 4 NA

Evidence of fulfillment:

- The office maintains an effective working relationship with residential life program personnel.

1 2 3 4 NA

Evidence of fulfillment:

- The office maintains an effective working relationship with the diversity affairs personnel

1 2 3 4 NA

Evidence of fulfillment:

- The office maintains an effective working relationship with health and fitness service personnel

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

1.2 The Office promotes a collaborative approach among institutional personnel in order to implement its policies and procedures.

- The office collaborates with campus administrators (e.g., President, Provost, Deans) regarding disability issues that impact institutional policies and procedures.

1 2 3 4 NA

Evidence of fulfillment:

- The office collaborates with institutional faculty and college administrators (e.g., Deans) especially as it relates to the provision of reasonable and appropriate course accommodations and/or services.

1 2 3 4 NA

Evidence of fulfillment:

- The office consults with academic departments and/or faculty regarding effective instructional and assessment techniques for students with disabilities (e.g., universal design approaches).

1 2 3 4 NA

Evidence of fulfillment:

- The office collaborates with facilities personnel regarding physical access (e.g., OSD ensures new campus construction accessibility).

1 2 3 4 NA

Evidence of fulfillment:

- The office collaborates with all appropriate institutional administrators and/or staff (e.g., academic affairs) regarding policy for course substitutions.

1 2 3 4 NA

Evidence of fulfillment:

- The office collaborates with IT services personnel (e.g., IT provides technical assistance with disability specific software, campus website access for students with disabilities, distributed access to campus technology labs, OSD participation in new technology purchases).

1 2 3 4 NA

Evidence of fulfillment:

- The office collaborates with the office(s) related to student discipline.

1 2 3 4 NA

Evidence of fulfillment:

- The office collaborates with the office(s) related to student activities.

1 2 3 4 NA

Evidence of fulfillment:

- The office maintains representation on an institutional committee on diversity.

1 2 3 4 NA

Evidence of fulfillment:

- The office participates in an institution-wide disability advisory committee on which students, faculty, campus administrators, campus staff, and community members may hold positions.

1 2 3 4 NA

Evidence of fulfillment:

- The office collaborates with the office(s) that oversee e-learning services.

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Information Dissemination

- 2.1 The Office disseminates information regarding disability relevant matters through all existing institutional media.

- The office ensures all its policies and procedures are current, clearly delineated, and provided through all relevant institutional media (e.g., catalogs, programmatic publications, student and faculty handbooks, electronic media).

1 2 3 4 NA

Evidence of fulfillment:

- The office makes available, to all members of the institutional community (e.g., students, faculty, staff, administration), its policies and procedures.

1 2 3 4 NA

Evidence of fulfillment:

- The office makes available, through appropriate institutional media, its location hours of operation, contact points, and availability of services, equipment, and technology relevant to students with disabilities.

1 2 3 4 NA

Evidence of fulfillment:

- The office makes available, to all members of the institutional community, policies and procedures regarding referral of students suspected of having a disability.

1 2 3 4 NA

Evidence of fulfillment:

- The office makes available, to all members of the institutional community, policies and procedures regarding appropriate documentation of a disability.

1 2 3 4 NA

Evidence of fulfillment:

- The office makes available, to all members of the institutional community, policies and procedures regarding how to access reasonable and appropriate accommodations, services, equipment, and technology.

1 2 3 4 NA

Evidence of fulfillment:

- The office makes available, to all members of the institutional community, information regarding the rights of students with disabilities.

1 2 3 4 NA

Evidence of fulfillment:

- The office ensures that electronic media provided through the OSD website meet appropriate accessibility standards.

1 2 3 4 NA

Evidence of fulfillment:

- The office makes available information and provides referral services to students with disabilities regarding institutional and community disability resources.

1 2 3 4 NA

Evidence of fulfillment:

- The office makes available, to all members of the institutional community, information regarding grievance and complaint procedures.

1 2 3 4 NA

Evidence of fulfillment:

- The office ensures all relevant institutional publications (e.g., recruitment materials, OSD website) include a statement regarding self-disclosure for students with disabilities.

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Office Administration

- 3.1 The office adheres to established institutional administrative procedures.

Mission

- The office develops, disseminates, and implements a mission statement.

1 2 3 4 NA

Evidence of fulfillment:

- The office mission is consistent with the mission of the institution.

1 2 3 4 NA

Evidence of fulfillment:

- The office maintains, as a component of its mission, a set of annual goals and objectives.

1 2 3 4 NA

Evidence of fulfillment:

- The office serves as a source for training regarding services for students with disabilities (e.g. intern training, faculty research).

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Staff Selection

- The office is lead by at least one full-time professional.

1 2 3 4 NA

Evidence of fulfillment:

- The office hiring practices are non-discriminatory.

1 2 3 4 NA

Evidence of fulfillment:

- The office has a process for identifying potential interns, volunteers, and/or student employees (e.g., exam readers, scribes, readers for books to CD, note takers).

1 2 3 4 NA

Evidence of fulfillment:

- The office has a process for the identifying and maintaining part-time OSD staff (e.g., sign language interpreters, real-time captionists).

1 2 3 4 NA

Evidence of fulfillment:

- The office ensures its hiring practices promote application by qualified persons with disabilities

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Fiscal Management

- The office has sufficient funding to meet its mission and goals.

1 2 3 4 NA

Evidence of fulfillment:

- The office administration effectively manages its fiscal resources.

1 2 3 4 NA

Evidence of fulfillment:

- The office administration develops and implements a program budget.

1 2 3 4 NA

Evidence of fulfillment:

- The office lobbies for additional fiscal resources as the need arises.

1 2 3 4 NA

Evidence of fulfillment:

- The office has the fiscal resources to hire necessary personnel (e.g., administrative assistant, student employees, interpreters, note takers).

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Ethics

- The office administrator consistently promotes and exhibits ethical behavior.

1 2 3 4 NA

Evidence of fulfillment:

- All office personnel consistently exhibit ethical behavior.

1 2 3 4 NA

Evidence of fulfillment:

- The office adheres to a relevant code of ethical principles.

1 2 3 4 NA

Evidence of fulfillment:

- The office periodically reviews the code of ethical principles.

1 2 3 4 NA

Evidence of fulfillment:

- The office adheres to a set of established OSD Guidelines or Standards.

1 2 3 4 NA

Evidence of fulfillment:

- The office provides periodic staff development training to all office personnel in the practice of ethical behavior.

1 2 3 4 NA

Evidence of fulfillment:

- The office understands and practices ethical behavior in the use of technology.

1 2 3 4 NA

Evidence of fulfillment:

- The office administrator periodically evaluates and provides feedback on the ethical practice of office personnel (e.g., AHEAD ethics code).

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Leadership

- The office administrators' vision, in collaboration with appropriate office staff, is evident in the written office mission.

1 2 3 4 NA

Evidence of fulfillment:

- The office administrator, along with appropriate office staff, and in consultation with appropriate institutional officials, sets OSD goals and objectives.

1 2 3 4 NA

Evidence of fulfillment:

- The office administrator develops and maintains written job descriptions and performance expectations for staff.

1 2 3 4 NA

Evidence of fulfillment:

- The office administrator participates in broader institutional activities that promote attainment of the office mission.

1 2 3 4 NA

Evidence of fulfillment:

- The office administrator is regarded as an institutional expert on access for individuals with disabilities.

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Office Policies and Procedures

- 4.1 The office, on a regularly scheduled basis, develops, reviews, and/or revises a clear set of policies and procedures regarding service provision for students with disabilities.

Accommodations / Services

- The office, on a regularly scheduled basis, develops, reviews, and/or revises the documentation guidelines that define who may receive reasonable and appropriate accommodations and/or services.

1 2 3 4 NA

Evidence of fulfillment:

- The office, on a regularly scheduled basis, develops, reviews, and/or revises policies and/or procedures that define the disability documentation review process.

1 2 3 4 NA

Evidence of fulfillment:

- The office, on a regularly scheduled basis, develops, reviews, and/or revises policies and/or procedures that define the steps for acquiring reasonable and appropriate accommodations and/or services.

1 2 3 4 NA

Evidence of fulfillment:

- The office, on a regularly scheduled basis, develops, reviews, and/or revises policies and/or procedures that define the process for receiving provisional services.

1 2 3 4 NA

Evidence of fulfillment:

- The office, on a regularly scheduled basis, collaborates with relevant institutional personnel to develop, review, and/or revise policies and/or procedures for resolving disagreements with respect to reasonable and appropriate accommodations and/or services.

1 2 3 4 NA

Evidence of fulfillment:

- The office, on a regularly scheduled basis, collaborates with relevant institutional personnel to develop, review, and/or revise policies and/or procedures for the drop off and pick up of exams taken in alternate testing sites.

1 2 3 4 NA

Evidence of fulfillment:

- The office develops, reviews, and/or revises policies and/or procedures for the loan of equipment to students with disabilities (e.g., laptop computer, wireless microphone).

1 2 3 4 NA

Evidence of fulfillment:

- The office, on a regularly scheduled basis, develops, reviews, and/or revises policies and/or procedures that define the process for the review of documentation for prospective students.

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Institutional Responsibilities

- The office develops, reviews, and/or revises policies and/or procedures that define institutional responsibilities regarding the provision of reasonable and appropriate accommodations and/or services.

1 2 3 4 NA

Evidence of fulfillment:

- The office collaborates with relevant academic programs to develop, review, and/or revise policies and/or procedures for requesting and obtaining program modifications (e.g., course substitution).

1 2 3 4 NA

Evidence of fulfillment:

- The office develops, reviews, and/or revises policies and/or procedures for obtaining services (e.g., interpreter services, scribe, note taker, lab assistant).

1 2 3 4 NA

Evidence of fulfillment:

- The office collaborates with relevant institutional entities to develop, review, and/or revise policies and/or procedures for requesting and obtaining priority registration.

1 2 3 4 NA

Evidence of fulfillment:

- The office collaborates with relevant institutional personnel to develop, review, and/or revise policies and/or procedures that spell out faculty responsibilities with respect to students with disabilities.

1 2 3 4 NA

Evidence of fulfillment:

- The office collaborates with IT personnel to develop, review, and/or revise policies and/or procedures with respect to technology and equipment for students with disabilities.

1 2 3 4 NA

Evidence of fulfillment:

- The office, in collaboration with institutional legal counsel, develops, reviews, and/or revises policies and procedures that ensure the privacy, based upon applicable law, of all communications and educational records related to students served through the office.

1 2 3 4 NA

Evidence of fulfillment:

- The office develops, reviews, and/or revises policies and/or procedures that define the process by which students with disabilities will be informed of their right to privacy and the circumstances under which their documentation may be accessed by others within the institutional community.

1 2 3 4 NA

Evidence of fulfillment:

- The office defines and follows a consistent and reasonable timeline for the review and revision of all office policies and procedures.

1 2 3 4 NA

Evidence of fulfillment:

- The office ensures all policies and procedures are readily accessible to the institutional community.

1 2 3 4 NA

Evidence of fulfillment:

- The office develops, reviews, and/or revises policies and/or procedures for the selection, training, and evaluation of office personnel.

1 2 3 4 NA

Evidence of fulfillment:

- The office develops, reviews, and/or revises policies and/or procedures, as necessary, in collaboration with institutional legal counsel.

1 2 3 4 NA

Evidence of fulfillment:

- The office develops, reviews, and/or revises policies and/or procedures for student disclosure of disability status.

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Student Responsibilities

- The office develops, reviews, and/or revises policies and/or procedures that define student responsibilities with regard to disability documentation (e.g., recency, contents).

1 2 3 4 NA

Evidence of fulfillment:

- The office develops, reviews, and/or revises policies and/or procedures that define student responsibilities for requesting and obtaining reasonable and appropriate accommodations and/or services (e.g., auxiliary aids).

1 2 3 4 NA

Evidence of fulfillment:

- The office, in collaboration with appropriate academic administrators, develops, reviews, and/or revises policies and/or procedures that define student responsibilities for requesting and obtaining program modifications (e.g., course substitution, waiver).

1 2 3 4 NA

Evidence of fulfillment:

- The office develops, reviews, and/or revises policies and/or procedures with respect to notification of appropriate office staff (e.g., interpreter, note taker) when a student will not attend a class.

1 2 3 4 NA

Evidence of fulfillment:

- The office holds students with disabilities to the same standards as all other students in the receipt and delivery of reasonable and appropriate accommodations and services (e.g., honor code, student misconduct).

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Privacy

- The office, in collaboration with institutional legal counsel, develops, reviews, and/or revises policies and/or procedures regarding access to educational records by other institutional entities.

1 2 3 4 NA

Evidence of fulfillment:

- The office develops, reviews, and/or revises policies and/or procedures for obtaining written consent to share student educational records with appropriate institutional personnel.

1 2 3 4 NA

Evidence of fulfillment:

- The office, in collaboration with appropriate institutional personnel, develops, reviews, and/or revises policies and/or procedures that identify when access to student educational records is necessary under emergency circumstances.

1 2 3 4 NA

Evidence of fulfillment:

- The office makes available the documentation regarding rights and responsibilities of students with disabilities regarding privacy and access to records pertaining to disability.

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Office Evaluation

- 5.1 The office periodically assesses its performance with regard to its office mission as well as its goals and objectives.

- The office evaluates itself against an established set of OSD Guidelines or Standards.

1 2 3 4 NA

Evidence of fulfillment:

- The office regularly conducts a systematic evaluation of its programs and services.

1 2 3 4 NA

Evidence of fulfillment:

- The office collects both quantitative and qualitative data in order to assess its effectiveness.

1 2 3 4 NA

Evidence of fulfillment:

- The office evaluates the degree to which it is meeting its both its mission and goals and objectives.

1 2 3 4 NA

Evidence of fulfillment:

- The office collects student feedback data as part of its evaluation.

1 2 3 4 NA

Evidence of fulfillment:

- The office uses valid and reliable measures in the evaluation process.

1 2 3 4 NA

Evidence of fulfillment:

- The office collects data from all relevant institutional community members as part of its evaluation (e.g., institutional staff and faculty).

1 2 3 4 NA

Evidence of fulfillment:

- The office uses the evaluation data to modify and improve future programming and services for students with disabilities.

1 2 3 4 NA

Evidence of fulfillment:

- The office collects data on institutional physical access.

1 2 3 4 NA

Evidence of fulfillment:

- The office collects data on trends in the use of programming and services.

1 2 3 4 NA

Evidence of fulfillment:

- The office collects data on attrition and graduation rates for registered students with disabilities.

1 2 3 4 NA

Evidence of fulfillment:

- The office collects evaluation data that demonstrates its impact upon student learning and development (e.g., academic growth, student institutional involvement).

1 2 3 4 NA

Evidence of fulfillment:

- The office uses evaluation data to request funding and to meet any office growth demands.

1 2 3 4 NA

Evidence of fulfillment:

- The office prepares a comprehensive report of its evaluation findings.

1 2 3 4 NA

Evidence of fulfillment:

- The office submits the comprehensive report of findings to appropriate administrative personnel.

1 2 3 4 NA

Evidence of fulfillment:

- The office conducts a regular evaluation of office staff performance.

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Self-Determination

- 6.1 The office articulates and implements a service delivery model that promotes the development and practice of student self-determination.

- The office mission clearly articulates the development and practice of self-determined behavior on the part of students served through the office.

1 2 3 4 NA

Evidence of fulfillment:

- The office policies and procedures support the development and practice of self-determined behavior on the part of students served through the office.

1 2 3 4 NA

Evidence of fulfillment:

- The office encourages the development of strategies that promote success in higher education.

1 2 3 4 NA

Evidence of fulfillment:

- The office facilitates the inclusion of students with disabilities in all aspects of campus life.

1 2 3 4 NA

Evidence of fulfillment:

- The office provides training to the institutional community regarding the development and promotion of self-determined behavior in students with disabilities.

1 2 3 4 NA

Evidence of fulfillment:

- The office encourages collaborative interaction between itself and the entire institutional community for the purpose of advocating for interests relevant to students with disabilities.

1 2 3 4 NA

Evidence of fulfillment:

- The office encourages students to access the OSD website when gathering information.

1 2 3 4 NA

Evidence of fulfillment:

- The office website provides clear direction to students who are looking for relevant institutional and community resources.

1 2 3 4 NA

Evidence of fulfillment:

- The office staff employs practices that are aligned with self-determination competencies.

1 2 3 4 NA

Evidence of fulfillment:

- The office promotes and encourages student choice, when and where appropriate.

1 2 3 4 NA

Evidence of fulfillment:

- The office provides clear direction to students regarding the protocol for accessing services.

1 2 3 4 NA

Evidence of fulfillment:

- The office ensures students are held accountable for following relevant OSD policies and procedures.

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Universal Design

- 7.1 The office promotes and practices a comprehensive set of universal design approaches (e.g., instruction, communication, facilities access).

- The office promotes the use of universal design practices in instructional environments.

1 2 3 4 NA

Evidence of fulfillment:

- The office promotes the use of universal design practices in all communication practices.

1 2 3 4 NA

Evidence of fulfillment:

- The office promotes the use of universal design practices in all campus facilities.

1 2 3 4 NA

Evidence of fulfillment:

- The office policies and procedures reflect the principles of universal design.

1 2 3 4 NA

Evidence of fulfillment:

- The office trains its staff to practice the principles of universal design.

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Educational Access

- 8.1 The office determines with students and in collaboration with faculty reasonable and appropriate accommodations and services.

Accommodations / Services

- The office ensures the provision of reasonable and appropriate accommodations for the purpose of providing equal educational access to students with disabilities.

1 2 3 4 NA

Evidence of fulfillment:

- The office reviews, with students, disability documentation (e.g., diagnostic evaluation, summary of performance) for the purpose of determining reasonable and appropriate accommodations and/or services.

1 2 3 4 NA

Evidence of fulfillment:

- The office determines, with students, the effectiveness of the reasonable and appropriate accommodations and services currently in use.

1 2 3 4 NA

Evidence of fulfillment:

- The office cultivates the student’s ability to articulate, based upon strengths and needs, necessary reasonable and appropriate accommodations and/or services.

1 2 3 4 NA

Evidence of fulfillment:

- The office uses a procedure for determining reasonable and appropriate accommodations and services that includes consideration of the environment, task, and unique needs of the student.

1 2 3 4 NA

Evidence of fulfillment:

- The office will consider providing time-limited, provisional disability support services to students who are pending receipt of a diagnostic evaluation.

1 2 3 4 NA

Evidence of fulfillment:

- The office will, as necessary, collaborate with faculty to determine reasonable and appropriate accommodations and services so as not to modify the technical standards of a student’s chosen academic program or course.

1 2 3 4 NA

Evidence of fulfillment:

- The office maintains documentation of the recommendations made regarding reasonable and appropriate accommodations and services.

1 2 3 4 NA

Evidence of fulfillment:

- The office, when possible, requests student information regarding accommodation and service needs in advance of the beginning of the term.

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Assistive Technology / Adaptive Equipment

- The office collaborates with the appropriate institutional constituencies to identify and purchase necessary assistive technology and adaptive equipment.

1 2 3 4 NA

Evidence of fulfillment:

- The office collaborates with the appropriate institutional constituencies to ensure a suitable percentage of new institutional technology purchases are compatible with assistive and adaptive technology (e.g., hardware, furniture, supplemental input and output devices).

1 2 3 4 NA

Evidence of fulfillment:

- The institution has a person on staff with the requisite training and/or experience in the use of assistive and adaptive technology.

1 2 3 4 NA

Evidence of fulfillment:

- The office provides or arranges for training for students to operate assistive technology and adaptive equipment.

1 2 3 4 NA

Evidence of fulfillment:

- The office periodically evaluates the assistive technology and adaptive equipment needs of its students.

1 2 3 4 NA

Evidence of fulfillment:

- The office assistive technology and adaptive equipment provided is in compliance with all applicable legal regulations.

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Educational Preparation and Professional Development

- 9.1 The office employs personnel with appropriate professional skills and provides those personnel with ongoing staff and professional development opportunities.

Staff and Professional Development

- The new office personnel are provided orientation training (e.g., disability awareness training).

1 2 3 4 NA

Evidence of fulfillment:

- The office personnel are provided ongoing staff development training.

1 2 3 4 NA

Evidence of fulfillment:

- The office personnel are provided ongoing professional development opportunities (e.g., professional conferences).

1 2 3 4 NA

Evidence of fulfillment:

- The office personnel are provided staff development and training opportunities based upon office/personnel evaluation data.

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Educational Preparation

- The office administrator(s) must have the appropriate educational credentials, training, and work experience necessary for the position held.

1 2 3 4 NA

Evidence of fulfillment:

- The office support staff is selected based upon the demonstration of appropriate education, training, and work experience.

1 2 3 4 NA

Evidence of fulfillment:

- The office interns, volunteers, and student employees must have appropriate educational experience and/or be provided relevant disability orientation/staff development training.

1 2 3 4 NA

Evidence of fulfillment:

- The office student support staff (e.g., interpreters, assistive technology personnel) must have the necessary qualifications and/or experience (e.g., training, certification).

1 2 3 4 NA

Evidence of fulfillment:

Additional Exemplars to be measured:

Facing Challenges: Experiences of Young Women with Disabilities Attending a Canadian University

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Abstract

This qualitative study examines the perspectives of students with disabilities studying at a postsecondary institution in Canada. Seven female students, five of them with learning disabilities, participated in focus group meetings and shared their experiences of studying at a university. Both individual characteristics, such as disability-specific needs, and contextual factors, including attitudes of faculty members and peers, were reported as barriers affecting students' full participation to university life. Participants reported that the Office for Students with Disabilities acted as an important support mechanism at the overall school-level. Findings indicate that postsecondary institutions should support students with disabilities not only by providing accommodations but also by addressing hidden attitudinal barriers to enable equal participation opportunities for all. Some recommendations for creating a barrier-free school community are made based on the suggestions of the participants.

Increasing numbers of students with disabilities choose to pursue postsecondary education in North America (Eckes & Ochoa, 2005; Fichten, 1995; Fichten, et al., 2003; Roer-Strier, 2002). However, research show that university or college graduates with disabilities experience difficulty in finding employment, have limited independence and low standards of living (Doren & Benz, 2001; Lindstrom & Benz, 2002; Madaus, 2005). Transition to higher education, and later to work settings, present challenges for every young adult; however there is a rich literature particularly from the North American context suggesting that certain student populations such as students with disabilities and female students may experience more obstacles during their studies (Doren & Benz, 2001; Dwyer, 2000; Lindstrom & Benz, 2002). Studies reveal that students with disabilities are still an under-represented group and face several barriers which may limit their full participation to postsecondary education (Duquette, 2000; Fichten, 1995; Weir, 2004). Even though there is evidence suggesting that accommodations are provided to students with disabilities at the postsecondary level (Cox & Walsh, 1998; Duquette, 2000; Hill, 1992, 1996), some research findings show that students with disabilities have difficulty accessing and obtaining accommodations and supports (e.g. Dowrick, Anderson, Heyer & Acosta, 2005).

Even though the results of the National Longitudinal Transition Study II (NLTS2) of the U.S. Department of Education reveal an increase in the number of female students continuing higher education, girls are mostly attending 2-year colleges while boys attend both 2- and 4-year colleges (Wagner, Newman, Cameto, & Levine, 2005). Research on career development and transition for women also show that female students are less likely to find employment compared to male students with or without disabilities (Doren & Benz, 2001; Lindstrom & Benz, 2002). Additionally, young women who are employed tend to have lower incomes and work in low-status jobs compared to their male counterparts (Doren & Benz, 2001). Thus, the dual presence of gender and disability categories may cause limitations for pursuing higher degrees and career options for young women (Lindstrom, Benz & Doren, 2004).

There is limited research focusing on students' perspectives and experiences at the postsecondary level (Dowrick et al., 2005; Dwyer, 2000; Evans-Getzel & Thoma, 2008; Troiano, 2003). The following study aims to present voices of students with disabilities studying at a large research university in Canada. The participants of the study are Canadian young women with disabilities, majority with learning disabilities (LD), attending postsecondary education. Given that

there is research evidence suggesting that female students with disabilities may be at a greater risk of experiencing obstacles in higher education (e.g. Dwyer, 2000), we focus on the unique perspectives of this sub-group of students. We discuss both individual characteristics (e.g. disability type, severity, and gender) and context-related barriers to having a successful postsecondary education life.

