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THE LEARNING ASSISTANCE REVIEW

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The Learning Assistance Review is an official publication of the National College Learning Center Association (NCLCA). NCLCA serves faculty, staff, and graduate students in the field of learning assistance at two- and four-year colleges, vocational and technical schools, and universities. All material published by *The Learning Assistance Review* is copyrighted by NCLCA and can be used only upon expressed written permission.

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Letter from the Editor

All things come to an end; it is now time for me to start the process to find the next *TLAR* editor (beginning Spring 2013). Please read the job descriptions listed in this issue and if you have editing experience, apply!

I have an important secret to share—the job is sometimes overwhelming and, occasionally, high pressure, but, mostly, it is exhilarating, gratifying and joyful. I shall miss it more than I care to say at this time. However, my second three-year term will be up with the Fall 2012 issue. It is time to turn over the editor hat to someone new. Please take up this challenge. The hope is to have the applications received by December 15, so we can review the applications and have a decision in time for me to train my replacement during preparation of the Fall 2012 issue.

In the meantime, this issue is jammed-packed with awesome stuff. Our first article by David F. Adams & Shawna G. Hayes, "Integrating Tutor Training into Faculty Mentorship Programming to Serve Students with Disabilities," explores the importance of faculty mentorship and peer mentoring programs in relation to the academic success of students with disabilities as well as the need for additional tutor training in working with students with disabilities.

Anne Ernest, Patrick Johnson, & Diane Kelly-Riley, in "Assessing Rhetorically: Evidence of Student Progress in Small-Group Writing Tutorials," present their results from a year-long study examining how well students could effectively respond to a piece of first-year writing using an articulated framework—Assignment, Focus, Organization, Support, and Proofreading (AFOSP).

The next article, "Integrating Reading, Information Literacy, and Literary Studies Instruction in a Three-Way Collaboration," by David Mazella, Laura Heidel, Irene Ke, while centered in literature/composition, explores the value of unique course-based collaboration involving an English professor, a learning strategies counselor, and a librarian.

The final article for this issue by Cristina Ariza, Julian M. Davis, Michael Frye, and Earl Harmsen, "Getting Science Students to PASS-UIW: A Successful Collaboration between Students, Staff, and Faculty," reports on how Peer Assisted Study Sessions (PASS) has been successful in science courses at the university level.

I just could not stop! I had to publish two books reviews this issue. NCLCA Board Treasurer, Josh Reid, reviewed, "Handbook of College Reading and Study Strategy Research,"—a must read review. Not to be outdone, Saundra McGuire, reviewed, "H3LT: The Hair Three-Legged Table Solution for Education," which encourages educators forming a partnership between

the student, the parent, and the classroom teacher.

On another note, I wish to take a brief moment to thank Della Croci, who laid out our last issue, Spring 2011; unfortunately she is unable to continue in that assistance. I wish to thank Nicole Cousino for stepping up at the last minute and helping out to ensure this issue—and hopefully—the next two of my remaining issues will be published. I hope everyone will enjoy this issue, submit more excellent articles, and take a giant leap and apply to be the next TLAR editor.

A handwritten signature in black ink, reading "Christine Reichert", set against a light yellow rectangular background.

Christine Reichert
Editor

Integrating Tutor Training into Faculty Mentorship Programming to Serve Students with Disabilities

DAVID F. ADAMS AND SHAWNA G. HAYES
BALL STATE UNIVERSITY

Shawna Hayes is now at Marillac Childrens' Psychiatric Hospital, Overland Park, KS.

This research was supported in part by a grant from the United States Department of Education, entitled "Ensuring a Quality Education for Indiana's Students with Disabilities" (Project P333A080021-10). The Faculty Mentorship Program was developed and implemented by Larry Markle, Director of Disabled Student Development; Jacqueline Harris, Learning Center Study Strategies and Writing Coordinator; Taiping Ho, Professor of Criminal Justice and Criminology; and Roger Wessel, Associate Professor of Higher Education.

Abstract

Students with disabilities face a vast array of physical, cognitive, social, and external barriers. The combination of barriers and negative attitudes faced by students with disabilities makes it difficult to develop skills to be more independent in future academic and career-related settings. This article examines the importance of faculty mentorship and peer mentoring programs in relation to the academic success of students with disabilities as well as the need for additional tutor training in working with students with disabilities. The article reports on the Faculty Mentorship Program and tutor training sessions that were developed and implemented at Ball State University.

In the United States, there have been several legislative decisions to create equal opportunities for individuals with disabilities in the education system. Vogel, Fresco, & Wertheim (2007) highlight that Section 504 of the Rehabilitation Act of 1973 as well as the Americans with Disabilities Act (ADA) of 1990, "protect the rights of these students, guaranteeing them the right to reasonable accommodations both in the admission process and once they have matriculated"(p. 485). Odom et. al. (2005) state that the Individuals with Disabilities Education Improvement Act of 2004 (IDEA) required free public education be afforded to individuals with disabilities. The authors further state that the general focus in the education system today is to provide quality education for all students in the United States. Vogel, Fresko, & Wertheim, however, maintain that as the number of students with disabilities entering colleges and universities increases, it becomes increasingly more important to examine the learning environment of these students.

In recent years, there has been a call for more mainstreaming and inclusive practices to be implemented in the education system (Parasuram, 2006; Vogel, Fresko, & Wertheim, 2007). According to Bender, Vail, & Scott (1995), mainstreaming education “refers to placement in general education classes with some time spent in a separate resource room placement,” while inclusive practices call for “ending all separate special education placements for all students” (p. 87). When addressing mainstreaming and inclusive practices in the education setting, faculty and staff at various institutions need to be aware of the numerous factors that affect the potential for success of students with disabilities. The current literature suggests that faculty and peer tutors have the potential to greatly impact the self-efficacy of these students.

Background

During the transition from high school to college, students with disabilities often face confusion and a sense of being overwhelmed. Vogel, Fresko, & Wertheim (2007) maintain that students with disabilities also experience a myriad of issues not faced by those with disabilities that include academic struggles and negative views of self that may contribute to high attrition rates. Students with disabilities can view themselves as being less competent than their peers, which can greatly impact a student’s ability to succeed, develop, and adjust to changes. Madaus (2005) further contends that the transition to college can also be difficult due to differences in the services offered at the high school and college level. In both places, discrimination based upon a disability is prohibited and equal access to all students is required by law. In higher education settings, equal access results in students receiving reasonable accommodations such as having extra time to take exams or the ability to use a closed captioned television. Students at the college level have the responsibility to disclose their disability and to utilize available services if they choose. This is a vast difference from the high school environment where the school collaborates with both student and parent to develop an Individualized Education Program (IEP).

The added stressors experienced by students with disabilities may contribute greatly to the empirical evidence reporting these students are at higher risk for depression and suicide (Bender, Rosenkrans, & Crane, 1999). Bandura (1986) defined the belief in one’s capabilities and potential for success as self-efficacy. Powers, Sowers & Stevens (1995), build on Bandura’s definition by submitting that self-efficacy has been correlated with academic success, which can be achieved by providing the student with opportunities to develop independence through exposure of skills training events and exercises, observational learning, and interactions with role models. Further, Dwyer & Cummings (2001) proffer that “high self-efficacy may act as a moderator of stress for university students” (p.209). While Bandura addresses the cognitive level of self-efficacy, social support systems can present added benefits to students with disabilities. Dwyer & Cummings report that social support systems are important for students with disabilities because students are not left feeling isolated in their struggles. In light of this information, it is imperative that colleges and universities work to systematically address ways in which they can best serve students with disabilities.

Mentorship programs provide students with structure as well as social support. Such programs are important not only because they help students with disabilities transition to the college learning environment, but they also assist in expanding upon current skills and cultivating new ones in order to overcome the numerous challenges they may face during their academic careers. Parents, friends, family members, mentors, and teachers can serve to endorse or discourage independence and self-confidence through verbal and nonverbal interactions with these students (Powers, Sowers, & Stevens, 1995). Mentorship programs ensure that students will have positive interactions with individuals that will foster their development of confidence, independence, and other life skills. Powers, Sowers, and Stevens demonstrated that mentorship provided students with the opportunity to identify ways in which they could advocate for themselves as well as learn about "adaptations and strategies they could use to increase their independence in the larger community" (p. 39).