Students with Disabilities and Postsecondary Education: A Canadian Perspective

The Canadian Charter of Rights and Freedoms has created a solid rights-based ground for which all provincial laws, policies, and institutions are developed (Roehrer Institute, 1996). The following statement: "Equality of all people under the law and protection of individuals against discrimination on the basis of disability (Roehrer Institute, 1996, Section 15[1])," protects people with disabilities from discrimination. According to this statement, legislation must be free from discrimination, and recognize that all people have the right to equal opportunities (Roehrer Institute, 1996). Over the past decades, with provincial legislation acts, influences of the move towards inclusive education, and changes in the attitudes of the Canadian society, there has been an increase in the number of students with disabilities attending postsecondary education (Wolforth, 1998). Leitch (1998) reported that in 1995, there was a mere 0.25% of the population of students with disabilities in 47 Canadian universities. In 2003, the average percentage of students with disabilities registered to receive disability-related services in Canada's provinces and territories ranged from 1.92% to 5.67% and only 8% of postsecondary institutions reported not having any students with disabilities (Fichten et al., 2003).

Students with LD make up the largest proportion of this population of students with disabilities attending postsecondary education in Canada (Stewart, Cornish, & Somers, 1995). This is a similar pattern compared to the American higher education institutions (Hart, Mele-McCarthy, Pasternack, Zimbrich, & Parker, 2004; Vogel, Leyser, Kwyland, & Brulle, 1999). Results of a Quebec-based study implemented as a part of a Canadian-wide study showed that there are significantly smaller proportions of students with disabilities in Quebec colleges and universities when compared to rest of the provinces (Fichten et al., 2003). Researchers suggest that provincial policies,

practices, and bilingual language system may be some of the factors contributing to this lower proportion of students with disabilities in postsecondary institutions of Quebec (Fichten et al., 2003).

With an increase in the number of students with disabilities continuing higher education, many Canadian postsecondary institutions have developed policies that respond to the individual needs of students with disabilities (Wolforth, 1998). By 1992, 30% of Canadian postsecondary institutions had disability-related policies, while another 15% were developing similar policies (Hill, 1994). By 1994, this figure rose to over 65%, and by 1997, 75% of Canadian universities reported policy development for students with disabilities (Cox & Walsh, 1998).

Hill (1992) surveyed the Offices for Students with Disabilities at 27 Canadian universities to ascertain the types of services provided to students with disabilities. This survey study revealed that although all participating universities attempted to accommodate the needs of students, some problems pertained in the following areas: (a) identifying those students who require special services, (b) making students aware of the available services, and (c) developing fair admission policies. An analysis of institutional policies for students with disabilities at 47 Canadian universities examined the types of academic accommodations provided to students with disabilities and found that academic accommodations and procedures show variation across provinces, territories, and institutions (Cox & Walsh, 1998).

In general, accommodations included extended time, special seating, the provision of visual language interpreters, change of test format, the use of adaptive technology, and the provision of alternative formats of print such as Braille or large print (Cox & Walsh, 1998). In a study on technology integration and utilization by students with disabilities, Fichten, Asuncion, Barile, Fossey, and Simone (2000) found that 41% of Canadian college and university students with LD, physical, and sensory disabilities required special accommodations and adaptations to use them effectively.

There is limited research on academic and social experiences of students with disabilities in Canadian higher education system (Dwyer, 2000; Jorgensen et al., 2005). In a longitudinal study extending over a period of 12 years, Jorgensen et al. (2005) compared the academic outcomes of students with and without disabilities attending a college in Quebec. Although students with LD had similar grades and graduation

rates, they required lighter course load and took longer to graduate (Jorgensen et al., 2005). In a recent online survey with 1,174 college and university students in Ontario, Tremblay et al. (2008) found that nearly two-thirds of a total of 72.9% female students and half of male students have experienced various kinds of negative social interactions during their postsecondary studies. These negative social interactions, although often very mild and verbal in nature, were experienced more by female students and students with LD (Tremblay et al, 2008) suggesting that these students may be at greater risk for experiencing obstacles at the postsecondary level.

Individual Characteristics: Challenges of Being a Female Student with Disabilities

Each disability presents different characteristics. Students with LD require unique accommodations at the postsecondary level as they may be at risk for experiencing difficulties in school (Trainor, 2007). Some of the unique characteristics of this life-long disability involve cognitive difficulties including solving problems, organizing thoughts, transferring previously learned information to new contexts, carrying out learning strategies, remembering, and integrating information from a variety of sources (Learning Disabilities Association of Canada [LDAC], 2002; Smith, Polloway, Patton, Dowdy, McIntyre, & Francis, 2010). Research shows that university graduates with LD may continue to experience difficulties in work settings particularly with writing skills, processing and organizing information, reading comprehension, computation, and time management (Madaus, 2005).

In addition to cognitive difficulties, several research studies revealed that students with LD may experience social-emotional difficulties such as poor self-concept, depression, and social isolation as a result of continuous academic failure (Heath, 1996; Roer-Strier, 2002; Shapiro & Rich, 1999; Smith et al., 2010; Troiano, 2003; Valas, 1999). Heath (1996) suggests that the underlying theory of how students with LD interpret continued school failure can be examined by the phenomenon of “learned helplessness.” According to the learned helplessness theory, individuals may give up trying as a result of a misconception that every effort and trial will result in unsuccessful consequences (Paris, Byrnes & Paris, 2001; Seligman, 1975). Dwyer (2000) conducted a qualitative study to examine the experiences of eight Canadian female university stu-

dents with Attention Deficit/Hyperactivity Disorder (AD/HD) and found that when students did not have enough time to accomplish required tasks they often ended up blaming themselves for their difficulties. The author suggests that female university students with AD/HD may be at risk for experiencing barriers due to both gender- and disability-related characteristics (Dwyer, 2000).

Self-advocacy and determination skills become essential skills in overcoming barriers, particularly at a postsecondary education setting where there is less direct guidance and greater expectation to achieve individually, compared to the earlier schooling levels (Evans-Getzel & Thoma, 2008; Dwyer, 2000; Field & Hoffman, 1994; Thoma & Evans-Getzel, 2005; Trainor, 2007; Troino, 2003). Self-advocacy or self-determination refers to an individual’s ability to make decisions, establish goals, and assume responsibility for outcomes (Ryan & Deci, 2000). In a series of focus groups conducted by Thoma and Evans-Getzel (2005) with postsecondary students with disabilities in Virginia, self-determination skills were reported as one of the most important factors contributing to students’ academic achievements. When students had an understanding of their needs, they asked for appropriate support services and created opportunities for their success (Thoma & Evans-Getzel, 2005). Likewise, Evans-Getzel and Thoma (2008) examined experiences of students with disabilities through focus groups and found that self-determination skills were the most important student-related factor that helped students in obtaining appropriate support services. Roer-Strier (2002) conducted a six-year case study of social work students with LD in Israel. Questionnaires, in-depth interviews, focus groups, and other documentation methods were used to learn about students’ experiences. As an alternative to individual therapy, participants worked on empowerment and advocacy skills training in small groups. At the end of this training period, dropout rates amongst students with LD reduced from 20% in the first year to 0% in the sixth year and more students with LD started to receive recognition for their success by receiving scholarships and academic awards (Roer-Strier, 2002).

Contextual Barriers: Attitudes Towards Disability

Students with disabilities attending colleges and universities can face challenges not only due to limited accessibility and delivery of support services but also

due to negative attitudes of peers and faculty members (Duquette, 2000; Tremblay et al., 2008). Faculty attitudes towards students with disabilities are found to be one of the most important factors affecting their academic achievement (Cox & Klas, 1996; Fichten, 1995; Hart et al., 2004; Hill, 1996; Duquette, 2000; Rao, 2004). Hill (1996) found that students' academic achievement was negatively affected when professors did not provide appropriate accommodations. In another study examining perceptions of students with disabilities in a Canadian university, Duquette (2000) found that professors were one of the most important sources of either support or barrier affecting students with disabilities' success at the postsecondary education level.

How students with disabilities are perceived in the school environment may affect their participation. In traditional models of service delivery, students with disabilities are viewed as passive recipients of services (Danforth, 2001). This model, also referred to as the medical model, functions on the basis of diagnosing disability categories and ascribing any characteristic of a disability to the whole individual (Danforth, 2001; Söder, 1989). Labeling or categorizing an individual with a particular type of disability may affect an individual's self-worth (Söder, 1989; Troaino, 2003). In contrast, the social model focuses on the role of society in creating the notion of disability (Söder, 1989). According to Oliver (1990), any kind of disability is a result of social exclusion and creates barriers to people who do not conform to the society's norms. Thus, the social model views disability as an equal opportunities issue, similar to race, social class, and gender, and requires the removal of barriers for full participation to society (Danforth, 2001).

Purpose of the Study

The purpose of this study was to learn about the experiences of students with disabilities studying at a large research university in Canada. We aimed to present voices of students with disabilities. Specifically, we addressed the following research questions:

1. What are the experiences and perspectives of students with disabilities regarding access to and participation in university life?
2. How can postsecondary institutions address the unique needs of students with disabilities?

Method

Participants

In this study, we used *purposeful sampling* which is based on the assumption that the investigator wants to discover, understand, and gain insight from a sample one can learn the most (Patton, 2002). Participants were seven undergraduate and graduate students from various programs and faculties studying at a large research university in Canada. All participants were registered at the Office for Students with Disabilities (OSD) and were receiving support services from the OSD. Three participants studying at the graduate level were receiving additional services from their faculties such as writing exams in a room designated by their departments. All seven participants were female. The most common type of disability was LD with a population of five out of seven students. Table 1 provides an overview of participant characteristics.

Data Collection and Analysis

The study was composed of three stages: recruitment of participants, focus group meetings, and data analysis. The primary researcher approached the OSD to recruit participants for the study. In this particular university, it is voluntary to request services through the OSD and students need to self-identify to the OSD to receive support services. Self-identification to the OSD is sufficient to access accommodations and students have the option to choose disclosing their disabilities to their course instructors. This is a common approach to access disability services in Canadian higher education institutions (Cox & Walsh, 1998). All instructors and faculty members are required to inform and invite students with disabilities to contact the OSD by stating this information on course outlines. In the beginning of the study, all students registered with the OSD received an information flyer published in the electronic newsletter of the center, explaining the purpose of the project and inviting them to participate. A poster version of the same flyer was displayed on the bulletin boards at the OSD for two months.

Three weeks following the advertisement of the study, four students responded by sending an e-mail to the primary researcher. First a focus group meeting was held with these four students. One month after the first focus group meeting, three more students came forth and wished to participate in the study. For that reason, a second focus group was held with new participants.

Table 1

Participant Characteristics

| <u>Name</u> | <u>Age</u> | <u>Type of Disability</u> | <u>Level / Major</u> |
|-------------|------------|-------------------------------------|-----------------------------|
| Terry | 27 | LD | Graduate / Medicine |
| Francesca | 22 | LD and ADD | Undergraduate / Arts |
| Laura | 28 | Mobility and cognitive difficulties | Graduate / Anthropology |
| Victoria | 23 | LD | Undergraduate / Arts |
| Sarah | 24 | Mobility Difficulties and LD | Undergraduate / Engineering |
| Claire | 27 | Chronic Health | Graduate / Education |
| Sophie | 24 | LD | Undergraduate / Arts |

The facilitator of the focus groups was also the principal researcher who was a graduate student completing her Master's Degree in Educational Psychology. The primary researcher did not have any disabilities but she was interested in inclusive education issues. She did not work at the OSD, did not know the OSD staff, and did not know any of the participants. Rapport with participants was established solely for the purposes of this study through e-mails and telephone conversations involving the purpose and nature of the research. Participants and the researcher met in person for the first time on the day of the focus group meetings.

Focus groups are a form of group interview where participants engage in a discussion on a topic guided by a facilitator (Gall, Gall, & Borg, 1999; Krueger, 1994). Focus groups allow respondents to hear each others' views thus providing a context for participants to express feelings or opinions that may not emerge during individual interviews (Gall et al., 1999). The following questions were asked during each focus group meeting:

- How do you identify with your disability?
- What is the major challenge of being a university student with a disability?
- What are your professors' and peers' perceptions of your disability?

- What do you think about university's support services?
- How would you define your ideal university? What do you think could be done to improve these issues?

Both of the group meetings were facilitated and audiotaped by the primary researcher. The transcriptions were used as the only source of data. Every participant received a copy of the transcript of the focus group session by e-mail within a week following the meeting. This procedure served as *participant verification*, which is a procedure to ensure reliability and to ensure that the researcher has captured the intent of participants carefully (Krueger, 1994). During discussions, participants had every right not to reveal information that they found private and intimate. They chose what to discuss and share during the group meetings. Each focus group meeting lasted about 45 minutes to 1 hour.

Given that conducting focus group interviews is a qualitative technique for generating data, we followed *interpretive data analysis* which is about identifying and analyzing specific words, phrases, or concepts (Newby, 2010). Data were divided into segments and coded by categories. The aim in categorization was

to discover some patterns (Gall et al., 1999; Krueger, 1994; Morgan, 1997; Newby, 2010; Patton, 2002). A second researcher coded the segments separately from the primary researcher. Coding data with multiple-raters increases the trustworthiness of qualitative analysis (Newby, 2010; Patton, 2002). For ethical considerations, identities of participants are not revealed throughout reporting of this study. We use pseudonyms instead of the participating students' names. Likewise, any information that could reveal the identity of the individuals has been modified accordingly.

Results

Disability Identity and Attitudes of Peers and Professors

All participants reported that they had accepted their disabilities early in their lives. Five of the seven participants reported that they had LD, which created difficulties particularly in their academic lives. Terry, who is a graduate student with LD in the School of Medicine, shared that her disability had been part of her identity for as long as she could remember:

I started having difficulty in reading when I was six. It hasn't been anything new. So as long as I can remember, this has been a part of me. It's something I am very open about; it's not something to be embarrassed about. I do things differently.

Francesca, an undergraduate student in the Faculty of Arts with LD, realized that she might also have Attention Deficit Disorder (AD/ D) last year after consulting her advisor at the OSD:

It kind of explains why I have so many problems in school and it's not like my fault because I have always known that there was something wrong and I've always kind of wondered...I guess when you are a girl, and you are quiet and you are a good student what I hear is that is the most under-diagnosed for ADD.

Laura, a doctorate student in Anthropology with mobility and cognitive difficulties, expressed that being identified with her achievements rather than her disabilities was very important for her:

For someone with a disability it's not like you want

to raise your hand on the first day and be like 'Oh I just want to let you know.' No, it's definitely not the first impression you want to give someone. You'd rather give the first impression with the essay you write or the test you have written with appropriate accommodations. So you want to avoid being singled out because you have a disability.

Victoria, an undergraduate student with LD, compared her academic success with her best friend. She stated that even though they followed the same steps while studying and getting ready for the same exam, her best friend still received higher grades. Victoria stated that this difference in their grades was a result of her LD:

It wasn't for a lack of studying. We'll discuss the material, and I'll know the answer to something she doesn't. It's not like I didn't know it. I just have a problem remembering stuff. We'd study the same amount, the same amount! But I just don't do as well on the test.

Additionally, for Sarah who has mobility difficulties and LD, getting around campus and getting to the school is a very important issue: "Mobility issues are really tough at the school because of the hill, ice and weather." In terms of time management, students mentioned having difficulty balancing their school lives and coping with the problems of their disabilities. Sophie, an undergraduate student with LD in the Faculty of Arts, shared her frustration: "Time and exhaustion and pain and maneuvering!" Sarah also put forth the issue of understanding as a difficulty for balancing their personal lives:

I would also say understanding, just in terms of balancing family and friends. I think there is a real gap in people's understandings. If you are a successful student people don't seem to be able to comprehend that you can have a learning disability, and still be quite successful. And they think that if you are successful it means your disability is not really a problem; it must be very mild and they don't realize how tiring it is and how much you work.

Laura agreed with the issue of understanding:

My experience with disabilities is obviously an

invisible one which is a strange thing to cope with in terms of having people understand. If you don't look disabled then people have a really hard time internalizing or understanding at all. I definitely feel misunderstood, for sure. I feel it is difficult to explain disability to people who don't have sensitivity to it. That's something that I have to come to find strategies to cope on my own so that I don't feel upset.

Participants reported that they felt misunderstood by their peers who did not have disabilities. They found it difficult to explain having a disability. Laura said that she felt misunderstood by her peers even though she felt completely comfortable with her disability:

In terms of the people, my peers, I really feel misunderstood. I feel it is difficult to explain disability to people who don't have sensitivity to it. Even when I do make it apparent to my friends that I have these limitations, people just can't seem to internalize it or remember it.

Francesca addressed the general lack of awareness towards individual differences:

I find people are judgmental. You don't really think they would be [judgmental] at some recognized institution but I find people are generally less inclusive. I think there is a real lack of awareness among students; that difference is not equal to good or bad; that you can't just put people into categories.

Sarah stated that students in her program did not understand what it meant to be a successful student with a disability:

I think they minimize what you've gone through if you succeed. I am told I am lucky all the time because I am doing a program part-time. Are you kidding me? I am working twice as hard as other people and I pay twice the tuition, that's lucky? I don't think so!

In addition to their peers who do not have disabilities, students also reported that they felt misunderstood by their professors. For the most part, professors provided accommodations because it is a regulation of school policy. However, students also reported that professors' attitudes and lack of understanding about

the accommodations they needed, seemed to affect their full participation in the university community. Regarding attitudes of professors, Francesca stated:

I find professors for the most part are understanding because the labels must be adhered to but it's kind of more like the deeper understanding of what it means to be dealing with this everyday and what does it mean to be always struggling.

Sophie added that some professors failed to understand that certain disabilities may prevent students from sitting for three-hour lectures or that some students with LD and AD/HD may not remember any formulas for an economics course:

I think there is an assumption with people with disabilities that you need to slow down. I feel like it does not mean that. Sometimes it means speeding up, or doing things differently, that's how I feel.

Sophie also talked about the legitimacy of accommodations from the professors' point of view:

I notice that among a lot of professors there is a bit of unawareness; especially about how OSD operates. I have taken a lot of care to inform them about the process that exam is sent to the OSD and that I am supervised when I write the exam, that it's a comfortable place, when I need to take a break, I can. There is no inappropriateness so I think that sometimes lack of awareness can lead to assumptions about the legitimacy of the way OSD functions.

Sarah mentioned that some professors' attitudes changed as they became more familiar with her:

Just total resistance with some of the professors.. but others have really changed as they knew me. Several were convinced that I would fail and now that they've gotten to know me and that I am actually a good student and that I actually understand the information, their attitude and understanding have really changed. But their first impression was that I was wasting their time by being in the program. They didn't say it straight out but they were assuming I was not going to be able to handle the program. There was a very clear unsaid message.

Upon listening to the comments of one of the group members regarding how professors in her program changed throughout the years, Francesca shared that it had been rather different for her:

You said that your professors have been changing as they got to know you, I find that also but I also find as professors get to know me they get more hardened with disabilities too because it is almost like you are reaffirming some of their stereotypes that you don't even know what they are.

Claire, a graduate student at the Faculty of Education with chronic health problems, added that professors should be even more sensitive to disability and inclusion issues:

In education that's how we have been taught; to accommodate and to learn about children with differences, right? But they are not practicing what they preach to a large extent.

Laura agreed with Claire: "It's one thing to understand something theoretically; it's another thing to deal with a person one-on-one."

Accommodations Provided by the University

Laura explained why receiving accommodations were necessary: "The point of accommodations is so that you can be treated equally and operate as any other student." Sarah brought up the issue that receiving accommodations sometimes is viewed as having privileges:

It is just so funny that it is perceived as privilege, when even it isn't equal. It just kind of helps you a little bit more, it helps you stay in float, express what you know and what you have done.

Although they are aware that they needed accommodations such as taking exams outside of the regular classroom or getting extra time for writing, Victoria and Terry also felt that such accommodations created a feeling of social exclusion from their classmates. This physical and psychological separation made them question their status within the student community.

You miss the better or worst, you miss the anxiety. I leave thinking that was the worst exam ever, but did everybody else feel the same way, I don't know. (Victoria)

It does cause physical separation in that respect. You don't get to do things the way everyone else does. Writing them with extra time and not writing them with class. You can't fix that but it's always a little frustrating because you don't want to be 'abnormal,' you want to be 'normal.' You want to fit with the rest of the class. (Terry)

All of the students stated that throughout their university years, the OSD had been the most distinguished source of support. The OSD acted as a mediator and helped them manage their lives more efficiently. After going through several incidents both at departmental and university levels, Sarah was very close to dropping out of school: "If it wasn't for [the OSD staff], I definitely would have left this university because I think there is a lot of ignorance." She added that with the help of OSD professionals, she managed to create a life outside of the campus where she felt safe: "The more I started spending time outside of school and the less this institution became the focus of my life, the happier I became." Laura added:

I think it is important for people with disabilities to have resources like the OSD here. Raising general awareness in society is a really slow process it's a hard thing to do but I think as more students become more successful students in the university then more powerful people with disabilities become because power is so associated with education in our society.

Looking into the Future: Recommendations by Students with Disabilities

All participants agreed that students, staff, and faculty members needed to be more sensitive towards disability issues. Accepting differences and treating all students equally by breaking free from certain prejudices and stereotypes were seen as crucial points that needed to be addressed to overcome hidden attitudinal barriers. In order to create this disability awareness on campus, participants proposed sensitivity training workshops. Laura stated that educating faculty members and instructors could be beneficial in terms of moving towards changing negative attitudes:

I guess ideally professors would have to go through a mini-education course or something like that to prepare them for the fact that there are many students with disabilities and you should be sensitive about this issue.

Both Claire and Sophie stated that these educational seminars on disability awareness should not only focus on disability but look at a spectrum of individual differences:

I wouldn't want the seminars to be; here is your stereotype of a person with a disability and here is your stereotype for this kind. That's what you constantly run into. (Claire)

When you introduce it as disability issues you are creating a binary category of 'normal' students and the 'abnormal.' It can be looked at as students on a continuum. I think that would be a lot better. (Sophie)

Francesca added:

...to actually have professors explore what their biases do to other people and their lack of insight to stuff like time management and the accomplishments of the students, and what students with disabilities actually have to do above and beyond their academic performance.

With respect to Claire's suggestion, Terry proposed other ways of creating disability awareness amongst faculty members and students:

In terms of educating –this is what I did in my undergrad- we had a panel of students with disabilities who would talk to groups. This could be a group of students talking to professors to just give voice and give it a human face.

Terry also mentioned that having a *mentorship experience* with professors can be a support mechanism especially for new students: "Having a role model or someone to look up to with that respect could be very beneficial." Laura suggested that all professors should make an announcement in class at the beginning of the semester and say: "If you are a student with disability of any kind I encourage you to contact the OSD. Here is the phone number and you can receive the accommodations you need."

Having *support groups among students with disabilities* was another recommendation. Claire said that sometimes students may not want to elevate every issue to the OSD:

There were several times when I wished that there could be some sort of a group for students with disabilities of who are having a hard time to share solutions with each other..if there were other students who have same types of problems, some sort of support group where we can share that kind of information, share solutions, when we are stressed whatever it is. Especially if you are the only one in your program it's so frustrating to deal with stuff... on those days when you're just tired of it, all you really need is to have someone understand and next day you carry on as you always do.

Participants also talked about how professors and instructors should change their traditional methods of teaching. They emphasized the need for a *variety of instruction methods* targeting all learning styles. Students said they wanted professors to find more creative teaching methods and added that using different instructional approaches may end up being effective for all students. One participant shared that her peers without any diagnosed disabilities would benefit from sensory presentations as opposed to lectures.