Campbell-Whately (2001) provides guidelines for developing and implementing an effective mentorship program. Those guidelines include: involving those who have contact with students (i.e., teachers and advisors), selecting program staff that can support organization, establishing clear program goals that focus on the needs of students with disabilities, identifying a specific target population (i.e., undergraduate freshman who receive services from disability services), developing activities and procedures (i.e. how often a mentor meets with a student), training mentors and peer tutors, monitoring the mentoring process and gathering feedback from mentors and students, actively ensuring compatible matches between students and mentors, and finally, evaluating the effectiveness of the program.

Faculty and student interaction is critical for all student success, but it is even more crucial for students with disabilities who struggle with transitioning into a college environment. Abundant research suggests tremendous outcome benefits can be achieved by including disability education training for faculty members instructing students with disabilities. While a comprehensive analysis of the importance of including faculty members in a mentorship program is beyond the scope of this article, it is important to note the abundance of literature reporting the benefit of faculty inclusion in such a program (Bender, Vail, & Scott, 1995; Campbell & Gilmore, 2003; Fichten, Amsel, Bourdon, & Creti, 1988; Nelson, Dodd, Smith, 1990; Odom, et al., 2005; Parasuram, 2006; Rao, 2004; Scott & Gregg, 2000; and Sharma, Forlin, & Loreman, 2008). It is important to detail the necessity of including peer tutor training in a quality mentorship program aimed at assisting students with disabilities.

The collaborative interaction between students and peer tutors has been shown to have a positive effect on students (Watkins & Wentzel, 2008). Heron, Welsch, and Goddard (2003) reported that social validity data suggests students favor peer tutoring, and this setting allows them the opportunity to interact with fellow students, further develop social skills, improve memory and cognition, enhance feelings of self-efficacy, and increase testing ability. Britner, Balcazar, Blechman, Blinn-Pike & Larose (2006) suggest that the social support theory is beneficial when working with students with disabilities because the emphasis is placed on providing information and resource to those in need. Social support systems can help

combat various negative outcomes such as high attrition rates for students with disabilities. These relationships are capable of providing social support which can prevent against negative outcomes such as dropping out of school.

Vogel, Fresko, and Wertheim (2007) examined the perceptions of peer tutors and of students with disabilities who were receiving tutoring in college settings. Tutors and clients both reported that the most severe difficulties presented by the students with Learning Disability (LD) and Attention-Deficit/Hyperactivity Disorder (AD/HD) were problems with attention and concentration. Both groups also felt that the greatest problem in the tutoring relationship was related to the tutors' insufficient skills and knowledge in working with the clients' various learning disabilities. Jameson, McDonnell, Polychronis, and Riesen (2008) indicate that mistakes made by tutors are most often made due to lack of confidence in working with assorted tutoring methods and procedures. While it is clear that peer tutoring is an integral part of a comprehensive mentorship program, the information provided by Vogel, Fresko, and Wertheim along with Jameson et al. suggest the need for continual monitoring and training of students providing services to students with disabilities. Campbell-Whately (2001) suggests that an integral part of a mentoring program is the continual training of mentors and students in addition to monitoring the mentoring process. Campbell-Whately further advocates for the use of self-report measures as a means of monitoring tutors' training as well as the effectiveness of the mentorship program. While Heron, Welsch, & Goddard (2003) maintain that tutoring has been shown to be effective and cost-efficient, implementation of a tutoring program alone is not enough. Stenhoff & Lignugaris/Kraft (2007) noted that given the plethora of research supporting evidence-based tutoring practices, it is of great importance that tutor training take place prior to initiating tutoring sessions.

Method

Participants

Participants in the present study were undergraduate and graduate students working as peer tutors in a Learning Center on the campus of a Midwestern university. Recruitment emails were sent to all tutors working in the Learning Center, in addition to informational flyers that were posted in the Learning Center regarding upcoming training sessions. Due to its longitudinal design, the number of participants involved in the training varied each session, ranging from as few as four to as many as 20 undergraduate and graduate tutors in attendance. The tutor training program was developed to serve as an additional facet of an already existing mentorship program. Training sessions were open to all undergraduate and graduate level tutors. Tutors who attended training sessions received credit that went towards their College Reading and Learning Association certification. The tutor training was offered to undergraduate and graduate tutors beginning in the Spring semester of 2009 (February) and ending in the Fall semester of 2009 (October). During each semester, tutors were given the opportunity to attend four tutor training seminars throughout the duration of the semester. (For the schedule of the tutor training sessions, see Figure 1 below; for outlines of the training sessions, see Appendixes 1-4 at the end of the article).