Victoria shared that if the purpose of a higher education institution is to make sure that students successfully obtain their degrees, the *assessment methods* should be changed: "We shouldn't have to be asked to memorize. Especially students with disabilities can't deal with that, you just can't. You need the concepts to understand." However, Laura was skeptical: "I think it's difficult to transform the way the curriculum has been set up. This has been like this for years. That would definitely be a hard angle to take."

Participants suggested that those professors who had been supportive of students with disabilities and who had changed their teaching styles should receive *recognition*, such as awards, to create awareness amongst other faculty members. Although there seemed to be agreement that changing traditions is difficult to achieve, students were optimistic about what future held for next generations. They expressed that after coming through an education system and work environment where differences among people are welcomed, future generations could create a new society.

Discussion and Implications

For the participants of this study, it was a combination of disability- and context-related factors

that created barriers to full participation in university life. Students in this study focused on disability as the only individual characteristic that affected their participation. Being a female student with disabilities was mentioned only once by a student regarding her AD/D diagnosis. She stated that females with AD/D may often get under-diagnosed. Indeed, there is a large body of research evidence showing the predominance of males in special education services (Wehmeyer & Schwartz, 2001). Because gender was not identified as a limitation by the participants, we focused only on disability as an individual characteristic.

The purpose of higher education is the same for everyone: fulfilling personal goals, finding employment, and building financially secure lives (Fichten, 1995). Likewise, for students with disabilities, postsecondary education is a means to having independent and productive lives (Canadian Association of Disability Service Providers in Postsecondary Education [CADSPPE], 1999). Literature suggests that self-determination is essential for student involvement at the postsecondary level given that students need to become more independent by setting personal goals and assessing outcomes (Evans-Getzel & Thoma, 2008; Field & Hoffman, 1994; Thoma & Evans-Getzel, 2005; Trainor, 2007; Troino, 2003). Almost all of the participants reported that at some point in their postsecondary degrees, they needed assistance from the OSD to act as a liaison in approaching course instructors. Support services and disability centers in university settings have crucial roles in terms of accommodating students, educating professors, and encouraging students to become self-advocates (Dowrick et al., 2005; Fichten, 1995). The results of the present study show that all of the participants found the support services provided by the OSD very helpful. On the other hand, some of the students stated that the OSD should always play a mediating role between the faculty and the student, while others believed that students should also learn to advocate for themselves.

Students shared that they worked on effectively managing their times, but could not meet the expectations and requirements that resulted in academic problems. According to the students, this challenge was both due to their unique disability characteristics and context-related factors such as a lack of understanding and negative attitudes of course instructors towards disability. Learned helplessness theory suggests that students with disabilities may give up trying as a re-

sult of a misconception that their every effort will be unsuccessful and become passive, unmotivated, and depressed (Field, 1996; Heath, 1996; Seligman, 1975). In this study, we did not observe any evidence of such negative affections as the learned helplessness theory suggests. Some of our participants were at the graduate level which may indicate that they were motivated to continue their education. Nonetheless, we need to be cautious that the phenomenon of learned helplessness may exist for different individuals in other contexts.

Similar to previous research findings, the importance of faculty members and their attitudes towards students with disabilities emerged as an important theme in this study. Research suggests that students with disabilities in postsecondary institutions face problems not only regarding service delivery and accessibility but also due to hidden attitudinal barriers (Duquette, 2000; Hill, 1992, 1996; Rao, 2004). Similar to findings of Cox and Klas (1996), Duquette (2000), Fichten (1995), and Hill (1996), students in this study reported that professors' attitudes and their lack of understanding about accommodations affected their full participation to campus life. Students stated that they felt misunderstood by some of their peers and professors. In general, peers and professors knew the labels of their disabilities but they did not know what it meant to live with the challenges of that disability. This was a major issue for particularly hidden disabilities such as LD. Since LD is a common type of disability in postsecondary institutions (Stewart et al., 1995; Vogel et al., 1999), faculty members should understand that LD is a real and life-long condition and that those students with LD have adequate intellectual capacities that have enabled them to get accepted by postsecondary education institutions (Rose, 1993).

Attitudes are embedded in society and can only be identified by individuals who are willing to examine their own conceptions (Söder, 1989). One of the ways of working with negative attitudes towards students with disabilities that create significant barriers to equal educational opportunities is to educate instructors and faculty members about disability and individual differences in general (Fichten, 1995). The presence of negative attitudes may be related to the fact that often faculty members have less contact with students with disabilities in large institutions (Fichten, Amsel, Robillard, Sabourin, & Wright, 1997). One of the participants proposed the idea of having student panels to give voice to students with disabilities. Becoming more

familiar with students' experiences can help focus on the person rather than the disability category (McConkey, 1996). By walking in the shoes of people with disabilities, faculty members can understand in what ways having a disability can affect students' academic achievement (Rose, 1993). Participants in this study also suggested that people who have experienced a change in their attitudes can share their own experiences, which would help to create awareness according to McConkey (1996).

In addition to the services provided by the OSD, students with disabilities need support and accommodations directly from their professors (Eckes & Ochoa, 2005). When discussing accommodations as personal needs, participants of this study felt that it was necessary to discuss what equal access to participation meant for them. Students mentioned that their course instructors sometimes lacked the necessary information and sensitivity towards their disability-specific needs. This lack of awareness sometimes affected their access to support services and accommodations. The faculty members and course instructors are responsible for understanding the purpose of each accommodation and how they should be provided (Dowrick et al., 2005; Hodge & Preston-Sabin, 1997). Postsecondary institutions should recognize the unique characteristics and needs of each student and design student-centered programs (Weir, 2004). Differentiated instruction practices should be provided at the postsecondary education level instead of traditional forms of teaching such as lecturing (Dowrick et al., 2005; Eckes & Ochoa, 2005). In another issue regarding school-level support, students expressed that it often took them longer to complete their course load and degrees similar to other research findings (e.g., Jorgensen, 2005). Students' concerns of rights and equity are particularly important for policy agendas aiming to increase the educational participation of all (Stowell, 2004). School policies need to ensure that students with disabilities do not face any administrative discrimination (Jorgensen et al., 2005).

Breaking down barriers for participation requires expertise, effort, and collaboration among many partners and institutional units (Fichten, 1995). Since postsecondary education policies are regulated at the provincial level, there is no national research initiative for each Canadian institution to investigate and report on the academic and social-emotional outcomes of students with disabilities (Jorgensen et al., 2005). This lack of systematic national research agenda makes it

very difficult to gain a whole picture of students' experiences. To promote equal educational opportunities for all students, Tierney (1999) states that universities must be open towards systematic organizational changes. Universities may be viewed as organizations with strong traditions and values that are resistant to change (Stowell, 2004). Nevertheless, universities are "the greatest centres of intellectual power in history" (Katz, 1987, p. 183). University campuses are places of powerful intellectual exchanges and welcome discussion and debate on moral and social issues (Katz, 1987). Thus, generating a dialogue on disability issues across campus can have powerful educational and social outcomes (Rund & Scharf, 2000). Through dialogues on disability issues, university campuses can create diverse communities and become more inclusive where all students feel accepted and supported (Rund & Scharf, 2000). As people with disabilities struggle to overcome social exclusion, the importance of restructuring policies and sources of support services within postsecondary settings becomes inevitable.

Limitations and Recommendations for Future Research

This study provides insights into the experiences of students with disabilities, particularly those with learning disabilities, studying at the postsecondary level in Canada. Nonetheless, the findings are not intended to be generalized to all women university students with disabilities. Although we report some invaluable student voices and perspectives, several methodological limitations exist in this study. The small sample size is one of the most important limitations. There were very few participants in this study. In the first focus group meeting there were four students and in the second meeting, only three students. Another limitation is that the sample only consisted of students who volunteered to participate in focus groups advertised through the OSD. Furthermore, they were all female. Students who participated in this project may have a special interest in discussing disability issues including their own experiences. They may also have more self-advocacy skills and personal will to create disability awareness in school community. Additionally, the data collected for this study is rather limited in its nature. Participants' comments were not triangulated by other data sources. One-on-one interviews, observations of these participants on campus, surveys or discussions with other students or significant people who knew

the participants such as disability service providers, and a review of students' GPA would have provided more in-depth examination. Hence, the experiences of participants in this study may not be generalizable across different populations and settings.

More research is needed to further validate the information gathered from this modest qualitative study. This study can provide a modest example to building more comprehensive research agendas. Future research can examine larger numbers of students to reflect a more comprehensive picture of the experiences of students with disabilities in higher education. Mixed methods design can be used to look at an issue both on a large scale and also in depth. Focus groups can be used as an initial step of a broader quantitative research agenda. Following focus groups, surveys can be administered to all students, not simply those with disabilities, to learn about the level of awareness and knowledge regarding disability. Likewise, similar surveys can be given to faculty members and instructors to learn about their attitudes towards students with disabilities in their classes.

This study provides an opportunity to learn about the perspectives of a small group of young female students with disabilities in a large research university in Canada. Although the findings cannot serve as generalizations, the findings of this small-scale study can assist educators in improving services at the postsecondary level. The voices of our participants can inform postsecondary institutions about issues that need to be addressed to maximize the learning potentials of all students. Postsecondary education institutions of higher education need to be aware of the unique needs of particular student populations including women students with disabilities.

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An Examination of the Effects of ADHD Coaching on University Students' Executive Functioning

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Abstract

Seven undergraduates at a selective Midwestern university participated in a semester-long pilot study regarding the impact of ADHD coaching services on their academic experiences. Coaches in the study had extensive qualifications, including specific training to address the needs of college students with ADHD. Three major themes emerged from qualitative interviews conducted with participants. First, students reported that their goal attainment skills improved by working with their coaches. In addition, students stated that they enjoyed working with coaches, whom they found to be effective and supportive. Finally, coaching helped students achieve a greater sense of well-being and self-regulation. These findings from thematic analysis of interviews are supported by quantitative data including administration of the Learning and Study Strategies Inventory (LASSI), which resulted in a substantial mean gain pre/post in self-regulation, and analysis of students' grade point average data. It appears that coaching holds promise as an emerging type of academic support for college students with ADHD to promote improved executive functioning.

Institutions of higher education provide a range of services today to growing numbers of students with Attention-Deficit/Hyperactivity Disorder (ADHD). In 2004, Harbour reported that students with this diagnosis had become the second largest subgroup of students receiving accommodations through Disability Services (DS) offices after students with Learning Disabilities (LD). Additional sources have reported a rapid rise in the numbers of postsecondary students with ADHD over the past decade (Quinn, Ratey, & Maitland, 2004; Wolf, 2001). Several factors help explain this trend. In 1991, the Department of Education formally recognized ADHD as a handicapping condition that could trigger Special Education services under the "Other Health Impairment" (OHI) category. The number of students served as OHI, including high school students with ADHD who received transition services, quadrupled by 2000 (Horn & Tynan, 2001). By the mid-1990s, a wave of literature (e.g., Hallowell & Ratey, 1995) reported the new understanding that ADHD symptoms persisted into adulthood. Then-conventional wisdom that most children outgrew impairment from this disorder gave way to the recognition that adults

with ADHD often needed disability-related assistance, too (Ingram, Hechtman, & Morgenstern, 1999).

Such findings have contributed to a rise in the diagnosis and treatment of adults with ADHD, including college students (Parker & Benedict, 2002). Campus professionals have sought to understand the nature of ADHD in order to provide the most appropriate support services for this emerging group of students (Quinn & McCormick, 1998). Undergraduates with ADHD are often at risk for becoming overwhelmed by new academic and organizational demands as they transition to postsecondary campuses, which provide substantially less external structure compared to high school and home settings (Katz, 1998; Wolf, 2001). Weyandt and DuPaul (2006) reported that college students with ADHD were at greater risk for academic difficulties and psychological distress compared to students without disabilities. These transition phenomena can limit students' ability to persist to graduation without effective academic assistance for attentional impairments.

Recent research has replaced an earlier behavioral view of ADHD with a neurocognitive framework. Today, ADHD is widely viewed as a disorder of executive

functioning skills. Executive functioning is an umbrella construct reflecting self-regulatory mechanisms that organize, direct, and manage other cognitive activities, emotional responses, and overt behaviors (Gioia, Isquith, & Guy 2001). Brown (2005) described six executive functions, including activation (organizing and starting one's work), focus (sustaining or shifting one's attention), effort (regulating alertness and adjusting processing speed), emotions (managing frustrations and modulating intense emotions), memory (retrieving, holding, or working with information), and action (monitoring and regulation of effort). The paradigm shift away from a behavioral view of ADHD to one of underlying executive functioning impairments has altered recommendations for practice. Whereas past interventions primarily involved pharmacology and behavior management, the literature now endorses pharmacology coupled with services that help individuals with ADHD enhance their self-management skills (e.g., organization, time management, and emotional self-regulation) (DuPaul, Weyandt, O'Dell, & Varejao, 2009; Silver, 2010). Findings from a recent National Institute of Mental Health (2007) conference underscore the importance of identifying effective ways to assist students with executive functioning impairments as they transition to adulthood:

Despite the short-term effectiveness of current treatments for ADHD, particularly stimulant treatments, the limitations of these treatments for long-term outcomes are increasingly recognized. Among these limitations are failures to achieve long-term gains in academic achievement (e.g., elevated high school dropout rates) and limited vocational opportunities and success (e.g., frequent job changes, greater unemployment). The persistence of deficits in executive functions, motivational deficits, and impairments in self-regulation are increasingly acknowledged.

Non-pharmacological strategies that help adults with ADHD improve their executive functioning have received particular attention in the best practices literature (Wedlake, 2002; Wolf, 2001). Increasing numbers of campuses have investigated ADHD coaching, an emerging service delivery model that appears to provide this type of assistance (Parker & Boutelle, 2009; Quinn et al., 2000; Schwartz, Prevatt, & Proctor, 2005). Developed as a private practice model, coaches

use specific types of questions to model effective executive functioning and to elicit students' own ideas as they increase their capacity to clarify, plan, and take action on goals. This approach, with a greater emphasis on asking rather than telling, has been identified as an "inquiry" model (Parker & Boutelle, 2009; Whitworth, Kimsey-House, Kimsey-House, & Sandahl, 2007). Coaches' questions promote students' ability to stop, reflect, and develop more realistic plans, based on more accurate self-awareness of how they think and act. Coaches then hold clients accountable for taking action on these plans and learning, in the process, about factors that support or restrict their goal attainment (Quinn et al., 2000).

Coaching's inquiry approach contrasts with didactic models of academic services commonly provided to college students with and without disabilities, such as content tutoring or strategy instruction (Byron & Parker, 2002). Tutors and strategy instructors verbally describe and demonstrate how to solve problems, carry out pre-determined steps in a learning strategy, or organize one's thinking about an academic task. Instead of telling students how to color-code a monthly calendar system, conversely, coaches would ask students questions such as, "What's important for you to remember as you go through your week?" and "What would be helpful for you to see or be reminded of as the week unfolds?" A dialogue of this nature might lead to the student selecting time management software that sends text messages to his/her cell phones with 'real time' reminders the student had previously programmed. Coaches often provide brief phone calls, e-mails or text messages to ask students about their progress as they begin to develop new habits for following through on their plans (Quinn et al., 2000). This method has helped college students with ADHD and/or LD attain academic goals in more self-determined ways while also reducing their non-clinical levels of daily anxiety and stress (Parker & Boutelle, 2009; Zwart & Kallameyn, 2001).

A small but growing body of research on college ADD coaching reflects the increasing interest campuses have expressed in this new form of academic support (Byron & Parker, 2002). Goldstein (2005) called for additional research to measure coaching's efficacy and to identify unique components of this emerging model. DuPaul et al. (2009) recommended research about non-pharmacological treatments involving college students with ADHD, given the siz-

able percentage of individuals who do not respond to medication. This issue is especially important due to the growing reports of the abuse of stimulation medication on college campuses (Tudisco, 2010). Frazier, Youngstrom, Glutting, and Watkins (2007) specifically recommended empirical investigations of coaching's ability to help college students with ADHD minimize the impact of executive functioning impairments on their academic achievement. All people have and use executive functioning skills. The transition to rigorous postsecondary settings can trigger new challenges to how students plan, organize, and guide their own behavior in pursuit of their academic goals. Greater insights about the efficacy of coaching may yield helpful knowledge that pertains to the needs of a wide range of postsecondary students, including but not limited to those with identified executive functioning disorders.

Research Questions

Within the context of what is known about college students with ADHD and emerging knowledge about ADD coaching, this study explored three research questions. First, what are students' perceptions about the effect of coaching on their process for achieving academic goals? Second, what benefits do students associate with the coaching services provided in this study? Third, did students' work with coaches on academic success issues affect their sense of well-being?

Methods

Given these questions, the authors conducted a small pilot study at a private Midwestern university during one semester. This research was primarily qualitative in nature and carried out in preparation for a larger field test of ADD college coaching. All freshmen, sophomores, and juniors enrolled full-time during the spring term who were eligible for accommodations based on approved ADHD documentation from the university's Disability Services office, but who had no other diagnosed disabilities, were invited to participate. This pool totaled approximately 25 students. Potential participants were informed that the researchers were investigating the impact of ADD coaching on their academic experiences.

Participants

A total of ten students initially expressed interest in this research. After learning more about the study, eight of these students provided their informed consent

to participate according to Institutional Review Board procedures. Initially, two females completed consent forms but one of them did not follow up to initiate services with her coach, leaving just one female participant. Participants completed a demographic data form at the launch of the study. Two freshmen, two sophomores, and three juniors participated (see Table 1). Interestingly, these participants were experiencing relatively high levels of academic success as measured by their grades at the study's outset. Consistent with rigorous admissions standards of the university, their mean cumulative Grade Point Average (GPA) at the beginning of the semester was 3.18.

Students' names have been replaced with pseudonyms. Alex was a freshman from a large city on the East Coast. He began the study with a 3.48 prior semester GPA and ended it with a 3.68 GPA. He was quiet but observed others with a low-keyed intensity. Alex often paused at length before speaking, as if gathering his thoughts, before answering questions in a highly parsimonious manner. Steve, another freshman, was from the South. He began the study with a prior semester GPA of 4.0 and maintained this during the study. He had requested a meeting with the Disability Services office two months before the study to understand his disability better and to learn new ways to manage its impact. Quiet and shy, yet extremely intelligent, Steve also appeared reserved in conversation. Joe was a sophomore from the East Coast. He began the study with a prior semester GPA of 3.60, which dropped slightly to a 3.12 by the end of the spring semester. Although diagnosed with ADHD in middle school, Joe found little need for academic assistance through high school and only sought college accommodations mid-way through his third semester. Serious and garrulous in conversation, Joe's comments reflected a hardworking and often solitary life due to his need to study a great deal. In contrast, Olivia was a sophomore from the Midwest with an effervescent personality. She was heavily involved in campus activities, including her sorority. Olivia exuded a positive energy and talked in a rapid, animated fashion. She laughed a great deal while describing her busy university life. Olivia began the study with a prior semester GPA of 2.88 and ended it with a 3.38.

Rob was a tall, lanky junior from the South. Gentlemanly in manner, he spoke with a calm, affable manner that could belie the seriousness of his reflections. He had used accommodations throughout

Table 1

Participants' Artifacts

| <u>Student</u> | <u>Year</u> | <u>Artifact</u> | <u>Student Quote about Artifact</u> |
|----------------|-------------|---|---|
| Alex | Freshman |  <p>Portable water bottle</p> | <p>“[Coaching] was a resource to pour my thoughts into, and my feelings about things. And then it was kind of a resource to take from what I felt I needed. And it was helpful.”</p> |
| Steve | Freshman |  <p>Steamboat Springs, CO ski slope map</p> | <p>“My dad and I went skiing. We would find ourselves here or here. And we were like, ‘Gosh, we’d really like to get here. How can we do that?’”</p> |
| Joe | Sophomore | Did not bring an artifact | |
| Olivia | Sophomore |  <p>Photograph of her clean room (on her cell phone)</p> | <p>“One day before Spring Break, maybe a week or so before? I had a free day and it was right after [my coach] and I had talked and we had gone through all the different ways I could reorganize things to have more space, to put things that were cluttering everything up in spaces.”</p> |

Table 1 continued on next page

Rob Junior



A bottle of glue used in course projects

“The glue represents a tool that [my coach] helped pull out of me to keep myself together.

Tim Junior



Small wooden carving of a man's face

“[My coach] told me that one thing that some people do is, they have a little artifact that they can kind of throw across the room. A physical thing to represent all the unhelpful, negative thoughts that they have and to do something with that.”

Zach Junior



Two shrub leaves; one is brittle, the other is verdant

“[Coaching] gives a way to look at things so ideas can bud and flower... It's also a positive voice that you can keep in the back of your head that's like, 'I can do this and this is how I'm going to do this to keep on track.'”

his college career but found it increasingly difficult to complete long-term projects in his major. Rob began the study with a prior semester GPA of 3.60 and ended it with a 3.68. Tim was a junior who had returned to the university after taking a year off to address a range of personal issues. He appeared restless and was apt to lose his train of thought while talking. His grades dropped during the study, shifting from a 1.79 prior semester GPA to a 1.70. Unable to complete two Incompletes the summer after the study, Tim lost his academic eligibility to return to the University. Zach was also a junior. Small and wiry, his mop of long, dark hair and tendency to wear hiking clothes conveyed his counter-culture values. He enjoyed outdoor activities such as canoeing and played bongo drums. Zach had experienced a great deal of academic difficulty during his sophomore year. He became more accepting of his ADHD and started thinking a great deal about new strategies while on a study abroad field experience the summer before his junior year. Like most participants, Zach's grades improved during the study. His prior semester GPA of 2.0 climbed to a 3.1.

Having worked hard to earn impressive grades in most cases, these participants expressed two related reasons for volunteering: to increase their academic efficiency through better self-awareness and skill proficiency and to enhance their quality of life in a rigorous postsecondary environment. Steve noted on his demographic data form, "I want to work with an ADD coach to better understand my ADD condition and to gain valuable tools to manage ADD so that I might mitigate the impact of ADD on my life as a whole." Olivia decided to participate to "hone my skills and discover ways to become a more effective student in terms of organization and study discipline." Rob hoped that participation could help him "get a more balanced life – ease stress with schoolwork and work more efficiently."

Coaching Intervention

All coaches in this study worked for the Edge Foundation (www.edgefoundation.org) and shared backgrounds of comparable training and extensive experience coaching students with ADHD. Edge coaches are required to complete a specialized training program that focuses on high school and college students with ADHD. Prior to registering for this training program, Edge coaches must have at least 60 hours of coaching training required for accreditation from appropriate

organizations such as the International Coach Foundation or the Institute for the Advancement of AD/HD Coaching. They also need a minimum of two years of experience as a coach with at least 10 clients. Edge coaches are contracted by the Edge Foundation rather than being its employees.

Implementation of the Edge coaching model begins with a two-hour intake session between the coach and student over the phone, in which the coach gets to know the student, learns about his/her strengths and weaknesses, and elicits feedback about the student's goals and preferences for interacting with the coach. After the intake, Edge coaching involves weekly, pre-scheduled phone calls between a coach and student lasting approximately 30 minutes. Coaches and students also exchange brief e-mail messages, text messages, or follow-up phone calls between weekly coaching sessions as needed. These interactions often involve the student reporting on his/her progress, the coach asking how a particular plan unfolded, or the sharing of an affirming message or information by the coach that may be of interest to the student.

ADD coaches typically address goals closely linked to students' executive functioning skills. Edge coaches in particular work with students in seven major areas: scheduling, goal setting, confidence building, organizing, focusing, prioritizing, and persisting at tasks. They help students assess their environments, identify needs, set goals, and offer suggestions and guidance. Coaches also set structures, provide support, and help students implement strategies for skill building. They monitor student progress and goals through their regular phone or e-mail check ins (www.edgefoundation.org/parents/how-a-coach-helps).