Figure 1**Schedule of Tutor Training Sessions**

Session Title	Date
Providing Quality Tutoring for Students with Disabilities	February 27, 2009
Providing Quality Tutoring for Students with Disabilities: An Overview of Learning Disabilities	March 20, 2009
Tutoring Students with Visual Impairments	April 9, 2009
Tutoring Students with Asperger's	April 17, 2009
Strategies for Tutoring Students with Learning Disabilities	October 9, 2009
Peer Tutor Discussion on Strategies and Techniques for Working with Students Who Have Disabilities	October 29, 2009

Note. Four of the outlines for the in-service tutor training sessions are included in Appendix B

Procedure

The research was conducted at a four-year, public, Midwestern university, where nearly 600 students receive eligibility for accommodations from the office of disability services. Approximately two-thirds of these students have non-apparent disabilities such as learning disabilities, traumatic brain injuries, psychological disorders, Asperger's Disorder, or chronic illnesses. In light of the research on students with disabilities, the university has constructed and orchestrated a comprehensive approach to address these concerns and provide equal learning opportunities for students with disabilities. Recognizing that actively engaging students with faculty could result in more successful transitions to college, the Faculty Mentorship Program (FMP) was first implemented in the fall of 2006. In 2008, a grant from the United States Department of Education, entitled "Ensuring a Quality Education for Indiana's Students with Disabilities" (also referred to as Project P333A080021-10) was applied for and received, which provided funding in order to expand upon the existing FMP and services offered to students with disabilities.

The goal of the existing Faculty Mentorship Program is to enhance the learning experience for students with disabilities by assigning faculty mentors to each student participating in the program. This program provides faculty members with training on and exposure to a myriad of disabilities, thus serving to disseminate education, offer collaboration among colleagues, and increase faculty members' comfort in working with students in this population. The faculty mentors then meet with students on a regular basis and assist students in dealing with the complexities of the academic experience at the university. Interaction with faculty members provides students with a collaborative environment where they can establish a stronger connection to the university and a better understanding of the academic expectations.

Specifically, the FMP seeks to do four things for students involved in the program:

1. Personalize the university experience for students with disabilities
2. Assist students in understanding and meeting the academic challenges and expectations of college students.
3. Connect the departmental major to future occupational goals.
4. Inform students about requirements of students majoring in the faculty member's department as well as student clubs, organizations, and internships available with that major (Ball State University, 2011, para. 3).

Some of the activities encompassed by the FMP are weekly meetings between program developers for event planning, correspondence from program developers to students with disabilities involved in the FMP via email, and frequent meetings and seminars for faculty mentors, tutors, and program developers to address current issues requiring greater focus within the program. The emails sent by the program developers to the students with disabilities in the Faculty Mentorship Program provided information regarding on-campus resources, on-line academic assistance, study tips, time management strategies, as well as ways the students could help structure their tutoring sessions. The regular meetings for mentors and program developers provided further development and training in the area of disability issues. During tutor training seminars, peer tutors were given the opportunity to ask questions, receive feedback, hear guest speakers share information about campus resources, and connect with other academic disciplines in order to best serve students with disabilities. Tutors also were provided with a comprehensive brochure detailing the Learning Center, the University, and outside resources available to them and students with disabilities. This brochure also contained relevant information that could be utilized in these tutoring sessions such as the following: helpful campus and web resources, and some tutoring tips.

In light of the research reporting the effectiveness of tutoring and its role in providing positive social support (Britner, et al, 2006; Heron, Welsh, & Goddard, 2003; Stenhoff & Lignugaris/Kraft, 2007; Watkins & Wentzel, 2008), it is of great importance that tutor training take place prior to initiating tutoring sessions. Clearly, tutors need to receive training and more specifically, a need has been demonstrated for additional education and instruction in tutoring students with disabilities. Therefore, an expanded tutor training program was developed in the spring semester of 2009 in order to meet this need. The program is focused on providing undergraduate and graduate students with formal presentations, current literature, institutional resources, and collaborative opportunities focused on tutoring students with disabilities.