Data Collection

Participation involved provision of information and utilization of weekly coaching sessions throughout the semester. One of the authors collected students' self-reported demographic data and their semester and cumulative GPA and academic credits from university records. All participants completed the online *Learning and Study Strategies Inventory, 2nd edition* ([LASSI]; Weinstein & Palmer, 2002) at the beginning and end of the semester. The LASSI is an "80-item assessment of students' awareness about and use of learning and study strategies related to skill, will and self-regulation components of strategic learning" (www.hhpublishing.com/_assessments/LASSI/index.html). Results address 10 scale areas (skills such

as Time Management; beliefs such as Attitude) that are averaged into three cluster scores: Skill, Will, and Self-Regulation. All scores are reported as percentiles. As this study was primarily qualitative in nature, students' LASSI scores and GPA data were used to triangulate findings from interviews with participants.

Data Analysis

Due to the nature of this pilot study, which centered on formative evaluation, and the small sample size, hypothesis testing is not appropriate. Nevertheless, an examination of the mean scores for the three LASSI clusters (Skill, Will, and Self-Regulation) demonstrated increasing trends for all three clusters. This provided evidence that the coaching intervention was successful in increasing key beliefs and skills related to academic success, including executive functioning in university students with ADHD.

Students agreed to participate in a one-hour qualitative interview with the first author on campus during the end of the semester. See Figure 1 for the interview protocol. These one-on-one qualitative interviews took place approximately 10 weeks into the semester. They were audio recorded, transcribed, and analyzed to identify emergent themes. Students were asked to bring an artifact to their interview (see Table 2). Artifacts were described as "any object you make or find that represents what coaching means to you." Interviews began by reminding students of their stated reason for participating in the study, based on comments in their demographic data form. The artifacts were photographed and students' comments about them were also used to help triangulate interview data.

All interview transcripts were analyzed in depth by the two research team members who have received training as ADD coaches. Both team members listened to each interview and read the verbatim transcripts prior to the coding. The first author completed an initial round of coding of all transcripts (Charmaz, 2001; Denzin & Lincoln, 1994). Separately, another research team member then applied these codes to extensive excerpts from three transcripts. A high degree of inter-rater reliability was reached through iterative discussions about the application of codes to all cases. These team members then triangulated the emergent themes by comparing their findings to students' artifacts, GPA data, LASSI scores, and students' reasons for seeking coaching services (Hoepfl, 1997). This led to the creation of a cross-case display of example data

points from a variety of students in response to each research question (Miles & Huberman, 1994). All four research team members then reviewed the cross-case display to finalize results by linking emergent themes to the research questions. By moving from isolated examples of students' thoughts, feelings, or activities in their coaching relationship to broader explanations of how coaching promoted their executive functioning skills and sense of well-being, the research team used a "bottom up" approach to construct meaning from the data (Miles & Huberman, 1994).

Results

Enhanced Goal Attainment

The first research question investigated the impact of coaching on students' academic goal attainment process. Although three students stated that coaching did not influence their goals, most participants reported that coaching changed how they formulated their goals and improved their capacity to attain them. These students noted that coaching helped them set higher academic standards and establish goals that were much more specific, broken into component steps, and linked to incremental deadlines.

Olivia did not believe that coaching changed her tendency to set goals. She asserted, "I never really had a problem establishing goals before so I don't really think that was an issue." Conversely, Joe described a change also reported by other students when describing coaching's influence on how he established goals:

I'm setting higher standards [now]. I'm trying to reset higher standards for myself because, coming into college, my expectations were, "Oh yeah, hey; 3.6, 3.7 [GPA], no big deal because, just coming from high school, that's just the way everything worked." So resetting those higher standards has been something I have been talking to [my coach] about.

Once students had academic goals in mind, the majority believed that coaching helped them act on their goals with more effective strategies and greater motivation. Several students described new time management techniques they developed with their coach, for example, that enhanced their ability to monitor progress toward these goals across time. Two students developed new habits of writing down or visualizing outcomes that helped them remember

Table 2

Qualitative Interview Protocol

Research Question 1: What are students' perceptions about the effect of coaching on their process for achieving academic success?

Prompts:

- Since you started working with a coach, have you noticed any changes in how you identify or create your academic goals?
- Has your coach helped you change anything about how you work towards your academic goals? If I were to ask someone who knows you very well and interacts with you a lot if coaching has changed anything about you, what would they say?
- If not mentioned by students, follow up with this prompt: "Self-talk" is when you hear your own voice or someone else's voice when you're thinking about what you have to do. Has coaching changed anything about your self-talk?

Research Question 2: What benefits, if any, do you associate with coaching services?

Prompts:

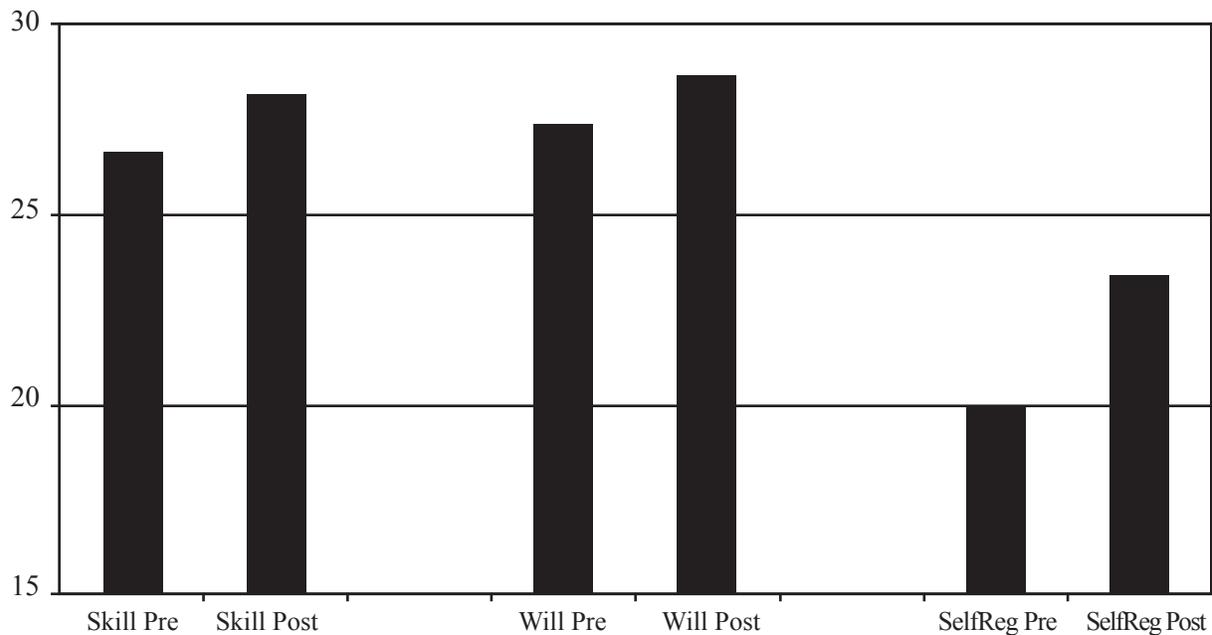
- What's the most useful outcome of working with your coach?
- If another college student asked you to describe what you liked about working with a coach, what would you say?
- Has coaching helped you achieve better grades? Or achieve those grades in a better way?
- Besides grades, can you identify any other benefits of working with a coach?

Research Question 3: What do students perceive as the relationship between coaching, their academic success, and their subjective well-being?

Prompts:

- Is your work with a coach having any impact on the stress you feel about being in college?
- Fill in the blank: "Working with a coach helps me feel ____." Please say more about that.

Figure 1. Pre- and Post-Test Cluster Scores on LASSI



Due to the nature of the pilot study, which centers on formative evaluation, and the small sample size, hypothesis testing is not appropriate. Nevertheless, the chart above demonstrates the increasing trends for all three clusters: Skill, Will, and Self-Regulation. This provides evidence that the coaching intervention was successful in increasing key beliefs and skills (including executive functioning) in university students with ADHD.

goals and maintain motivation for reaching them. Despite their overall high levels of academic success, these freshmen, sophomores, and juniors all found it difficult to break large deadlines into smaller chunks of activity. In many cases, coaching helped students develop new approaches to reframing their goals as a series of steps. Steve brought a map of the ski runs in Steamboat Springs, Colorado as his artifact. He and his father had recently skied there during spring break. When asked to describe how this map symbolized his experiences with coaching, Steve said:

My dad and I went skiing. We would find ourselves here or here [pointing to slopes on the map]. And we were like, “Gosh, we’d really like to get here. How can we do that?” It’s like, “Oh, left here, right here, lunch, here, here, here. A to B to C to D. Then we can really take that run we want to take!” Interviewer: What about that makes you think of coaching?

Well, I’m kind of being redundant here, but the whole goal-setting/oriented thing. Like, “Here’s what you want to do. How is it that you can accomplish that?” I guess if I had a roadmap, that would be an even better example, but ski lifts are more fun.

Olivia’s coach helped her develop time management skills that facilitated her ability to work across time on large projects. This incremental approach contrasted with her earlier pattern that often included significant procrastination. Olivia reported:

[Before coaching] I would be really sleep deprived, cram it all in and get the grades I needed, but I just never felt like I had time. And everything was always urgent; last minute. And so [my coach] has taught me to – we have a Google calendar and she has access to it, too. And I put all my classes and meetings and everything into it and in my free time allocate, working out or going grocery shopping

or study times. I have repeated study times every week... It's more the way learning is supposed to be [laughs] – gradual, doing things before they become urgent.

Rob was a visual thinker who could easily envision the buildings he wanted to design, but his ADHD challenged his capacity to carry out the steps needed to implement these ideas. The space in which Rob lived and worked often became disorganized, too. Much of this changed during the study. Rob's roommate was overseas in a study abroad program during the study. He commented that the roommate would have been pleased by how much neater their room had become. After nearly three months of coaching, Rob reported with a smile that his professors had also notice positive changes:

Yeah, mainly with my work being done in my architecture studio. People have commented that, "Wow, you're really producing this semester," or, "Wow – you're," I don't want to brag, but – "further ahead than everyone else," or whatever. Just small comments like that that you occasionally hear that I might not have heard last semester.

Similar to Rob and most of the other participants, Joe began to notice that his internal state of mind while being coached produced positive changes in his goal-attainment efforts. When asked if coaching had changed anything about him, Joe thought for a moment before saying:

I'm more prompt. I hold my commitments better. Which is something I did before [coaching], but something I just realized is more and more important. My room's a little more organized. I think more of what coaching has given me is an internal awareness and internal focus on what it is I need to do to improve a very specific aspect of my life that not everyone always sees. It's more of a fine-focused knob type of thing.

While most students attributed their high grades to their own talents and efforts, nearly all credited coaching with improvements in *how* they achieved those grades. Participants talked about becoming more consistent in their work habits, using new techniques for test-taking and reading comprehension they had

developed with their coach, starting earlier as they began to study for exams, and studying more consistently over time. This finding merits further investigation since four of the seven students' grades did, indeed, improve while being coached. One remained the same (4.0) and two declined slightly. When asked if coaching led to better grades, Olivia quickly said, "I actually don't think so. Grades were never really an issue for me ever." Alex was more forthright in expressing an opinion shared by most of the students. "No," he said, "but, again, I wasn't doing it for academic reasons." That said, Olivia's semester GPA rose from 2.88 to 3.38 during the study and Alex's increased from 3.48 to 3.68.

Zach is the only student who directly linked coaching to his GPA. He felt strongly that coaching helped him earn better grades, which was confirmed as his GPA climbed from a 2.0 to a 3.01 during the study. As he said:

Yeah, I've seen my grades go up. For example, I started coaching after my first exam in Biology. And I was talking to my coach. We were recognizing some of the issues I was having studying for the last test, making sure that I was putting in enough time to study. And then, also, checking in to make sure that I was actually doing what I said I was going to do as far as studying goes for the test. And on the second exam, I went from – I actually failed the first exam. Luckily, I could drop one. But on the second one, I got above the class curve... It felt good, like, "I can actually do this."

Caring, Accountable Relationships

The second research question explored benefits that students associated with coaching services. Overall, they reported that a productive relationship with their coach helped them feel motivated to achieve or maintain academic success in a demanding postsecondary environment. Students appreciated their coaches' ability to challenge them to achieve meaningful goals. At the same time, they enjoyed working with coaches who clearly understood them, recognized the impact of their ADHD on their lives without becoming critical of them, and cared about their feelings and experiences. Participants reported that a working relationship with these coaches allowed them to become more proficient and confident.

To explore this research question, students were asked to identify the most useful outcome they could

attribute to coaching. Their comments overwhelmingly focused on helpful dynamics in their relationship with a caring coach. Some students spoke to qualities in the coach, such as being a skilled facilitator of the student's planning process, tailoring suggestions to that student's needs or preferences, holding students accountable in a respectful but consistent manner, or demonstrating an accurate awareness about ADHD. Other comments reflected what students gained from the coaching relationship, including greater accountability to themselves, new strategies for accomplishing goals and living more balanced lives, enhanced self-awareness, and increased confidence about achieving their goals.

While all the participants respected their coach's professional skills, nearly all of them also described their coaches as genuinely caring people. Joe spoke at length about how often his coach helped him generate and sustain a sense of optimism as he moved through his demanding week. Like Tim, Joe often looked down at the floor while talking, rarely laughed, and described few experiences in which he felt happy. His goal attainment was clearly enhanced, however, from the relatedness he enjoyed with his coach:

When I work with an Edge coach, I feel like it's a step in the right direction personally, emotionally. Because a lot of the setbacks that I've had, I can at least make myself feel better in that I am giving it effort. I'm giving it my all... I think that the Edge coaching reminds me of that a lot; that I'm really trying to do something about it. It's also giving me someone to talk to who specifically knows these things... When I first started talking to [my coach], she summed me up pretty well and it seemed like she understood where I was coming from. And that's not really common... I feel that she has helped me move to a more comfortable state of mind.

Students were asked to discuss what they liked best about working with a coach. Here, their comments centered on coaches' skill and empathy. Students developed strong working relationships via weekly calls despite never meeting their coach in person. They appreciated the coaches' knowledge about ADHD and their expertise in motivating them and helping them manage stress. Students described coaches as focused on their priorities and adaptive to their thinking styles and personalities. Alex, the circumspect freshman,

was relatively expressive when describing what he liked best about working with his coach. He reported that she was "very flexible and open and had pretty good insights. She was also willing to talk about what I thought was most important and didn't adhere to any strict scheme or anything. So she was very good." He added an appreciation for his coach's ability to inform her insights about his experiences with expert knowledge:

Sometimes I would describe something and she had information about how it was typical of the ADD brain and how this kind of thing that I was experiencing is not really stereotypical of ADD, but was typical of people who had ADD. And shared some techniques she had used with people in the past.

Rob, the junior who majored in an arts-related field, was even more explicit in describing the depth of relatedness he felt with a caring coach. He reported that her support of his efforts enhanced his motivation throughout the week. When asked what he liked best about coaching, Rob leaned into the conversation and stated with quiet conviction:

Besides the benefits, I think the relationship. Developing a relationship is very helpful in keeping you; it's almost like developing a relationship with an angel on your shoulder or something. It's just kind of nice to have a good relationship with someone that can help you.

Interviewer: What do angels on your shoulder do?
[Laughter]: They keep you upbeat when it would be very easy to crash and burn.

Steve particularly enjoyed his coach's ability to relate to his ADHD by describing strategies that worked for other college students with this disorder. The coach offered strategies to Steve for his consideration without conveying an expectation that Steve had to utilize them. As a freshman, Steve had not yet met many other college students with ADHD. He, too, appreciated working with someone who seemed to know him well:

I would say [to my coach], "Look, I'm having this problem, right?" Or we'd be, like, "Here's a goal. Why aren't I reaching that goal?" "Oh, it's because of this problem." And then he would say, "Well,

some people like yourself with ADD, they would try x, y, and z.” And I’m like,” Wow, that’s really helpful to know what other people kind of like me in similar situations are doing and how they solve their similar problems.”

Like many other participants, Olivia and Steve enjoyed being accountable to their coach. Coaches held students accountable by reminding them of their goals and asking students for honest accounts of their goal-directed efforts or lack thereof. Rather than creating a negative wedge in the caring relationships they built with their coaches, students said that being held accountable helped them progress and demonstrated their coaches’ commitment to their success. Olivia had achieved academic success as a sophomore but often felt stressed out due to the many obligations in her socially active life. Being accountable to her coach helped Olivia strike a more manageable balance between commitments to others and to her own goals and needs:

I would say I am holding myself much more accountable for my actions and for the outcomes of my actions. I was never somebody who blamed everyone for problems, but now, if something needs to be done, nobody’s going to do that for me. I need to do it. I do what I want to do and I get it done and I maintain that. That actually helps. It’s an exponential effect that makes you want to be more organized in another area that keeps reinforcing your motivation to do other things.

Steve reported that his coach’s habit of holding him accountable appealed to his thinking style. Consequently, he began to internalize his coach’s accountability questions:

The next question I got used to hearing was, “Well, how do you think you might get to that? What steps do you need to take to do that? What’s effective? What’s not effective?” And [my coach] was really pretty analytical in going through those things. And while I consider myself to be an analytical person from the start, it’s entirely another thing to have someone sit down with you and force you to go through the methodology.

Even Tim, the junior who struggled with many emotional issues that complicated his ability to take

action on his goals, appreciated being held accountable. He acknowledged some difficulty in being honest with his coach. Nonetheless, he described her as non-judgmental as she sought to understand how he worked toward his goals. Tim said:

Working with an Edge coach helps me feel more that the tools I have around me can be a lot more simple than I make them. An Edge coach also makes me feel that I need a lot more therapy before I can start doing coaching and really be effective about it.

Enhanced Well-Being and Self-Control

Overall, students described a more positive sense of well-being that emerged from the increased self-regulation they achieved through coaching. As students realized that coaching helped them gain greater control over their goal-directed behaviors and minimize their daily stress, their confidence increased with their academic proficiency. This finding was reinforced by students’ LASSI scores (see Figure 1). Post-test scores on this measure of students’ study habits and beliefs showed gains in all areas. The area of greatest improvement was Self-Regulation, which measures students’ ability to employ their skills across time in order to accomplish their goals. There was an overall and positive trend in the participants’ GPA data as well. Participants’ average semester GPA at the beginning of the study was 3.05 and increased to 3.22 by the end of the study. While most students did not feel that coaching had a direct impact on their grades, this GPA trend suggests otherwise.

Participants described many ways that coaching helped them formulate and work toward goals in new ways, most of which were academic in nature. In addition, students observed that coaching improved their beliefs and feelings about their capacity to accomplish these goals. In general, students stated that they were becoming more self-regulated. They were more mindful of their goals and more likely to accomplish them in a timely, calmer manner. Several students described themselves as less likely to procrastinate; three students declared that they had become more organized. Students also noted that these positive changes were often noticed by others, including suitemates who appreciated more organized rooms, friends who sought help for achieving their own goals, and professors who complimented a student for his consistently improved studio work.

Olivia's artifact was a photograph on her cell phone. Although small and grainy, it was easy to see a very neatly-made bed next to an organized desk. With a broad grin that communicated a deep sense of satisfaction, Olivia explained that her bedroom was typically in disarray prior to coaching. This made it difficult to find study materials and left her with the feeling of being judged by her sorority sisters as highly disorganized. She identified a "neater room" as a goal when she began coaching. At first, the ideas she and her coach generated did not result in this accomplishment.

So, we tried for the first couple of weeks. [My coach] gave me ideas and it didn't really happen. And then one day before Spring Break, maybe a week or so before, I had a free day and it was right after we had talked. We had gone through and talked about all [the] different ways I could reorganize things to have more space, to put things that were cluttering everything up in spaces. And I now have all this empty storage space! And I have a lot of stuff, too, so that's a big deal [laughs]. And I just went through and spent a couple of hours doing this big overhaul. And then my coach talked with me about ways to maintain that. Like, actually changing lifestyle habits.

Like Olivia, Zach brought a very personal artifact to his interview. This junior, who had failed several classes prior to the study, described coaching as a service that positively impacted his ability to achieve academic success as well as his sense of well-being. He carefully unfolded a white tissue to remove two small branch tips that had come from the same shrub. One was brittle and pale; the other was pliant and lushly green. With a shy smile, Zach explained:

So I found a bush outside and part of it was dried out and yellow. This is just a stem from this bush with yellow leaves dried out and this one is definitely still alive. It's green, it's budding, and it looks like it's flowering. Coaching is like what water might do to this plant. Coaching gives confidence. It gives a way to look at things so ideas can bud and flower with that water and without that attitude and also goal-oriented advice. It's also like a positive voice that you can keep in the back of your head that's like, "I can do this and this is how I'm going to do this and stay on track." And

then this is what it does to your mind. It keeps your mind alive and it allows your ideas to bud and flower.

To explore the final research question, students were asked if coaching had any impact on the stress they felt from being in college. While two students felt more time in coaching was needed to fully answer this question, all the participants identified specific ways that coaching had enhanced their capacity to manage daily stress more effectively. Most students reported that coaching helped them develop reliable strategies for planning and using time more effectively. As Parker and Boutelle (2009) found, coaching helped these students minimize the daily stress of college by enhancing their proficiency with managing their time, goal-directed behaviors, and emotions.

Steve and Rob both reported that the coaching sessions themselves were a break from daily stress that often left them feeling much more optimistic about meeting their goals. Both reported that coaching helped them feel that the demands on their time were more manageable. Steve tried to follow a consistent schedule to maintain his academic success. Despite achieving a 4.0 GPA during both semesters of his freshman year, he worried a great deal that his grades would slip. Steve noted that his coaching sessions were a productive and welcomed break from these tensions:

[Coaching] is just a nice break from my day. I usually have it on Wednesdays and Wednesdays are really busy. Some people feel less stressed after they've sort of planned out what they're going to do about something they are stressed about. Because it takes away the question of, "Oh, how am I going to do this?" Oh, this is how I'm going to do it. I feel less stressed about it because I know I can get it done.

Finally, students were asked to complete this open-ended statement: "Working with an Edge coach helps me feel ____." Students stated that working with a coach left them feeling more proficient, less overwhelmed, and emotionally supported. Participants reported feeling more "proactive" and "organized" due to coaching. Having survived a challenging sophomore year, Zach provided a brief but powerful response when asked how coaching made him feel. "Confident," he said. "Everything is doable." And then, grinning broadly, he added, "Yeah."

As participants discussed coaching's impact on their process for accomplishing goals, self-talk emerged as a final and specific area of growth. Self-talk refers to the use of covert or overt language to organize one's thinking or engage in problem-solving skills (Depape, 2006; Duncan & Cheyne, 1999). Barkley (1999) and other researchers posit that adults with ADHD are often delayed in their development of effective self-talk as an executive functioning skill. With one exception, students described a growing use of self-talk that they attributed to coaching. This form of verbal reflection had various purposes and benefits. Some students simply used self-talk to remind themselves of their goals. Several students described self-talk that kept them on task by identifying negative or positive consequences to their current behavior. Steve compared his self-talk to a chess game as he found himself anticipating what his coach might ask him while working on his goals in-between weekly sessions. Joe found himself hearing his coach's voice during the week, buoying his confidence by countering self-critical doubts with a reassuring confidence that he was making progress on his goals. Two participants provided particularly telling examples of their use of self-talk. Olivia described how she used it to promote on-task behavior:

If I have on my Google calendar that I have study time now when I come from class and I'm like, "I'd rather just watch TV," I would be like, "This is time that I'm going to be missing sleep later if I'm not getting stuff done now." Which isn't coming from my coach. She's not telling me to not sleep to finish things. There's a new level of awareness of my time and how I spend it, which came from her influence, for sure.

Joe described many instances when his motivation or energy level lagged. These experiences left him feeling unsettled, complicating his ability to persist at his many academic responsibilities with any sense of optimism or enthusiasm. While this pattern of procrastination continued during coaching, Joe was clear that it happened less often. His changing use of self-talk helped to account for this trend:

When I'm not improving, when I'm not doing the things that I'm supposed to be doing, which is, admittedly, quite often, [I'll say to myself], "You're really tired because you pulled an all-nighter for

this exam that you studied for. You skipped your class this morning." You hear different things like that. You hear [your coach's] two cents points on what are the pitfalls of specific things like, "You should have the notes for class." If it's not [my coach's] voice, it's my voice inspired by her voice, definitely.

Several students explicitly stated that the self-regulating skills they learned in coaching helped them enhance their sense of self-control. By employing the ideas they generated in their coaching sessions, students recognized that they were increasing the likelihood of accomplishing their priorities in a less stressful manner. Near the end of his freshman year, Steve said that working with a coach helped him feel "in control. Just like the planning thing. And if you have the ability to set goals and to design ways to reach those goals, then you are in control of what you can do." Olivia echoed Steve's experiences when she replied:

I would say "organized." In control, not of myself but of my daily life and of the situation; daily experiences. Probably less stressed and more confident in my abilities to get the things done that I need to get done, again, in a timely manner.

Discussion

This small pilot study investigated coaching's impact on the academic experiences of seven undergraduates with ADHD. After 10 weekly half-hour phone sessions with a highly trained ADHD coach, most of the students' grades increased. One remained the same at a 4.0; two students' grades dropped slightly. The participants' LASSI cluster scores all increased in the areas of Skill, Will, and Self-Regulation, particularly strong growth was seen in their Self-Regulation pre/post scores. Three major themes emerged from qualitative interviews with students about their coaching experiences, in which they used personal artifacts to discuss how coaching had influenced their thinking and behaviors. These themes were strengthened by patterns in their GPAs and LASSI scores. First, coaching helped students enhance their ability to achieve academic goals that, in many cases, become more specific and rigorous as the study progressed. Second, the participants enjoyed working with their coaches. This was due to the coaches' ability to interweave challenges and supports into their work with students. Coaches

challenged students to make their goals more specific, develop more realistic plans for achieving them, notice and report on ensuing barriers or successes, and be accountable for their efforts to take action on their plans. At the same time, coaches supported students by listening without judgment, affirming their feelings, and sharing relevant information about how other students with ADHD have succeeded in academic settings. Finally, students reported feeling less stressed and more in control of their academic and personal lives. They expressed greater confidence in their ability to sustain effective efforts regarding their studies, thereby demonstrating greater academic self-regulation.

These findings suggest that coaching appears likely to help many college students with executive functioning challenges achieve greater academic success. For students who do not respond well to prescription medication for ADHD, who choose not to use a pharmacological treatment, or who do not have a diagnosed attention disorder, however, coaching may emerge as a viable new tool for enhancing the matriculation of at-risk students. Coaching also appears to help students manage daily levels of non-clinical stress, worry, or anxiety about their academic goals. As Parker and Boutelle (2009) found, students in this study began to feel, after just one semester of coaching, greater confidence in their ultimate success that enhanced their motivation and sense of well-being. Students with ADHD are often at risk for experiencing significant affective distress as they attempt to manage their increased demands on their executive functioning once they transition to college (Weyandt & DePaul, 2006; Wolf, 2001). Clinical disorders such as depression and anxiety are appropriately treated by psychiatrists, psychologists, and trained therapists. That said, coaching may succeed in minimizing the threshold of affective distress that ultimately triggers a need for more formal psychiatric services as students struggle to take greater control of their schedules and lives. This effect may have benefits for students with and without ADHD as campuses report a growing population of students flooding counseling centers after becoming overwhelmed by the demands on their daily functioning and problem-solving skills (Kadison & DiGeronimo, 2004).

The participants in this pilot study were clear that coaching helped them achieve academic success with lower levels of stress as their self-regulation grew. Coaching has been compared to therapy, in

that both models employ the use of questions to elicit information from individuals (Jaksa & Ratey, n.d.). This similarity has created some confusion on college campuses that seek to identify differences between coaching and other models, such as therapy, and the types of professional training that qualified coaches should have (Byron & Parker, 2002; Quinn et al., 2000). None of the participants described their coaches as therapists or seemed to think of coaching as a form of counseling. Indeed, Tim noted that coaching helped him appreciate his need for additional therapy. Still, many students reported that their coaches' empathy, support, and assistance enhanced their skills while also diminishing their worries about meeting their academic responsibilities. This finding has been reported in other studies of ADD college coaching (Parker & Boutelle, 2009; Zwart & Kallemeyn, 2001). Rob summed up the reassuring but non-therapeutic nature of coaching when he said:

It's nice to have someone there that – for instance, if you have a really tough week, you can express some stress and then [my coach] will say, "Okay, well, this sounds hard, but doable. Let's break it down." And then through that process, I wasn't stressed out then but I knew I was going to be in a couple of days, since I had things due back-to-back-to-back. I was going to be stressed out. By having her there to help understand that it's all doable, definitely helped the stress.

Limitations

Primarily qualitative in nature, this small pilot study generated findings that cannot be generalized to other settings or populations. Indeed, given the decision to restrict seniors and undergraduates who had been diagnosed with co-existing disorders in addition to ADHD from participating, the pool of potential participants in this study was narrow by design. The seven participants constituted more of a convenience sample, consequently, and ultimately included just one female participant. The pilot study took place at a highly selective university whose admissions standards resulted in a participant pool of students who, with one exception, were already achieving strong grades. Despite these limitations, students' stories about their coaching experiences revealed significant daily struggles with organization, time management, self-esteem, and chronic feelings of being overwhelmed. While these

students may have greater tools for resilience than a broader population of college students with ADHD, they developed new competencies through coaching that supported their academic success and enhanced their quality of life. Coaching may produce even more significant outcomes in other settings.

Implications for Further Research and Practice

A larger study on a variety of campuses (i.e., 2-year and 4-year campuses, including postsecondary settings that are not as academically rigorous as the pilot study setting) is needed to further test the relationship between ADD coaching and academic success. A comparison group design would enhance the ability to compare students with ADHD who received coaching with those who did not, with a focus on any differences that could be attributed to coaching. The authors are currently conducting a larger field test of this nature, using insights gained from this present study. In addition to GPA and LASSI scores, an appropriate measure of students' subjective well-being could further identify any meaningful differences between students who receive coaching and a comparison group of students who do not.

As the number of postsecondary students with ADHD who request academic supports grows, and campus professionals respond to additional requests for help from students who may or may not have ADHD but request help with organization, time management, and emotional self-regulation, coaching appears to be a promising new model of academic support. Some campuses, such as Landmark College and the University of North Carolina at Chapel Hill, provide on-campus coaching from highly trained service providers. Many other campuses (Byron & Parker, 2002) seek sources of highly trained coaches to whom they can comfortably refer students. Private sources of highly qualified ADD coaches such as the Edge Foundation may create a useful new option for disability service providers who are not, themselves, trained coaches.

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The Effects of Instruction in a Paired Associates Learning Strategy as an Intervention for College Students with Learning Disabilities

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Abstract

A multiple probe across subjects design was used to evaluate the effectiveness of instruction in a Paired Associates Strategy provided to nine college students with learning disabilities on their ability to identify and recall important information from textbooks. Students received instruction in the strategy in the context of an on-campus disability support service center. Results of the study indicated that instruction in the Paired Associated Strategy improved students' ability to identify important information from textbooks, create study cards, and to recall that information in testing situations. Instructional data are presented as well as implications for future research and campus practices.

Increasing numbers of students with learning disabilities (LD) are attending colleges and universities upon completion of high school (Brinckerhoff, Shaw, & McGuire, 2002; Ellis, Sabornie, & Marshall, 1989; Murray, Goldstein, Nourse, & Edgar, 2000). However, college students with LD are graduating from institutions of higher education at lower rates than their peers without disabilities (Murray et al., 2000; Vogel & Adelman, 1992). According to a report from the National Longitudinal Transition Study-2 on postsecondary outcomes of youth with disabilities, although 89% of postsecondary students with disabilities reported that they were working toward a diploma or certificate, only 29% had graduated or completed their programs by the time they left their postsecondary institution (Newman, Wagner, Cameto, & Knokey, 2009). Like all college students, those with LD encounter complex academic demands. In order for students with LD to be successful in the college setting, however, access to effective service delivery models, support, and academic interventions is often necessary.

Due to the autonomy colleges claim in implementing programs and services unique to each campus,

postsecondary students with LD often encounter vast differences in service options from college to college. While institutions are mandated to provide equal access to students with disabilities who are otherwise academically qualified, colleges are not required to follow a continuum of special education services, as are elementary and secondary schools (Brinckerhoff, Shaw, & McGuire, 2002). Therefore, colleges are allowed to select or create their own support service model for students with LD and other disabilities (Deshler, Ellis, & Lenz, 1996). Often, systems of support for college students with LD focus more on subject-specific tutoring (Hock, Deshler, & Schumaker, 1999), curriculum modification such as foreign language course substitutions, and the provision of course-based accommodations (Brinckerhoff et al., 2002). Although these are integral parts of any support and service system for college students with LD, service delivery models that only include these elements may inadvertently enhance students' dependence on the accommodations and services provided by others. Providing students with access to empirically-validated models of learning

strategy instruction, in addition to the mandated supports described above, holds the promise of teaching students more independent approaches to achieving academic success. Hughes and Smith (1990) reviewed studies involving college students with LD, only to find that there was a great absence of studies that focused on specific interventions or instructional approaches for this population. Given this lack of intervention research, and knowing that students with disabilities report various reasons for leaving postsecondary school and not attaining their degrees (Newman et al., 2009), a lack of validated interventions is one possible explanation for the high numbers of college students with LD who fail to attain their college degrees. A model that combines traditional support services with specific interventions designed to help students independently meet the demands of complex academic settings may lead to improved outcomes for college students with LD.

Without the use of specific interventions that are designed for their unique learning needs, students with LD may continue to lag behind their peers without disabilities in graduation rates and other indicators of college success (e.g., job placement following graduation, satisfaction with college experience). Development of specific interventions should include consideration of the existing college-level learning environments. Currently, many segments of the higher education community use instructional practices derived from traditional adult learning theory. Prominent areas of adult learning theory, such as self-directed learning (Rogers, 1969), transformational learning (Mezirow, 1981), and experiential learning (Brookfield, 1995), are constructivist in nature. Constructivist processes are those that “emphasize that it is the learner who makes learning occur, and materials, teachers, and other external influences are important only if they provide experiences that enable the learner to construct new meanings” (Mercer, 1997, p. 295). Although traditional constructivist instructional methods may be successful for the majority of students, they do not appear to be sufficient for many college students with LD. While many students with LD meet admission requirements and are determined to earn a degree, they often lack the necessary strategies needed to successfully construct their own learning and cope with the academic setting demands of the college environment (Ellis, Deshler et al., 1989).

One learning tool that has been empirically validated at the K-12 level and may hold great promise in postsecondary settings is strategy instruction. While

strategy instruction can take a variety of forms, the Strategic Instruction Model (SIM) developed by researchers at the University of Kansas (KU) Center for Research on Learning is a model that has undergone stringent validation processes and is arguably the most prevalent commercial strategy curriculum used in K-12 settings in the United States (Clark, Deshler, Schumaker, Alley, & Warner, 1984; Ellis, Deshler, & Schumaker, 1989; Hughes & Schumaker, 1991; Lenz & Hughes, 1990). The SIM is a curriculum of numerous strategies, each designed to improve students’ independent performance in a variety of academic skill areas. Each strategy is made up of steps that cue the student to take certain physical or mental actions as they approach a task.

Systematic field tests have validated strategy instruction as having high potential for allowing students with LD to cope more effectively with the academic demands of the secondary school environment (Deshler et al., 1996; Deshler & Schumaker, 1986). Schumaker and Deshler (1984) also point out that, ultimately, the responsibility of performance shifts from the teacher to the student. Given mastery of several learning strategies, the student becomes capable of analyzing the setting demands and choosing or designing an appropriate strategy to meet those demands.

It is feasible that at least some of the KU Learning Strategies Curriculum could serve as an effective intervention model for college-age students with LD who have difficulty meeting academic demands. Strategy instruction could serve as a potential alternative to, or enhancement of, tutoring and curriculum modification and benefit college students with LD (Ellis, Deshler et al., 1989). In a study to determine the direct service needs of college students with LD, McGuire, Hall, and Litt (1991) found that “without specific instruction in study skills that are critical in dealing with the demands of college studies, LD students may be at risk because they lack the tools of learning that many college faculty assume they have mastered” (p. 104). Further, students with LD in postsecondary settings may be at risk due to the traditional focus put on specific subject tutoring and academic accommodations and the possibility that these approaches do not improve students’ independent learning tools. Indeed, many of the articles about this topic published in the last two decades continue to reflect the earlier findings of Hughes and Smith (1990), (e.g., Alster, 1997; Hock, Deshler, & Schumaker, 1999; Holzer, Madaus, Bray, & Kehle, 2009; McNaughton,

Hughes, & Clark, 1997; Raskind & Higgins, 1995; Reed et al., 2009; Ruhl & Suritsky, 1995; Runyan, 1991; Schiff & Calif, 2004).

Many of these studies involved interventions or approaches that were dependent on assistive devices or instructor behavior but a few investigated the effects of strategy instruction. Zawaiza and Gerber (1993) examined the effects of explicit instruction on the word-problem math performance of community college students with LD. Results indicated that students were “responsive to strategy instruction and can change their problem-solving behavior accordingly” (p. 78). Butler (1995) conducted research to investigate the effects of the Strategic Content Learning model on the ability of adults with LD to use self-regulated and strategic learning techniques. Results indicated that students improved task performance while becoming more active in developing and modifying strategies to help them complete academic tasks. In addition, participants generalized strategies to new settings and situations and they attacked new tasks in a strategic manner. Spiegel and Barufaldi (1994) investigated the effects of instruction in a strategy to construct graphic post-organizers on the immediate recall of science knowledge. Results indicated that students who used the post-organizer strategy to develop a graphic representation of text structure recalled more information than students who simply highlighted, underlined, or reread text to gain information from anatomy and physiology textbooks. As the need for effective support services for students with LD in colleges and universities continues to grow, so will the need for research that demonstrates effective means for this sizable population to meet the complex demands placed on them by the college and university settings.

The behavior of faculty members is also a key focal area in developing models of intervention for college students with LD. Instructional practices such as the pause-procedure (Ruhl & Suritsky, 1995) and providing extended time (Alster, 1997; Runyan, 1991), however, create an environment in which students’ success may be dependent on the behavior of the professor. Some research has described interventions that create student dependence on devices such as computer spell-checking programs (McNaughton et al., 1997) and speech synthesis devices (Raskind & Higgins, 1995). Other interventions, such as strategy instruction, are more empowering to students. This is true because students then become responsible for exhibiting the

behavior necessary for improving performance and for generalizing the use of strategies to novel settings and situations without relying on external assistive devices or the behavior of instructors or professors.

Evidence from a small number of studies indicates that college students with LD can improve academic performance when provided specific instruction in the use of learning strategies. The purpose of this study was to add to this emerging body of research and determine the effectiveness and social validity of the Paired Associates Strategy (Bulgren & Schumaker, 1996) for college students with LD. The Paired Associates Strategy (PAS) was selected because it emphasizes the ability of high school students to read textbooks, identify important information, and strategically recall that information. These related learning behaviors are a critical skill for successful college students as well.

Methods

Participants and Setting

Students. Nine college students (referred to as S1 through S9) identified as having LD participated in this study. All participants were enrolled at least part-time at a midsize comprehensive regional public university and were receiving support services through the school’s disability support service program. Confirmation of the participants’ classification as learning disabled occurred prior to implementation of the study with the assistance of on-campus disability support service personnel. Participants were recruited with the assistance of the on-campus disability support service office. While 12 students initially expressed interest in participating and attended an informational meeting, nine participants agreed to participate after being notified on the time commitment required to participate in the study.

Student pretesting. All students identified as potential participants for the study were administered a pretest to determine their current ability to correctly identify and recall important information from printed materials. Students who scored below 90% on the Finding Information Pretest and/or below 80% on the Mastering Information Pretest were included in the study. Pretesting materials were provided as part of the PAS Instructor materials (Bulgren & Schumaker, 1996).

Instructional Setting. All sessions were conducted at the disability support service center on the college campus or individual meeting rooms in the campus

library. The library setting was used only to facilitate subject requests for meeting times after the regular operating hours of the disability support service center.

Experimental Design

Three implementations of a single-subject multiple probe research design (Horner & Baer, 1978; Tawney, Gast, & Skouge, 1984) across students were used to determine the effectiveness of instruction in the PAS on the ability of college students with LD to identify and recall important information. A multiple probe design allows researchers to determine a functional relationship between independent and dependent variables when using small numbers of subjects in a study.

Procedures

General procedures. After the collection of initial baseline data, each of the nine students who participated in the study received instruction in the PAS (Bulgren & Schumaker, 1996) from the lead author. It should be noted that in order to use the PAS or other strategies from the Kansas Strategy Curriculum, teachers or researchers must first receive training in the strategy from a trainer who has been certified by the University of Kansas Center for Research on Learning. PAS is designed to improve students' ability to identify and recall important pairs or trios of information (e.g., the *Civil War* ended in 1865; *Tim Rose* wrote *Vengeance* in 1955). Instruction in PAS took place primarily in small group arrangements of 2 to 4 students. Several one-to-one instructional sessions occurred for students who did not master the information and needed additional practice and feedback or whose schedule necessitated meeting times that could not be coordinated with other subjects. During the course of the study, instructional materials were used that are provided in the Paired Associates Instructor's Manual (Bulgren & Schumaker, 1996).

Controlled Test Probes and Content Test Probes were administered to assess student learning. The Controlled Test Probe consisted of a stimulus sheet with 20 sentences and a corresponding test sheet. Each of the 20 sentences contained either a pair of information or a trio of information (16 sentences had pairs of information and 4 sentences had trios of information). Content Test Probes consisted of stimulus reading passages that were approximately one to two pages long and double-spaced. A corresponding test sheet accompanied the stimulus passage.

During both the Controlled Test Probe and Content

Test Probe, a stimulus sheet was randomly selected and distributed. Students made study cards for the information using blank index cards provided by the researcher in preparation for a test over information contained within the stimulus sheet. Students were given 50 minutes to independently study the information and create study cards without assistance or feedback. At the end of 50 minutes, the stimulus sheets and study cards were collected. At the next scheduled meeting, students were allowed 20 minutes to review the study cards then given 20 minutes to complete the probe. The probes consisted of a 20-item fill-in-the-blank format test. Student responses were scored as correct or incorrect. Answers needed to closely approximate the required answer although exact spelling was not a requirement. The percentage of correct responses was recorded for each student.

Instructional procedures. All instructional procedures came directly from the stages of instruction in the Paired Associates Instructor's Manual (Bulgren & Schumaker, 1996). PAS is designed "to facilitate students' recall of information . . . it was developed for use primarily in relation to test situations for which the students are expected to recall factual information" (Bulgren, Hock, Schumaker, & Deshler, 1995, p. 24). All instructional sessions began with an advance organizer and ended with a review and post-organizer. PAS uses an eight-stage instructional process that employs scripted lessons for the delivery of instruction. Each stage required at least one meeting with students, and up to four meetings with students. Some stages were completed in one meeting, while others took multiple meetings over several weeks. Each student completed all stages over a two month time period.

After seeing their pretest results, the baseline condition consisted of students making a verbal commitment to learn PAS and being administered a set of Content Test Probes and Controlled Test Probes. The term "probe" refers to a quiz, or assessment of mastery of a specific skill or content knowledge. Students remained in the baseline condition until data were stable and showed no identifiable trend.

The goal of the second stage of instruction was to provide students with the specific knowledge needed to carry out the strategy. The primary behaviors necessary in using PAS are the ability to use a memory device to remember important information in testing situations and the ability to construct study cards in a systematic fashion to assist the student in studying the information.

To assist students in remembering information, a four-step mnemonic device called CRAM was used. The specific steps of the CRAM device are as follows:

- C = Create a picture
- R = Relate something
- A = Add boxes
- M = Make a code

Once students learned the CRAM device, they were taught how to systematically construct study cards through the mnemonic device called PAIRS:

- P = Pick a clue
- A = Arrange the items
- I = Identify the questions
- R = Recast the information using "CRAM"
- S = Self-test

During the third stage of instruction, the researcher demonstrated and modeled PAS through a "think aloud" process for all students. The researcher modeled both the use of the CRAM device and the PAIRS device by demonstrating several examples. In the fourth stage of instruction, students went through a process of verbal practice in which they verbally described the procedures of PAS. This allowed the researcher to ensure that each student had an understanding of the strategy and could verbally convey the concepts and processes of the strategy. A student Verbal Practice Checklist (Bulgren & Schumaker, 1996) was used for ensuring that each student met the verbal practice requirement.

During the fifth stage of instruction, students practiced using mnemonic devices on Controlled Practice Materials (Bulgren & Schumaker, 1996, pp. 170-189). Students proceeded through a series of five Controlled Practice Study Sheets and Controlled Practice Quizzes. Each set of practice materials consisted of five stimulus sentences and a corresponding answer sheet. Scores on these measures were recorded on the Paired Associates Score Sheet (Bulgren & Schumaker, 1996, p. 157). This process occurred as students proceeded through each of the five levels of Controlled Practice Materials. The researcher provided positive and corrective feedback to each student following each Controlled Practice Quiz.

After students met all mastery requirements in the Controlled Practice stage of instruction, the *Advanced Practice and Feedback* stage was introduced. During

this stage, students worked on Content Practice Materials (Bulgren & Schumaker, 1996), which consisted of reading passages from students' individual textbooks. The researcher worked with each student to identify two reading passages in a textbook provided by the student that could be used for advanced practice. Students had to find pairs of information embedded in the reading passages and create corresponding study cards. A mastery level of 90% accuracy on the Content Practice Materials was required to complete the *Advanced Practice and Feedback* stage of instruction.

The Controlled Test Probe and Content Test Probe were administered as post-tests in the seventh stage of instruction. The post-tests were taken from the same pool of Content and Controlled Probes that were used during the baseline condition of the study; however, students were given Content and Controlled Probes that had not previously been given to them during baseline conditions. The results of the post-test probe sessions were communicated to the students. Students had to meet a mastery level of 80% on Controlled Test Probes and 75% on Content Test Probes. Students who failed to reach these levels, were provided additional feedback and instruction before being administered an additional set of Content and Controlled Probes.

Contingent feedback and maintenance procedures. After each student reached mastery levels on the Content and Controlled Tests and following training in PAS, maintenance sessions were conducted by periodically administering Content and Controlled Test Probes. This was done to ensure the skills were maintained over time.

Reliability

Reliability was assessed on both the independent variable (procedural reliability) and the dependent variable (student response reliability). Acceptable levels of agreement on dependent variable reliability and accuracy on procedural reliability were 90% or higher. During the baseline probe condition and the contingent feedback and maintenance probe conditions, the researcher was 100% accurate on having materials ready, distributing cards to students, allowing the appropriate time for studying the cards, collecting the cards, waiting 10 minutes, distributing the probe, allowing appropriate time to complete the probe, and collecting probe from the students. During the instructional, or intervention condition, reliability data were collected on all stages of instruction including the describe stage, the modeling stage, the verbal practice

stage, controlled practice and feedback stage, advanced practice and feedback stage, and the generalization stage of instruction. The error rate was extremely low and the overall procedural reliability of 99% indicates the intervention was implemented reliably.

Results

Effectiveness Data

Figures 1, 2, and 3 display effectiveness data for each of the nine participants. Data are expressed in terms of percent correct on Content and Controlled Probe sessions during the baseline condition and the contingent feedback and maintenance condition.

Controlled probe session data. Prior to the intervention, students' mean scores on Controlled Probes ranged from 24% to 85% correct, with an overall mean score of 60% correct. Following instruction in PAS, student mean scores on Controlled Probes ranged from 83% to 97% correct with an overall mean score of 91% correct. During the baseline condition, individual test scores ranged from 15% to 95% correct. After instruction in PAS, individual test scores ranged from 70% to 100% correct. The performance of each individual student is discussed in this section.

A visual analysis of Figures 1, 2, and 3 reveal a consistent accelerating trend across each student following instruction in PAS. The mean percent correct score on Controlled Probes for each student increased following the instruction in PAS. Each student reached the mastery criterion level of 80% correct and eight students (i.e., all except S6) were able to reach criterion immediately following instruction in PAS and required no further instruction or feedback. S6 required one additional instructional session before reaching the mastery criterion level. Also, results indicate that students maintained mastery levels of performance on Controlled Probes for the remainder of the study.

Content probe session data. Prior to the intervention, student mean scores on Content Probes ranged from 25% to 75% correct, with an overall mean score of 55% correct. Following instruction in PAS, student mean scores on Content Probes ranged from 70% to 95% correct with an overall mean score of 85% correct. During the baseline condition, individual test scores ranged from 15% to 85% correct. After instruction in PAS, individual test scores ranged from 60% to 100% correct.

A visual analysis of Content Probe data in Figures 1, 2, and 3 reveal a consistent accelerating trend

across each student following instruction in PAS. The mean percent correct score on Content Probes for each student increased following instruction in PAS. Each student reached the mastery criterion level of 75% correct with six students (i.e., S1, S4, S5, S7, S8, and S9) reaching criterion immediately following instruction in PAS and requiring no further instruction or feedback. Three students (i.e., S2, S3, and S6) required one additional instructional session each before reaching the mastery criterion level. Also, results indicate that students maintained mastery levels of performance on Content Probes for the remainder of the study.

Discussion

This study investigated the effects of teaching the Paired Associates Strategy (Bulgren & Schumaker, 1996) to college students with LD and its influence on their ability to identify and recall important information in testing situations. Results of this study were uniformly positive and indicate that each of the nine participants in the study improved their ability to identify and recall pairs and trios of information following instruction in PAS. Data collected during the contingent feedback and maintenance Controlled and Content probe sessions indicated a 14% overlap with data collected during baseline Controlled and Content probe sessions. The relatively low percentage of overlap supports the effectiveness of the procedure.

Six of the nine students (i.e., S1, S4, S5, S7, S8, and S9) met mastery criterion levels on both Controlled and Content Probe materials during the first probe sessions following instruction in the strategy. The other three students (i.e., S2, S3, and S6) each required one additional instructional session before reaching mastery criterion levels on subsequent Content and Controlled Probe materials. This would indicate that the instructional methods prescribed in the Paired Associates Instructor's Manual (Bulgren & Schumaker, 1996) are effective in improving students' abilities to identify and recall information in testing situations.

The positive results regarding the effectiveness of teaching PAS to college students with LD are noteworthy considering how strategy instruction methodology contrasts with traditional adult learning theory instructional practices often utilized on college campuses. PAS entails systematic and explicit instruction across all stages of instruction to promote student involvement through mastery-oriented learning. In addition, PAS

Figure 1. Content and Controlled Probe Scores for Students 1, 2, and 3

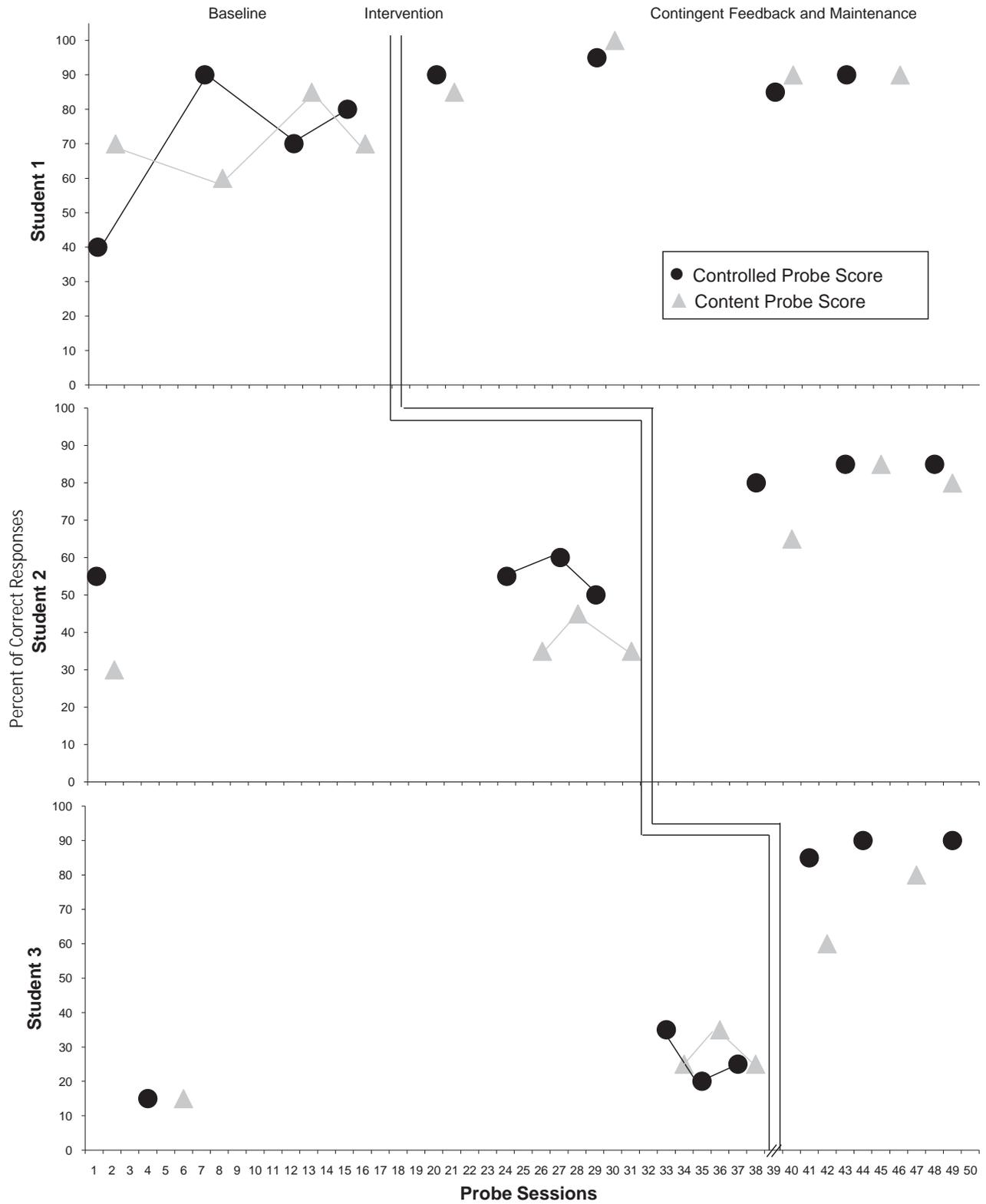


Figure 2. Content and Controlled Probe Scores for Students 4, 5, and 6

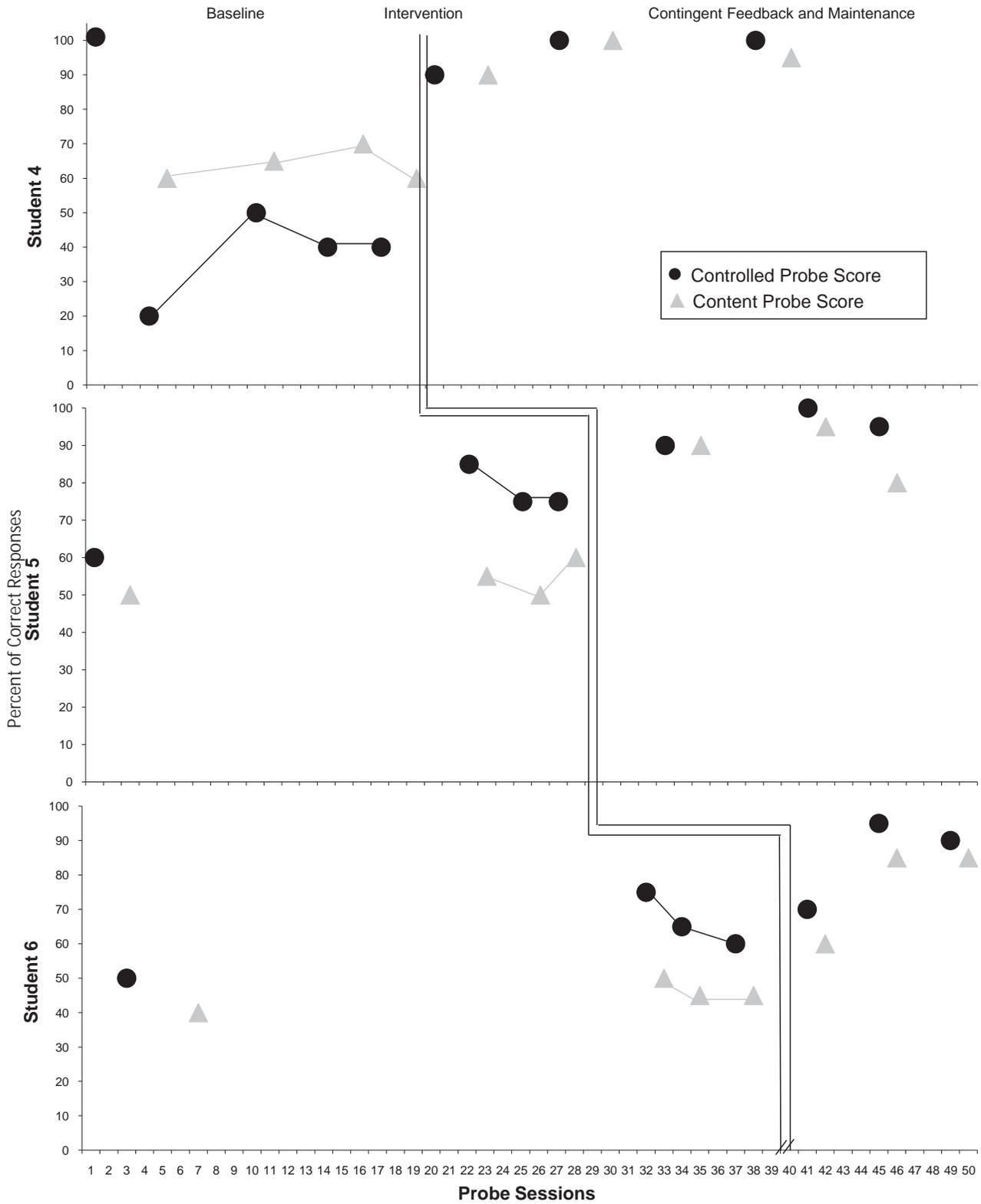
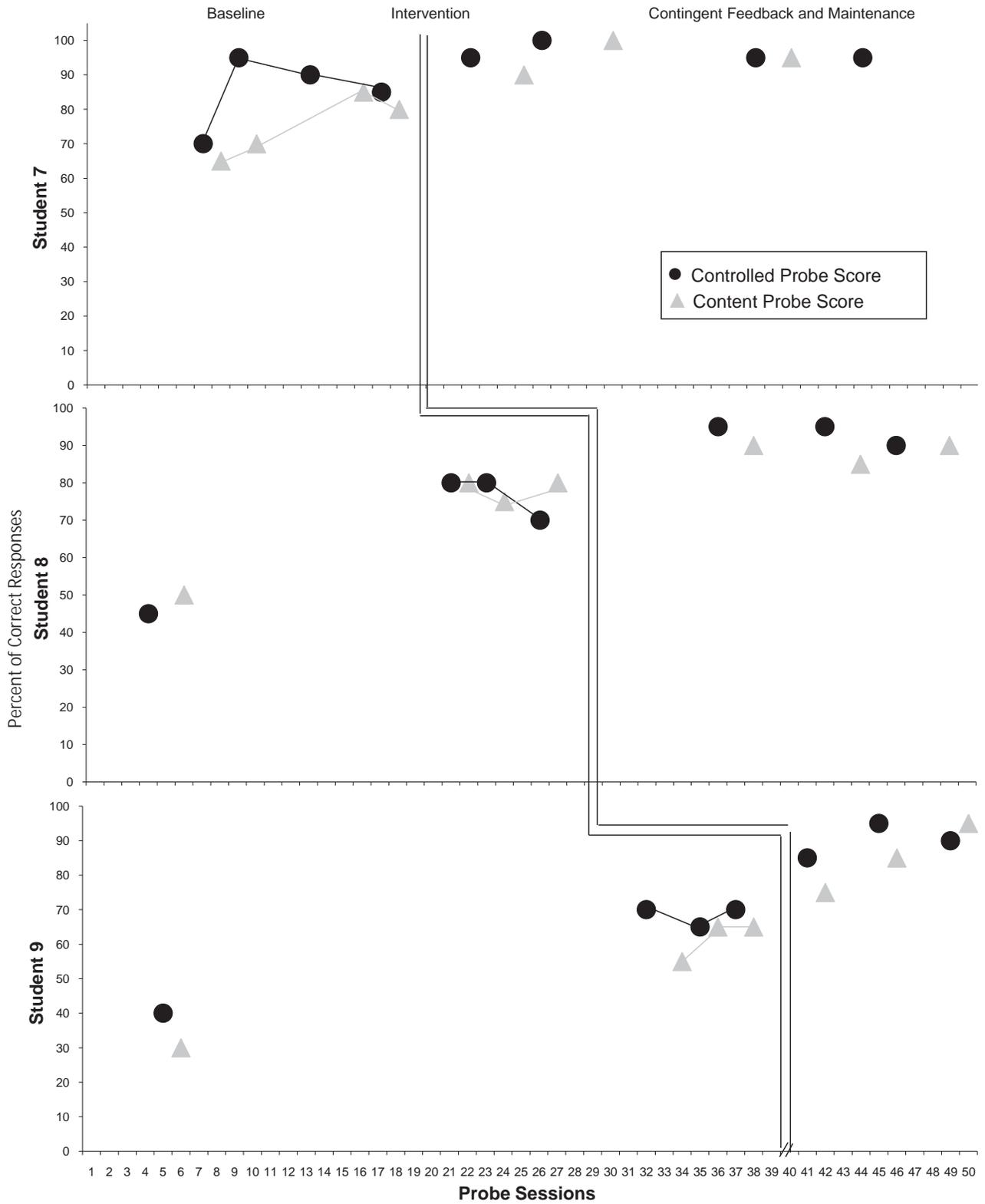


Figure 3. Content and Controlled Probe Scores for Students 7, 8, and 9



incorporates systematic procedures for teaching students how to generalize use of the strategy in independent settings. These results indicate that explicit and systematic instruction of strategies developed for use with high school students can be an effective method of instruction for postsecondary students with LD as well.

These findings suggest that it is possible to implement a strategy like PAS with minimal modifications of procedures specified in the Instructor's Manual (Bulgren & Schumaker, 1996). Most of the minor modifications implemented can be traced to the research design. In a non-research setting, students would be administered one pretest instead of repeated baseline measures that required additional sessions. Also, due to the multiple probe research design, it was necessary for students in the upper tiers of the research design replications to reach mastery levels on Controlled Practice materials before instruction could begin with students on the lower tiers. This, combined with the relatively short college semester and the limited student time available, made it necessary to combine as much instructional material as possible into the time available for instruction. The ability and necessity to combine lessons within PAS could be viewed as a positive component of strategy instruction with college students with LD because college settings are not restricted to traditional 50-minute instructional time periods found in high schools. Therefore, it may be possible to proceed through the stages of strategy instruction at a faster rate in the college setting.

Limitations of the Study

Several limitations of this study have been identified. One limitation is the incomplete student records available for the participants of the study. One student (i.e., S5) did not have achievement score records in his student file; the only documentation of LD was a letter from a school psychologist indicating his diagnosed disability areas. Other students had records that were limited in both content and expression of student strengths and weaknesses, thus reducing the ability to provide complete subject descriptions. However, all participants did satisfy university documentation requirements for receiving disability support services and exhibited academic characteristics consistent with students with LD.

A second limitation was the possibility that students had previously been exposed to some material from the Controlled and Content Test Probes. While

every precaution was taken to ensure that the material was taken from textbooks not currently used by the students, the information was factual in nature (e.g., U.S. and World History material, Science material). Little could be done to preclude the possibility that students had been exposed to some of the material at some point in their academic career.

A third limitation of the study is the use of highly motivated student participants. All of the subjects volunteered for participation in the study and were not compelled to participate for any reason other than personal improvement. Therefore, the subjects may not be fully representative of the population of college students with LD and the results can only be viewed in terms of students who sustained their intrinsic motivation to learn the PAS strategy. The only potential motivating factor identified by the researchers that may lead participants to continue participating is that the instructional process itself provided positive and corrective feedback during the instructional stages of the strategy.

A final limitation is the changes made to probe session scheduling during the contingent feedback and maintenance phase of the study. Due to the approaching end of the semester, students on the second and third tiers of the research design replications had to change from maintenance probes occurring at two-week intervals to maintenance probes occurring at one-week intervals. A one-week interval between maintenance sessions may not have been ideal in determining if students were able to maintain use of the strategy over time. Also, it would have been desirable to allow maintenance probe sessions to continue for several more weeks for students on the lower tiers of the research design replications.

Implications for Colleges and Universities

This study provided evidence that instruction in the PAS (Bulgren & Schumaker, 1996) is an effective procedure for improving the ability of college students with LD to identify and recall important textbook-based information in testing situations. This finding has implications for college students with LD and postsecondary personnel who provide services to students with LD.

Implications for college students with LD. While an increasing number of students with LD are enrolling in college (Brinckerhoff et al., 2002; Ellis, Sabornie et al., 1989; Gregg, 2007; Sparks & Lovett, 2009), they are not experiencing the same level of academic success

as their peers without disabilities (Murray et al., 2000; Vogel & Adelman, 1992). The empirical validation of effective interventions for college students with LD is one step in the process of providing college students with LD the ability to independently meet the academic demands of the college environment. Specifically, PAS can provide students a tool to promote their ability to identify and recall important information from college textbooks; a skill that the participants in this study identified as one that is important for all college students. Ultimately, the provision of strategies for meeting the academic demands of college could lead to improved rates of success for college students with LD.

Many of the support services and accommodations that college students with LD receive create an environment in which the student is dependent on others for the provision of support (e.g., tutoring, note-taking services, course outlines, etc.). Strategies are an independent tool that can decrease students' reliance on external assistance. Strategies assist students in accepting the responsibility of knowing how, when, and in what situations to use the learning techniques they have been taught, including the ability to generalize strategic learning skills in new situations. While there is an initial investment of time and effort in both teaching and learning a strategy, the positive effects can be long lasting. When used in conjunction with other services and accommodations, strategy instruction could prove to be a factor in helping college students with LD to achieve higher persistence and graduation rates.

Implications for postsecondary disability service providers. The findings of this study indicate that strategies such as PAS can be taught to college students with LD in disability support services settings including small group instruction and one-on-one instructional formats. This offers personnel who provide services to college students with LD another resource for providing these students with empirically validated supports during their academic careers. In addition, the findings of this study may spark interest in postsecondary faculty and disability support personnel to conduct more research on strategies and other instructional interventions in an effort to identify effective models of support for students with LD. Also, the findings may assist in creating avenues for collaboration between disability support offices and other academic skills staff on college campuses or colleges of education, who may have expertise and personnel who could assist disability support offices with strategy instruction.

Future Research

The present study leads to at least two areas in which further research is warranted. First, future research needs to address the generalized use of PAS by college students with LD. A follow-up study of the participants could yield important data about their ability to maintain and apply the strategy to novel settings and situations over time. This will be critical when designing systems to implement this type of strategy use in college disability support service environments because of the importance placed on independent learning in college settings.

Finally, future research should be conducted to identify other strategies and instructional approaches that can assist students with LD to independently meet the academic demands of the college environment. While the strategies developed at the University of Kansas have shown great promise, there are other strategies developed individually by practitioners in the disability support service field that must be empirically validated and disseminated to other professionals in the field.

These findings are important because they extend the use of the PAS by providing evidence that the procedure can be used effectively with college students with LD and add to the scarce database of empirical research studies on effective interventions and instructional approaches for college students with LD.

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Power Soccer: Experiences of Students Using Power Wheelchairs in a Collegiate Athletic Club

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Abstract

Intercollegiate athletics provides an opportunity for improving the societal perceptions and overall quality of life of physically disabled persons. Athletic opportunities in the collegiate atmosphere allow such students to be socially, psychologically, and physically engaged. This study focused on how involvement in a Power Soccer collegiate athletic club using power wheelchairs influenced the collegiate experience of physically disabled students. As a result of participating in Power Soccer, participants reported higher levels of social interactions and independence, an appreciation of the opportunity to compete and participate on a team, and an increased amount of self-confidence.

Mary Allison Milford is a collegiate wheelchair basketball athlete who uses a wheelchair as part of her sport. Unfortunately her university does not offer student-athletes with disabilities, such as Milford, the same funding and resources that it offers student-athletes in traditional able-bodied sports (Lum, 2007). This discrepancy outwardly demonstrates the perceived incongruence between people with physical disabilities and participation in organized athletics. It also demonstrates the stigma and perceptions of incompetence associated with persons with disabilities in contemporary society (Hedrick, 2000). However, as Wolfensberger (1983) argued in his theory of social role valorization, these poor perceptions may be improved when persons demonstrate competence within social roles that are highly valued, such as that of an intercollegiate athlete.

This study focused on how involvement in a collegiate athletic club, specifically Power Soccer, influenced the collegiate experience of students with physical disabilities. Intercollegiate athletics provides an opportunity for improving the societal perceptions about and overall quality of life of persons with physical disabilities (Hedrick & Hedrick, 1993). Athletic

opportunities in the collegiate atmosphere allow such students to be socially, psychologically, and physically engaged. Campus activities that enhance the visibility of student athletes who use wheelchairs hold the promise of influencing broader social perceptions about the abilities of individuals with physical disabilities.

Review of Related Literature

This review of related literature introduces Wolfensberger's (1983, 2000) work on social role theory, social role valorization, and social role integration; provides an overview of students with disabilities in higher education; and concludes with a discussion of athletic opportunities and how they relate to student success during the collegiate experience.

Social Role Valorization

Social role valorization (SRV), a schema based on social role theory, serves as the theoretical foundation of this study (Wolfensberger, 1983, 2000). This theory identifies ways in which specific subgroups of people are devalued, and therefore wounded, by other specific subgroups or by society as a whole. SRV is the

successor to Wolfensberger's (1972) earlier theory of normalization, which proposed methods through which mentally impaired individuals could become more fully integrated into society. While normalization identified specific goals for devalued individuals, SRV provides an overarching theory through which researchers may better understand how such individuals come to be devalued. The term valorization was therefore utilized because of the focus on the concept of value. Specific aspects of SRV include social roles, social classes, wounds, and social value.

SRV is primarily driven by the social roles that people occupy. Every social role is defined by the duties, responsibilities, and behaviors that are recognized by other members of society. These expectations are significant, as the fulfillment of social roles is determined by them. Individuals who fulfill the societal expectations of a specific role will be largely seen as a member of that role, while those who fail, or choose not to carry out these behaviors, will then be viewed as occupying a different role. "People who fill roles that are positively valued by others will generally be afforded by the latter the good things in life, but people who fill roles that are devalued by others will typically get badly treated by them" (Wolfensberger, 2000, p. 105). Certain roles such as college professor, public office holder, and star athlete, are specifically identified as more likely to be valued positively than others, such as garbage collector, beggar, or invalid. One purpose, then, of SRV is to posit a method in which the social roles of devalued groups can be upgraded in the perceptions of other highly valued groups.

Wolfensberger (2000) also identified seven specific classes of people who are typically devalued in Western society. Among these are "people who are impaired in some way, as perhaps in their senses, bodies, or minds" (Wolfensberger, 2000, p. 106), people whose visible bodily attributes are viewed in a negative fashion, as well as people whose skills are seen as not useful to society. Many negative outcomes are possible when a person lives within one of these devalued classes and Wolfensberger labeled these outcomes as "wounds" (p. 107). These wounds include social rejection, functional and physical impairment, severed relationships, and in extreme instances, poverty or death.

Regarding the importance of social roles, Wolfensberger posits that every aspect of one's life is impacted by the social roles one occupies. For instance, relationships, economic status, and even where one lives

are all in some fashion determined by social roles. He contended that individuals who are otherwise impaired may overcome the negative outcomes of such impairment by occupying highly-valued social roles. Based on these conclusions, Lemay (1999) identified the occurrence of role avidity, or role hunger, as one's strong desire to occupy a positively-valued social role. Role avidity is typically present in those who desire stronger social relationships but are born into roles that may limit social interaction, such as a physically impaired child who is unable to participate in the same activities as other children.

Lemay (2006) further asserted that social roles may be placed in two broad categories, primary or secondary. Primary roles are not contingent on one's immediate environment, which may change frequently. Long-lasting relationships are developed within the context of these roles since people are typically born into them. Examples of primary roles include son or daughter and brother or sister. Secondary roles are dependent on setting and behaviors, and they are frequently achieved through the relationships formed within one's primary roles. For instance, through the mediation of the primary role partners, namely parents or guardians, a child may earn secondary roles status through participation in daycare or sporting activities. As these roles continue to mature and develop, one's social circle continues to widen and more opportunities to adopt secondary roles become available. As a result, it is quite possible that secondary roles may eventually become one's primary roles. Lemay argued that, through this process, undervalued groups may achieve valued primary roles and social integration.

Students with Disabilities in Higher Education

In a study in which 244 undergraduate students were required to complete a Situational Attitude Scale assessment, Stovall and Sedlacek (1983) found that students adopted significantly negative attitudes when acknowledging the possibility of coming into close, personal contact with students in wheelchairs. Examples of situations in which this contact would be required included being asked on a date or discovering an immediate family member was intending on marrying someone who uses a wheelchair. The study also identified similar attitudes in situations in which personal contact was not required, such as finding out a student in a wheelchair was hired for a job or accepted into a university the participants might attend. These

findings support Wolfensberger's (2000) claim that physically-impaired individuals compose a devalued class in Western society. For the purposes of this study, the presence of such physically-impaired individuals on university campuses was specifically considered.

Students with disabilities have entered higher education in significantly increasing numbers over the past twenty years (Eckes & Ochoa, 2005; Hitchings, Luzzo, Retish, Horvath, & Ristow, 1998; Jarro, 1993). Over two million students with identified disabilities participated in postsecondary education in 2008, up from nearly 1.4 million in 2000 (United States Government Accountability Office, 2009, using data from the National Postsecondary Student Aid studies in 2000, 2004, and 2008). That is an increase from 6.1% in 2000 to 10.8% in 2008. These students have similar demographic characteristics (i.e., age, race, gender, and schools attended) as students without disabilities.

Additionally, the presence of college students with orthopedic or mobility impairments, including students who use wheelchairs, has changed over the past several years. Of the 1.4 million students who reported a disability in 2000, 29% of them specifically indicated orthopedic or mobility impairment as their main disability, equaling approximately 406,000 students (United States Government Accountability Office, 2009). Unfortunately these students with orthopedic or mobility impairments do not have the same access to athletics as able-bodied students. Only a few colleges or universities provided varsity-level sports for students with disabilities (Markle & Spangler, 2009). When athletic opportunities are provided for students with physical disabilities, the university's athletics department is often not involved and the National Collegiate Athletic Association (2008) does not govern any of the disability-specific sports. As a result, these students struggle with funding for their teams and do not have access to facilities and other amenities that able-bodied teams have (Lum, 2007).

Athletic Involvement and Student Success.

Overall student engagement is an essential aspect of a successful collegiate experience (Astin, 1977; Pascarella & Terenzini, 2005). This engagement is defined by involvement in both in-class and out-of-class activities, including intercollegiate athletics. While the student is responsible for his/her own individual effort to get involved, the institution is also responsible for providing opportunities that encourage this type of engagement. Tinto (1975) discussed the roles of aca-

demical and social integration pertaining to the person-environment fit associated with student retention and involvement. Regarding academic integration, an individual's integration was measured in terms of grade performance and intellectual development. Social integration took place primarily through informal peer group associations, interaction with faculty/staff personnel, and extracurricular activities within the college. Of the multiple forms of social interaction that occur on the college campus, peer group associations have the greatest influence on a student's social integration. Shulman and Bowen (2001) found that students who are deeply involved in any type of organized activity are more likely to persist through graduation than peers who are not as seriously engaged. In regards to SRV and its implications for physically-impaired persons, the concept of social integration is defined as "the valued presence and participation of individuals with disabilities in mainstream society" (Lemay, 2006, p. 1). A primary concern is that individuals who remain in a socially-devalued subgroup will not obtain any social connections outside of the subgroup, and achieving successful social integration is identified as a method for overcoming these boundaries.

Multiple authors have discussed the benefits of participation in intercollegiate athletics by wheelchair users. Wheelchair basketball players reported higher levels of self-determination, which is positively associated with coping skills (Perreault & Vallerand, 2007). Goodwin et al. (2009), exploring the social experience of wheelchair rugby, found that participants positively identified with a shared sense of community, fulfillment of need, and shared emotional connections as they expressed themselves through the sport. The three themes that emerged from interviews with the players were self-acceptance (i.e., that it's okay to be a quadriplegic), confidence (i.e., don't tell us we can't), and the power of the experience of wheelchair rugby. Adnan, McKenzie, and Miyahara (2001) reported that quad rugby participants had higher levels of self-efficacy than persons without quad rugby experience. For individuals participating in wheelchair dance, increased levels of pride and social integration were the results of unconditional acceptance, the fulfillment of a dream come true, a meaningful experience beyond the wheelchair, and the stronger self (Goodwin, Krohn, & Kuhnle, 2004).

Some researchers, however, have attributed negative outcomes to students' involvement in athletics

regardless of whether or not those students have disabilities. Campbell and Jones (2002) found that wheelchair basketball users experience sources of stress directly associated with being a member of a team, including poor group interaction and communication, relationship issues, and a general lack of disability awareness. Shulman and Bowen (2001) found that recruited athletes were more likely to be given an advantage in the admissions process, which allowed them to enter college with lower academic credentials. They also concluded that students who participated in athletics, particularly in high-profile or revenue-generating sports, were likely to academically under-perform throughout their college career. Astin (1977) partially attributed this underperformance to the athletic subculture that formed on many campuses. This subculture was found to separate athletes from their peers, resulting in a highly pronounced social divide. Though such findings may be considered negative as they relate to the college experience, the opportunities both for athletes to enter college with lower admission standards as well as to academically under-perform while remaining a student, would be identified as two examples of “the good things in life” that society grants to those in a highly-valued social role (Wolfensberger, 2000, p. 105).

This study focused on the athletic experiences of college students who use power wheelchairs, specifically the activity of Power Soccer. Power Soccer was created in France during the 1970s as the first competitive team sport for power wheelchair users (U.S. Power Soccer Association, 2009). Introduced to the United States in the 1980s, the sport has since grown and developed in other countries including England, Canada, Japan, Belgium, and Portugal. In July of 2006, international delegates met in Atlanta, Georgia to ratify a constitution and adopt official game rules. As a result, the Powerchair Football International Federation (FIPFA) was officially established. In October of that year, the United States Power Soccer Association (USPSA) was legally recognized and granted non-profit status. The headquarters for the FIPFA is located in Paris, France, and the USPSA headquarters is in Carmel, Indiana. The USPSA promotes the sport through programs such as tournament play and referee certification. Currently, participants in Power Soccer include those with quadriplegia, muscular dystrophy, cerebral palsy, spinal cord injuries, and other physical disabilities. According to USPSA, “It is the mission

and hope of the USPSA that all persons who use power wheelchairs will have the opportunity to play and experience Power Soccer” (para. 1).

Method

The purpose of this study was to better understand the experiences of undergraduate wheelchair users who participated in a Power Soccer athletic club and examine how these experiences influenced their self-concepts regarding their academic and social collegiate experiences. Data collection was guided by the following two research questions: (1) What were the experiences of undergraduate wheelchair users who participated in a Power Soccer athletic club? and (2) How did participation in Power Soccer influence the self-concept of each student regarding his/her academic and social collegiate experiences?

Design of the Study

Since this study sought to answer “questions that stress how social experience is created and given meaning” (Denzin & Lincoln, 1998, p. 13), qualitative methodology was chosen, as it provides a better understanding of social experience and social roles. The study’s design was based on the belief that the students’ experiences could best be understood by analyzing their individual experiences and searching for common themes among these experiences. More specifically, this study was guided by phenomenological methodology because the focus concerned the experiences of a group of people rather than a single individual, and the experiences of this group revolved around a similar concept, or phenomenon (Creswell, 1998).

The population consisted of 15 undergraduate wheelchair users who were active members of the College Cards or College Fury (pseudonyms) Power Soccer teams during the 2009-2010 academic year. Members of the two Power Soccer teams practiced on a weekly basis and competed in five weekend tournaments through the year. Since Power Soccer has achieved club sport status at the students’ university, the teams were able to reserve space at the campus recreation center. The Power Soccer season culminated in the national championships in June. Both teams at the university were among the 20 teams that qualified for the national championships. Because of the size of the population, all students in the population were invited to participate. Since the researchers had access

to the e-mail addresses of each member of the Power Soccer teams, initial contacts were made through e-mail messages. This message explained the purpose and nature of the study and requested each student's participation. Follow-up personal contact was also made. Nine students agreed to participate, including six males and three females. Four were first-year students, while the other five were sophomores or juniors. All nine research subjects were traditionally aged college students at the time of the study and each was an active participant on one of two Power Soccer teams affiliated with the institution. The identity of each student was protected through the use of a pseudonym. These students were enrolled at a public, four-year, doctoral granting institution in the Midwest. The university had 20,000 students, 17,000 undergraduates and 3,000 graduate students. The university focused on residential undergraduate education with emphases on the professions plus the arts and sciences (The Carnegie Foundation for the Advancement of Teaching, n.d.).

Data Collection

A semi-structured interview guide was developed to facilitate the data collection process. This protocol guided flexible interviews that adjusted to the flow of conversation (Denzin & Lincoln, 1998). The structure for this guide was organized to obtain information that would answer the research questions. Questions included, "Why did you decide to join the Power Soccer team?" and "Are there ways the Power Soccer team has influenced your college experience?" Students were encouraged to share stories and personal experiences during the interview process. All identifying information provided by the participants was kept confidential through assigning pseudonyms in transcriptions.

Before any interviews were conducted, a panel of four experts skilled in either the topic or qualitative research methodology reviewed the proposed interview guide. The guide was revised based on the suggestions of this panel. Before any interviews were conducted, the Institutional Review Board reviewed and approved the data collection process. Data were collected during the spring semester of 2010. Individual interviews were conducted by one of the authors. The one-on-one interviews took 45 to 60 minutes and were conducted in a mutually agreed upon site on campus, such as the campus library or student union. The interviews were recorded and transcribed.

Data Analysis

Two specific qualitative research techniques were utilized to interpret data collected from the interviews. First, the technique of memoing (i.e., reflective notes and ideas upon the completion of each interview) was used, as defined by Glaser and Strauss (1967). Preliminary notes were recorded during memoing, which were then used to identify emerging connections and themes during the data collection process. Field notes, according to Bogdan and Biklen (1982), are "the written account of what the researcher hears, sees, experiences, and thinks in the course of collecting and reflecting on the data" (p. 108). Following completion of the interviews, the second technique, member checking, was used to ensure the transcriptions faithfully represented the information provided by each participant (Denzin & Lincoln, 1998). When member checking was completed, data were analyzed based on steps identified by Moustakas (1994) and Strauss and Corbin (1990). During Moustakas' (1994) first step, horizontalization, the researchers identified statements from the interviews that addressed how individuals experienced the topic. Second, the authors organized statements identified from multiple interviews during the first step into clusters. This step required revisiting the data to identify themes, or common experiences, among the participants.

These clusters were then used to draw a textural description, which explained the experienced phenomenon, and a structural description, which explained how students experienced the phenomenon. The researchers used the process of "open coding" whereby themes were identified from transcripts (Strauss & Corbin, 1990). Open coding allowed for a preliminary identification of conceptual categories. Then the researchers reexamined the conceptual categories in relationship to each other, a process referred to as "axial coding." At this point the researchers determined if there were any connections that emerged between the categories. The third part included preparing a narrative about the overall data in relation to the original research questions. The researchers then drew conclusions from these descriptions.

Findings

This study examined the influence of participation in Power Soccer on the collegiate experiences of traditionally aged college students who used power wheelchairs. Common experiences were studied to

better understand how college students with physical disabilities valued Power Soccer as an activity within higher education. Four main findings emerged from the study: friendships and social interactions, independence, competition and teamwork, and self-confidence.

Friendships and Social Interactions

Participation in Power Soccer clearly influenced the social interactions of the students involved. Every student interviewed indicated that their friendships were positively affected, or that new, meaningful friendships were created, through their participation in this activity. Five of the nine participants spoke about friendships with their teammates as their favorite aspect of Power Soccer involvement. Of the other four students, three specifically mentioned that friendships developed on the Power Soccer team as something they will always remember. Nick explained, "I'll always remember the friendships that I've built. . . . I'm sure that throughout my entire life I'll always be in contact with them. I'll always have those memories of playing together."

For Kyle, the experience of developing deeper relationships with other students in wheelchairs was very meaningful.

Before I came to State College [pseudonym], I was the only one in a wheelchair that I knew or hung out with, and now I'm hanging out with people in chairs all the time. It's mostly my teammates, and I mean, we live in the same hall too, so it's almost like a family.

John expressed a similar sentiment about developing friendships and feeling like part of a family.

The friendships with my teammates, that's the one thing that I like the most. I talk to them and hang out with them outside of the classroom, and just being friends, it's great, but being involved in something that we all love, it's even better. You feel like you're more than friends, more than teammates, you feel like you're family.

Students specifically spoke about how the process of growing closer as a team influenced the quality of their friendships. This process included learning how to best communicate with each other during practices and games, as well as learning to trust each other

throughout these experiences. Rachel indicated that this process helped her overcome her own shyness.

I don't just go to random people and start talking and making friends very easily, so this kind of forces me to because we have to have this chemistry and be friends and know that we're going to be there for each other on the team, and outside of it.

According to Brian, when playing Power Soccer you have to "know your teammates a lot and communicate with them. You want to have a trust with your team, and I think a lot of that is getting to know your teammates." Though all the participants spoke positively of their relationships with teammates, friendships outside of the Power Soccer team were not as universally strong. Rachel explained, "I don't hang out with hardly anybody else, so I've kind of distanced myself away from other people. I'm trying to work on that."

When asked if they would recommend participation in Power Soccer to other students who use power wheelchairs, every individual responded positively. Three of these individuals cited friendships and the social aspect of the sport as reasons for this recommendation. Aaron explained that these friendships were easy to form because of the common interests of everyone on the team. According to Kyle, "It gives you the experience of being on a team, interacting with others, and trusting people."

Independence

Participants in this study repeatedly identified a sense of independence as an overwhelmingly positive aspect of participation in Power Soccer. Particularly within the setting of competitive sports, students indicated that they had not experienced this sense of independence before. Previous athletic experiences were generally positive, but active participation usually required the aid of able-bodied individuals. One example of this was Challenger Baseball, which three participants in this study referred to when asked about their previous experiences with sports. This activity required an able-bodied person to accompany each participant to help them perform activities they were unable to do. In contrast, Power Soccer gave students in power wheelchairs their first opportunity to participate in a competitive activity without the help of anyone else.

Out of the nine individuals who were interviewed, five specifically referred to this sense of independence as a beneficial component of Power Soccer. Lindsay compared it to her previous experiences by saying, "I'm used to having somebody else help me do something, and they always have their two words to say, and when I'm playing on the court, it's me making the decisions and communicating with my teammates." Similarly, Daniel and Hannah were both grateful for the opportunity to fully participate in a sport without help from other people. According to Hannah, "College sports, you have to do everything, and actually do it all, and then with soccer, I could do it, and it was me, because my chair is who I am." When asked to explain why he ultimately decided to participate in Power Soccer, Daniel referred to the independence of the players by noting, "Once I just have help to get in my wheelchair and get all my stuff on that I need, I'm pretty good with doing the plays and everything, and you're just out there doing it for you."

In addition to the independent nature of participation in the sport, students appreciated the opportunity they had to improve upon their own skills. Especially within the context of competitive sports, students had never previously experienced this sense of ownership regarding their own skill level. When asked about his favorite aspect of Power Soccer, Nick responded, "I really like the self-improvement. I want to become the best player that I can." Similarly, John spoke about his own self-improvement when asked about his favorite aspect of the sport, "I just love the fact that you have power and control of what you can be good at . . . you are the one controlling the ball. The coaches coach, but you play. I just love that independence."

Competition and Teamwork

A majority of the students interviewed had not experienced athletic competition prior to Power Soccer. Previous athletic involvement was typically recreational in nature. Although these were generally positive experiences, students appreciated the competitive nature of Power Soccer. Six of the nine participants specifically indicated the level of competition in Power Soccer as a valuable outcome of participation. For Rachel, this experience was completely new. She reported, "I've never done anything like this before. The competition is really good because I've never competed in anything, ever, and it's just fun to be on a team."

For students in wheelchairs who had a naturally

competitive personality, participation in Power Soccer provided a healthy outlet to express this personal quality. Kyle explained, "I'm a very competitive guy . . . I've never been part of a team where I can actually be the one that participates in helping the team win." In a similar fashion, Nick explained that the competitive nature of Power Soccer was actually his favorite element of the sport, "I'm a very competitive person, and it lets me show my competitiveness, and show how skilled I am and try to improve."

Three students spoke about the competitive nature of Power Soccer when comparing it to their previous experiences with sports. When asked about his favorite aspect of Power Soccer, Brian responded, "I really like the competition, you know, wanting to win. It's not like Challenger Baseball where you win just for playing. It's not an 'everybody-wins' sport, and you have to work hard at it."

John spoke about this competition when asked why he decided to join the team. "It's not an 'everybody wins' sport, it's not a sympathy sport, it's really competitive. If you're not good, you're not going to win anything, unless you keep on practicing. I just fell in love with it." John further explained that this level of competition was the reason he recommended that other students in wheelchairs participate in the sport. "It's just a competitive outlet. I think everyone has some competitiveness in them . . . sometimes I think you need to blow off some steam, and it's a good way to do that."

Students also indicated that those who are unfamiliar with Power Soccer typically do not understand the level of competition associated with it, and typically do not take it seriously. Lindsay expressed frustration over this:

It's hard to get people to understand that this isn't just another disabled sport. It's a real sport with real competition. It's not an 'everybody wins' type of game, and usually after they come for the first time, they're hooked. I was, anyway.

Self-Confidence

Improved self-confidence was the third recurring theme and a positive outcome of participation in Power Soccer. Eight of the nine participants spoke about Power Soccer's positive impact on their self-confidence. These students referred to three specific outcomes of the sport when explaining their increased

self-confidence: forming friendships and creating social opportunities, improved communication, and improving one's personal skills. The social aspect was particularly important to Brian in this regard:

I know without having Power Soccer I wouldn't have as many friends, and I think having a lot of friends helps with your self-confidence . . . I would be alone a lot more, and I wouldn't have anything to really be proud of.

Hannah also indicated that the social aspect of Power Soccer was significant in helping her develop a higher level of confidence. When asked to identify her favorite part of being involved in the activity, she responded, "Just getting to know people, and being part of a group." Later in the interview, she explained how this impacted her own level of confidence. "I mentioned before that I'm really shy, and so I think now that I'm actually a part of the team I'm more outgoing. Yeah, I think I'm more confident."

Four individuals acknowledged that participation in Power Soccer required them to assertively communicate with their teammates during games and practices, which they had previously avoided. They each expressed that this communication had significant influence on their confidence in social situations. Both Rachel and Aaron experienced profound changes in their social lives as a result of this newfound confidence. Rachel indicated that, before she started playing Power Soccer, she was "extremely quiet. I didn't talk to hardly anybody except for my closest friends and family, but now I'm just a lot louder and more confident, and I can talk to people, and it doesn't really bother me anymore." Aaron said that when he was in high school, he "barely talked to people, except for the circle of friends I was in. Now I can talk to almost anybody and not really feel anxious or nervous."

John was also thankful for the level of confidence he developed in social situations. He expressed that his participation in Power Soccer caused him to become more open-minded in regards to establishing a group of friends on campus. "It's made me talk to more people and be more open. I think if I didn't have that with Power Soccer, I don't think I'd be as outgoing as I am now."

The independent nature of Power Soccer created opportunities wherein participants felt they could improve upon their personal skills, which further contributed to higher levels of self-confidence. Daniel was

able to view this improvement over a period of time. He explained, "As I progressed through the years, my abilities and skill levels have gotten better . . . it gives you a chance of doing something to become better, and so it has helped my confidence level." Both Kyle and Lindsay recognized how this self-improvement impacted their confidence levels in other areas of life. According to Kyle:

It gives me something I'm good at. I can be good at it, and not necessarily brag about myself, but in my head I know this is cool, I did this, that type of thing, so it gives me a little more confidence, and it builds the confidence in other things that I do, like going to school or interviewing for a job.

Similarly, Lindsay emphasized how important Power Soccer was to improving her personal skills as a college student:

The things that I learn from Power Soccer I use throughout my college experience, from being more assertive and speaking up, and being a better communicator, and independently thinking . . . it's helped me be more confident in myself, and that type of thing, which has helped me, I believe, in my school work and communication with teachers and potential employers.

Discussion

Involvement in the Power Soccer program had several positive effects on the participants, including their independence, their ability to build stronger friendships and social interactions, and their communication and interpersonal skills. The significance of these outcomes to students with physical disabilities, which are frequently noted as positive aspects of the collegiate experience, is addressed in the following discussion.

Independence

For college students who use power wheelchairs, participation in a Power Soccer program may present them with their first and only independent experience within the context of athletics. Students place high value on this independence, which also has universally positive impacts on the general collegiate experience. To cultivate these positive benefits, educators, particularly those who work in disability support offices,

should work to provide students who use power wheelchairs with the opportunity to participate in intercollegiate or recreational programs.

The independence gained through participation in Power Soccer had a significant impact on the social roles, and therefore social values, of the students involved. As each individual in this study operated a power wheelchair due to a physical disability, he/she embodied a negatively-valued social role in accordance with Wolfensberger's (1983, 2000) schema. These students occupied this role at the outset of their respective college careers, but the self-confidence each individual derived from their newfound sense of independence positively influenced the way that he or she viewed this role's socially-defined limitations. The resulting confidence enabled these individuals to overcome the strict boundaries placed by society on the role of a physically-disabled person. Additionally, this confidence was affirmed by the interest able-bodied students displayed in the athletic club, further validating the opportunities for these students to overcome such boundaries. Without these opportunities, these individuals may have remained in their initial negatively-valued social role throughout the entirety of their collegiate experience. Overall, participation in Power Soccer provided them with the chance to establish competency in a new skill set, as well as work towards occupying a highly valued social role: that of an athlete.

Establishing competence and autonomy are both vital steps in forming a healthy identity through the college experience (Chickering & Reisser, 1993). In fact, developing competence is identified as a foundational event which must occur before any progression can be made towards establishing identity and ultimately integrity. The independent nature of Power Soccer created an ideal environment for the students in this study to build upon their own physical, intellectual, and interpersonal competencies. Furthermore, since these students were required to attend practices and participate in competitive events without the aid of other, able-bodied individuals, each was also able to make significant progress in developing a personal sense of autonomy. The opportunity for students with physical disabilities to participate in athletic events provides a life beyond the wheelchair and a stronger self (Goodwin et al., 2004).

Because of the differences in the nature of disability services in the secondary and postsecondary arenas,

gaining independence and self-advocacy skills are vital for the successful transition to a college community (Madaus & Shaw, 2004). Specifically, physical and attitudinal barriers make strong self-advocacy skills "essential" for the student with a disability (McCarthy, 2007). Power Soccer created an environment in which students who use power wheelchairs directly engaged these skills.

Stronger Friendships and Social Interactions

Participation in a Power Soccer program facilitated the participants' development of strong friendships and healthy social interactions. Students who use power wheelchairs and do not have the opportunity to get involved in this activity are much less likely to experience the same quality of social interactions. For many students who use power wheelchairs, involvement in Power Soccer also provides them with their first opportunity to form close friendships with other peers who share similar physical disabilities. For the students involved, this outcome significantly contributed to creating a positive college experience that was also extremely important to them on a personal level.

One's social interactions and relationships will always be impacted by the social role he/she occupies (Wolfensberger, 1983, 2000). Especially within the context of competitive athletic activities, many participants begin college without experiencing the benefits of occupying positively-valued social roles. Involvement in Power Soccer provided these individuals with their first opportunity to occupy such a role. As a result, these students not only increased the value they placed on their own social roles as athletes, but also the value they placed on the roles of other physically disabled peers who were involved in the Power Soccer program. The resulting reciprocal positive values these students placed on each other drastically improved their social interactions and relationships. This was indicated by the findings in which students overwhelmingly cited their improved friendships as reasons why they encouraged other students to join the team.

To establish a healthy identity, it is important for college students to develop mature interpersonal relationships (Chickering & Reisser, 1993). As students experience separation from parents and family, they must learn to build a healthy interdependence on their peers before they are able to achieve a fully realized identity. The students in this study found the camaraderie within their Power Soccer team to be an effective catalyst for achieving this interdependence.

Similarly, Tinto (1988, 1993) identified healthy social interactions as an important element of a student's successful transition into the college community. In fact, the success of an individual's transition into a college community is marked by the strength of the relationships they form with others in the community. Considering this, it is important to note that students in this study unanimously reported strong friendships as a significant benefit to participation in Power Soccer.

The findings of this study supported previous research concerning the social impact of athletic involvement. Participation in collegiate-level athletics results in a perceived higher level of social support for athletes throughout the college campus (Umbach, Palmer, Kuh, & Hannah, 2006). This level of social support is markedly higher than the level of support perceived by non-athletes on the same campuses, and participants in this study echoed these conclusions. Previous research has also suggested that participation in athletic teams typically results in the formation of an athletic subculture within the college campus (Astin, 1977). This subculture was marked by a pronounced social divide between the athletes and other students who were not involved. Each of these conclusions was supported by these findings, as every one of the nine students interviewed specifically identified social support as a positive benefit of participation in Power Soccer.

Students with physical disabilities need the same kind of social support and integration as any other student on-campus. Goodwin et al. (2009) reported that athletes who are disabled often share a sense of community and are emotionally connected to one another. However, opportunities for these students to establish this support are limited, simply because there are typically fewer organized activities that implement the use of power wheelchairs on college campuses. This distinction places an even higher emphasis on providing students who use power wheelchairs with the opportunity to engage in a Power Soccer program. Ideally, such a program should be supported and publicized by both student affairs and athletic departments. Administrators who work with these students on a consistent basis, including those who work in housing offices or disabled student services, should also be aware of the social benefits students gain from this participation.

Improved Communication and Interpersonal Skills

Certain elements of Power Soccer, particularly the competitive action and teamwork required of participants, provided students with the opportunity to improve their communication and interpersonal skills. As students recognized their improvements in these areas, their self-confidence became significantly higher. In the interest of fostering the development of a positive self-image for students who use power wheelchairs, educators should actively encourage their participation and involvement in a Power Soccer program.

The higher confidence levels and stronger social networks of Power Soccer participants are evidence of upward movement through the social classes identified by social role valorization theory (Wolfensberger, 1983, 2000). As teammates, the participants learned to value each other's social roles in more positive ways. The chance to independently participate and compete in an organized sport provided them with the confidence to compare their own social roles with those of able-bodied students, thereby improving how they valued each other as students with physical disabilities. Furthermore, for college students, interpersonal competencies must be established before it is possible to then develop mature friendships and relationships (Chickering & Reisser, 1993). As these competencies are discovered and confidence is built within these skills, students are then able to build a healthy level of interdependence within their college community and foster their own capacity for intimacy in their relationships. Each of these steps forms a foundational piece of achieving integrity, identity, and purpose.

It is vitally important for college students who use power wheelchairs to be given the opportunity to explore and establish their own self-confidence, especially considering the tendencies of their able-bodied peers to place negative social values on them. Improved group interaction and communication can be an outcome of wheelchair sports (Campbell & Jones, 2002). The communication, teamwork, and competition required of Power Soccer participants provides the strongest, and possibly only, opportunity to develop this self-confidence that such students are likely to find. For college administrators wishing to foster a more conducive, accessible, and welcoming university culture for students with physical disabilities, the positive impacts of participation in a Power Soccer program should not be ignored or understated.

Limitations

The results of this study were limited to the experiences of nine undergraduate students who used power wheelchairs while enrolled at State College during the spring semester of 2010. As with any qualitative research, readers should not generalize the findings of this study to other institutions. The study provides information on the experiences of physically disabled students who used power wheelchairs to participate in a recreational Power Soccer team at one institution. Conclusions drawn from the study do not necessarily apply to other colleges or universities. The experiences of these students were self-reported. The absence of how other individuals on campus viewed the outcomes of students with disabilities on the Power Soccer team was not a part of this study's design.

Implications for Disability Services Providers

Since there is a paucity of sport opportunities for students with physical disabilities on campuses, the growth of Power Soccer provides students the opportunity to enjoy the benefits of participating on an athletic team. While there is no clear model for which campus unit should house and support a Power Soccer team, the following experiences of the institution studied in this research can be instructive for disability services providers interested in offering a similar sport opportunity at their institutions.

This institution's involvement with Power Soccer began when teams from a neighboring community were invited to campus to perform a demonstration. The Disability Services office, the Recreation Services office, and faculty from the Adapted Physical Education academic program collaborated on this opportunity to promote the demonstration, find appropriate space, and to cover the minimal costs involved. Following the demonstration, it was apparent that students were interested in exploring the potential for hosting a Power Soccer team at the institution. Students contacted the sport's governing body, Power Soccer USA (<http://www.powersoccerusa.net/>), to explore the logistics of doing so. A student club was then formed, following the university's policies and procedures for forming an athletic club. When this was accomplished, the club formally affiliated itself with Power Soccer USA. Power Soccer USA provided some funding and resources to the club and worked with it in arranging travel and transportation. The Disability Services director at the

university served as an advisor to the club and assisted it in raising funds to support the club's activities. Partnerships with other campus entities such as Recreation Services, Adapted Physical Education, and Athletics resulted in some additional funds, resources, and space for the team. Additionally, the University's Development office assisted in seeking out alumni who were interested in sponsoring the club.

The success of the team has served as a helpful recruitment tool as several students who use power wheelchairs have attended the university specifically to play Power Soccer. As students who formed the original club graduated, new students assumed leadership roles within the club. These new students, along with additional funding sources garnered through the attention the team received, provided the means to sustain the Power Soccer club at this university.

The opportunity for students with disabilities to participate in an intercollegiate athletic club provides many benefits to participating students: higher levels of social interactions and independence, the opportunity to compete and participate on a team, and an increased amount of self-confidence. Disability Services staff members can help create these opportunities by serving as advisors for the sport team and facilitate planning among other campus offices that can contribute to the creation and success of the team. In this capacity, campus offices, beginning with Disability Services, can promote student engagement, personal development, and higher retention rates of an important segment of postsecondary populations during their transition to independence in adulthood.

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PRACTICE BRIEF

Supporting Student Athletes with Disabilities: A Case Study

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Abstract

Students with disabilities face tremendous change when transitioning to postsecondary education. Student athletes with disabilities face additional time and academic demands. Many universities have developed academic support programs for these student athletes. This article describes a case study of a Learning Assistance Program developed to support student athletes with disabilities and others who struggle transitioning to a Division 1 university.

Approximately 11% of undergraduates in 2003-2004 reported having a disability, up from 6% in 1999 (Horn & Berkold, 1999; U.S. Department of Education, National Center for Education Statistics [NCES], 2006). Although the transition to college is difficult for many students, adjustment to college for student athletes with disabilities presents additional academic, time, and publicity dilemmas to overcome.

Problem

Students with disabilities must develop strategies to deal with the many new demands of the college environment. They must navigate the change in processes and services from the high school to college environment, tackle the increased academic demand of college courses, and deal with the lack of a school-imposed schedule on their time (Parker & Boutelle, 2009). In addition, they may find academic support services dispersed throughout the university, requiring a student, for example, to seek writing support from the writing center, math support from the math department, course-specific support from individual professors or departments, and general strategy support from an academic help center. Research has shown that struggling to adapt to these changes often affects a student's willingness to persist to graduation (DaPeppo, 2009).

Student athletes must develop additional strategies to meet the requirements of playing an intercollegiate

sport. For example, along with university requirements for academic eligibility, the National Collegiate Athletic Association ([NCAA], 2009) adds criteria for progress toward degrees and successful completion of course hours to maintain competition eligibility. Also, to compete, student athletes are required to complete a requisite number of study hall hours, a minimum of between eight and 20 practice hours per week, competition travel and play, and community and university service obligations (NCAA, 2009). These athletes, especially from high profile sports, are also public figures at all times, even when attending class or seeking course accommodations.

Given these additional demands, many universities have established student athlete academic support units to work in concert with or as supplements to support services for the general student body. These support units provide advising for NCAA eligibility purposes, study halls, tutoring, and mentoring services for student athletes.

As the number of student athletes with disabilities has increased, both the NCAA and the National Association of Academic Advisors for Athletes (N4A) have taken up the issue of how to best support these students. In the past several years, academic support units of many Division 1 schools have created Learning Assistance Programs (LAP) with Learning Specialists to provide this support. In a recent survey of Learning Specialists, the N4A (2007) found that they come from many different professional backgrounds, including

counseling, education, and special education, and their top four responsibilities are teaching learning strategies, time management skills, organizational skills, and working with student athletes with learning disabilities. There is much variety between universities in the services offered. The purpose of this paper is to provide an overview of one such LAP.

Strategy

Following the recommendations of its University Athletic Committee, the student athlete academic support unit of a large, Division 1 university decided to develop a LAP dedicated to working with student athletes with disabilities and those who were struggling in their first two years of college. The Committee cited several reasons for the program, including: (1) an inability for students to access Services for Students with Disabilities (SSD) because of their athletic schedules, (2) the long waiting list or cumbersome procedures for assistance through support services on campus, (3) the unwillingness of some student athletes to seek help outside of athletic support services because of their highly public status, and (4) the need for progress monitoring for NCAA compliance.

The LAP began in 2005 with the hiring of a former special educator as the Lead Learning Specialist. The mission of the program was to provide supplemental academic support services for student athletes with disabilities or who were struggling during the transition to college (i.e., years 1 and 2) and to work closely with SSD. The Learning Specialist developed the LAP to address the self-determination, self-management, and technology skills for these students, skills identified as critical to college student success (Getzel, 2008).

Working with SSD. Initially, the Learning Specialist and Assistant Director of SSD met on several occasions to develop a documented plan for information exchange and to invite participation in orientation activities. Specifics about support services such as academic coaching were shared and, with their permission, dialogue about students and whether they were accessing or experiencing difficulties with services continued throughout the program's existence. In addition, a partnership between the LAP and SSD's Assistive Technology office allowed shared technology resources for all students with disabilities on campus.

Academic support services. The academic coordinators who were responsible for overseeing the

eligibility and academic progress of student athletes referred students with disabilities or those suspected of having a disability to the LAP. These coordinators were an integral part of the LAP development process. When academic issues arose for a student after general tutoring or mentoring services were provided, the Learning Specialist met with the coordinator and the student to discuss the issues and to problem solve. If the student athlete was a student with a disability, the Learning Specialist worked as a liaison to the SSD office, explaining procedures, making appointments, and helping the student athlete understand the process. If the student athlete was suspected of having a disability, the Learning Specialist would work with the student to get more information and to provide help in securing a psychoeducational evaluation. The academic coordinators discussed all referrals with the student athlete's coaching staff.

Once a student was admitted to the program, the Learning Specialist developed and implemented an individualized plan for support. In addition to assistance in obtaining accommodations, several levels of individual and group assistance were available. These services were similar to those offered by many different units on campus but were more readily accessible and individualized in the LAP. See Table 1 for a description of services. The goal of the Learning Specialist was to provide the initial support necessary to help the student athlete transition and then to move the student to independence from those services by the end of their second academic year.

All LAP services were scheduled around a student athlete's course, practice, and travel schedule. The LAP staff scheduled appointments on Sundays from 4 pm to 10 pm and Mondays through Thursdays from 8 am to 10 pm. Evening meetings usually took place during mandatory study hall hours. The Learning Specialist communicated general progress and all missed sessions to the academic coordinator who then informed the coaching staff. If a student athlete missed more than three scheduled sessions in a semester, they were dismissed from their LAP services.

Observed Outcomes

In the first semester of the program, four student athletes identified with disabilities received direct services from the Learning Specialist (three freshmen and one upperclassman). All four were able to maintain passing

Table 1

Academic Support Services Offered

| Service | Available to General Student Body? | Individual / Group | Goals |
|----------------------------|---|---------------------------|--|
| Academic Coaching | Yes; SSD (one semester wait list) | Individual | Help the student learn content material, time management skills, self-advocacy skills, and various study skills. The student and Learning Specialist set specific academic and learning goals and used course content in instruction toward these goals. |
| Structured Study Hall | Yes; Academic Support Unit (students on probation or returning from suspension) | Small group | Three to five students worked with the Learning Specialist either on content material, task analysis skills, or time management skills. The Learning Specialist helped to maintain student focus and monitor task completion. |
| Study Groups | Yes; individual courses | Small / large group | Learning Specialist would help students identify important material in the reading, review for important vocabulary terms, and determine effective study strategies. Setting allowed for much discussion of content and an environment where student athletes felt comfortable asking questions. |
| College Success Strategies | Yes; Academic Support Unit | Large Group | Focused on study skills, understanding college topics, life as student athlete (public speaking, responsibilities when traveling, etc.) |
| Assistive Technology | Yes; SSD (during office hours) | Individual | Training on use of assistive technologies such as readers, speech-to-text programs, or digital tape recorders. |

grades and remain eligible for competition in the next semester. Two have since graduated, one has enough credits to graduate, and one has left the university.

By the spring of 2009, 60 student athletes received either individual or small group services from two Learning Specialists. The program had expanded to include a section of a College Success Strategies course similar to that offered to all students but geared to athletes (e.g., meeting with professors to provide travel letters and how to respond during an interview) and two large study groups for Introduction to Psychology and Introduction to Theater. Sixteen of the 60 student athletes served were identified as students with disabilities. Twenty-one student athletes received individual academic coaching, 10 worked in structured study hall, 10 received individual consultations (usually two to four sessions per semester), 22 participated in course study groups, and 12 enrolled in the College Success Strategies course. Only six of the student athletes involved with the Learning Assistance Program (including only one student athlete with a disability) earned less than a 2.0 GPA for the semester.

Implications

Students with disabilities often struggle with the transition to postsecondary education (DaDeppo, 2009; Trammell, 2009). Student athletes with disabilities have the additional time, academic, and publicity demands related to their sports. Universities often need to provide centralized and accessible academic support services for these students. A Learning Assistance Program with a Learning Specialist who is knowledgeable about disabilities and instruction can work within these academic support offices to provide the support and progress monitoring necessary to help these students transition successfully.

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Margaret P. Weiss received her PhD in Special Education from the University of Virginia. Her experience includes working as a middle and high school special education teacher and a Learning Specialist at the college level. learning specialist at University of Alabama-Birmingham. Her research interests include middle and high school students with learning disabilities, self-determination skills, and transition to postsecondary education. She can be reached by email at: mpweiss1@gmail.com.

BOOK REVIEW

Ready for Take-Off: Preparing your Teen with ADHD or LD for College

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Laurie Maitland, T. E., & Quinn, P. O. (2011). *Ready for take-off: Preparing your teen with ADHD or LD for college*. Washington, D.C.: Magination Press, 208 pp., \$19.95

You are sitting in your office waiting for your next appointment---an informational interview with a prospective student and his parent. You start to imagine what the appointment will be like. Will this be a helicopter parent who does all the talking and demands the same services provided at the private high school her son attended? Will the student sit back passively and look for his parent to answer all your questions? Not knowing what to expect, you open the door with trepidation and invite the two to enter. However, once the introductions are made and the appointment begins, you are pleasantly surprised to find that right from the beginning, the student takes the lead. He knows what questions to ask; he can explain his disability and its effects, and he answers your questions with confidence. Is this a dream...could this really happen?

In their book, *Ready for Take-Off: Preparing Your Teen with ADHD or LD for College*, Dr. Theresa Laurie Maitland and Dr. Patricia Quinn provide tools that help parents and their teens with ADHD and LD create a Personalized College Readiness Program during the student's transition to adulthood. The authors provide a practical approach for shifting responsibility from parent to student by informing parents about the college-readiness skills that their teens need to develop, how to take a 'coaching role' in order to have empowering conversations, and how to create a readiness plan so that their teens can systematically learn what is needed for college.

For students to be successful in college and in life, the authors advise parents to let go by deliberately and systematically preparing teens for life on their own. To illustrate this, Laurie Maitland and Quinn use the

analogy of flying a plane. They state, "Let's face it, no one would ever put a pilot in the cockpit and expect him to be ready for take-off or to fly solo without adequate preparation" (p. 8). The authors note that, although parents initially fly the plane, they should get their teens ready for life on their own by first learning to co-pilot, and then becoming their own pilots as they get "ready for take-off." While much of this book could be helpful to all students and their parents, Laurie Maitland and Quinn use their vast experience and knowledge of college students with Attention Deficit/Hyperactivity Disorder (ADHD) and Learning Disabilities (LD) to focus on the specific issues that address this population's needs. As a certified Life Coach, I was intrigued by the way in which this book teaches parents how to take a coaching approach to parenting. The authors ask the parents to make a paradigm shift in order to, "put on your coaching hat and take off your directive, 'total authority' hat...and fight the urge to take charge"(p. 71).

Chapter 1, "The Challenges of Flying Solo in College," grabs the reader's attention by providing a reality check of the challenges that students with disabilities face in college. They share National Center for Educational Statistics from 2000 that found only 53% of the students with diagnosed disabilities earned a college degree 5 or 6 years after enrolling (p. 10). The authors use hypothetical case studies of four students with ADHD and/or LD "whose first solo flights got off course" to illustrate the many challenges and things that can go wrong during transition which can prolong or derail a student. Once parents have been told the "bad news," however, they are reassured that these students can be successful in college if the student is properly

prepared, has self-determination, and chooses the right college. Laurie Maitland and Quinn inform parents that they can facilitate their teen's future success by using a coaching approach to parenting, by honestly evaluating their teen's readiness, and by proactively helping their son or daughter develop a plan in high school for a smooth transition to college.

Chapter 2, "Who's Piloting the Plane?" provides scenarios to illustrate how parents inadvertently enable their teens. Although Laurie Maitland and Quinn recognize that a teen's ADHD or LD can play a part in a parent's need to take charge, they add that, "When parents continue to take charge, fix things, or dictate what to do, this pattern of enabling can be counterproductive and actually hinder raising successful, independent young adults" (p. 31). To further illustrate how parents might take over "piloting the plane," the authors provide an Enabling Questionnaire (p. 32) for parents' consideration.

Chapter 3, "Being the Copilot: A Coaching Approach to Parenting," introduces techniques to empower teens and "to deliberately select coaching attitudes and responses that are designed to allow teens with ADHD and LD to become more self-determined" (p. 35). By describing a coach's mindset and skills, parents are shown a 'coach-like' way of communicating through the use of what the authors call "coaching conversations." By using the worksheet found on pages 46-48 and looking at the enabling scenarios from Chapter 2, parents are given the opportunity to practice their skills.

Chapter Four, "Is Your Teen Ready for Take-Off?" provides two surveys: *The College Readiness Survey for Teens: Are You Ready?* (pp. 58-62) and the *College Readiness Survey for Parents: How Ready Is Your Teen?* (pp. 63-68). Laurie Maitland and Quinn suggest that by honestly answering these surveys and analyzing the results, parents and their teens can identify ways for teens to take the next step in preparing for their solo flights.

Chapter 5, "Designing Your Teen's Personalized College Readiness Program," presents five steps to create realistic goals and step-by-step action plans. By using the areas needing improvement from the College Readiness Surveys (Chapter 4), parents and their teens create SMART Goals (Specific, Measurable, Agreed to, Realistic, and Timely or Time sensitive). Additional resources such as Personalized College Readiness Program Planning Sheets and Action Plans with examples of their use are provided on pages 90-93 to help carry out these goals.

Additional sections appear in Chapters 5-8 called *Coaching Reminders*. These helpful sections reinforce ways that parents can use "coach-like" skills and beliefs to shift decision-making responsibilities to their teens so that they can learn to take the controls and "fly solo." Parents and their teens are encouraged to use the Personalized College Readiness Program and develop additional SMART Goals and Action Plans when going through Chapter 6, "Promoting Self-Determination Skills," Chapter 7, "Developing Daily Living Skills," and Chapter 8 "Improving Academic and Study Skills" to ensure that these skills are in place for "departure."

The last chapter (9), "Proof That a Successful Solo Flight Is Possible," introduces four successful college students who have "arrived at their destination" despite hitting some turbulence along the way. While three of the students had proactive parents who worked with them to create a plan for transitioning to college, one student did not. This realistic range of scenarios illustrates that, with training and support, it's never too late to learn the skills for college success. Laurie Maitland and Quinn note that these teens were successful because they, "Sought out and accepted support, honestly faced their struggles, persisted, even when there was little evidence that things could get better, and learned from their mistakes and struggles" (pp. 191-194).

Although this book contains a lot of valuable information, tools, suggestions, and resources, it might overwhelm some parents. Laurie Maitland and Quinn acknowledge this by stating, "If it becomes clear that you can't be the person having these coaching discussions with your teen, right now, or maybe ever, then you might take a different approach" (p. 86). They encourage those parents to identify who else could help their teen get ready for college and observe that one such person could be a professional coach who specializes in working with teens with ADHD and LD.

The overall message is that a deliberative process that encourages self-determination and independent living needs to start as early as possible in order for students with ADHD and LD to have the fullest opportunity for success in college and in life. Further, the "coach-like" approach to parenting and the plan to prepare students to "take off" can lead to these important outcomes.

Despite the fact that this book was primarily written for high school teens and their parents, the materials

could be used by Disability Student Support (DSS) providers and other college personnel. One possible use would be to recommend this book to prospective students, their parents, and high school teachers to promote college readiness. This would allow students transitioning to campuses to be better prepared for the demands of college life. Also, if your college or university offers a transition to college class, an orientation program, or engages in retention planning with students, the personalized readiness program could be used to help students determine their strengths and weaknesses and create an individualized plan for success. By utilizing the ideas for promoting self-determination skills, daily living skills, and academic and study skills, DSS providers and other college personnel could create activities and lesson plans that would encourage this success planning. Finally, a great reason for acquiring the book, and one that is near and dear to my heart, is that DSS providers and other college personnel could implement the “coach-like” skills and beliefs described in the book to help students gain the tools they need to navigate their lives. By using or adapting the tools, information, and suggestions in this book, parents, disability support providers, and other college personnel could help students become “the pilots of their own lives.”

You are sitting in your office waiting for your next appointment. You are looking forward to meeting this student because, after talking with him on the phone, you realize he has been making the transition to college for several years. You open the door and invite the student and his parent to enter. Introductions are made, and the appointment begins with the student immediately taking the lead. He knows what questions to ask; he can explain his disability and its effects, and he answers your questions with confidence. This is no longer a dream but a reality. This student is *Ready for Take-Off*.

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Linda Nissenbaum received her B.A. in Special Education from the University of Missouri, Columbia, and her M.A. in Teaching from Webster University, St. Louis. Her experience includes teaching in the K-12 system, currently directing Disability Support Services in the Access Office at St. Louis Community College-Meramec, and two years as ADA Coordinator for the St. Louis Community College. Having been trained as a Co-Active Life Coach by the Coaches Training Institute (CTI), she obtained the credentials of a Certified Professional Co-Active Coach (CPCC), and additionally received the certification of Professional Certified Coach (PCC) through the International Coach Federation. In addition to directing Disability Support Services at STLCC-Meramec, she has a part-time private coaching practice which includes clients with ADHD and LD. She can be reached at: lnissenbaum@stlcc.edu.

Journal of Postsecondary Education and Disability

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- Write sentences using active voice.
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