Within the tutoring sessions, tutors were exposed to a myriad of educational resources (on-campus referral sources, on-line sources of information, faculty and staff with particular expertise, and current research literature). Throughout the training process tutors were able to obtain valuable information from individuals with expertise in this field of work and study, such as the director of the disability services office and the Learning Center's Study Strategies and Writing Coordinator, both of whom

are also co-founders of the Faculty Mentorship Program (FMP). During these presentations, undergraduate and graduate level tutors were given an introduction to the FMP, an overview of the demographics of students with disabilities on campus, current legislation, the inclusive and mainstreaming practices being implemented, and the services provided to students with disabilities. In subsequent training sessions, an Adaptive Computer Technology Specialist presented information on resources and current technology available for students with visual impairments, and a counseling psychologist presented tutors with information on tutoring students with autism and Asperger's Disorder.

The training sessions were focused on providing tutors with additional education on various disabilities and informing them of available on-campus resources. Tutors in this training program were given the opportunity to enter into collaborative discussions with the presenters and colleagues about effective means of approaching various tutoring scenarios with students who have different disabilities. These training sessions also fulfilled College Reading and Learning Association (CRLA) topic requirements. After each training session, participants were administered a survey to provide critical feedback regarding the benefits of the particular seminar, what information they gleaned from the process, as well as suggested changes for future training seminars. Data regarding the academic success and utilization of support services for incoming freshmen who took part in the FMP was compared to those who did not participate in the FMP. This information was aggregated for analysis and comparison during the two years the tutor training portion of the FMP was enacted.

Results

Qualitative, self-reports from tutors provided a great deal of information regarding the effectiveness of the tutor training sessions for those students involved (Figure 2). Tutors reported that the training sessions provided them with the opportunity to gain information and develop skills for tutoring students with disabilities. During the analysis of the data, it became apparent that common themes were expressed by participants of the tutor training seminars.

Figure 2

Qualitative Feedback from Tutors Reporting Skills Obtained Due to Training

Tutors reported learning the following skills

- Basic guidelines of how to interact with students with disabilities
 - Accommodations available to students with disabilities
 - Strategies for helping students with different learning styles
 - "Having a learning disability does not mean you're not smart"
 - "I learned to ask questions of the client to learn how the disability impacts his/her learning"
 - Information about the different learning disabilities
 - Strategies for how to handle various tutoring situations
 - Learning about the adaptive technology
 - Varying degrees of visual impairments
 - Approaches to working with clients who have varying degrees of blindness
-

Effective Communication Skills

Participants reported learning effective communication skills to implement when tutoring students with disabilities. Participants also reported obtaining information about basic guidelines that would help them interact better with students with disabilities during tutoring sessions. One participant reported, "I learned to communicate with the clients about their strengths and weaknesses." Several participants reported learning strategies and tips to employ when working with individuals diagnosed with Asperger's Disorder. They further indicated this information was helpful due to the fact that Asperger's can impact an individual's ability to effectively communicate with others. One participant stated "I learned strategies for helping students with different learning styles." Another participant indicated he or she was taught strategies to help in a myriad of tutoring environments. A third participant stated, "I obtained knowledge of various approaches that would be effective and helpful when working with clients who have varying degrees of blindness."

Utilizing the Student's Strengths

Participants also reported they obtained greater knowledge regarding how to emphasize and utilize students' strengths within session to create positive change outside of the tutoring environment. This was highlighted by one student's report of better appreciating the fact that "having a learning disability does not mean you're not smart."

Resources Available to Tutors

Participants indicated they learned of further resources available to them in the Learning Center and as well as on-campus resources that could increase their effectiveness when tutoring students with disabilities. One participant reported that "I am aware of the resources available at [the] Adaptive Computer Technology lab." Participants also reported that educational web pages and texts used and referenced during the training were helpful resources to have when tutoring students with disabilities. Several participants reported they obtained helpful information regarding the on-campus resources and accommodations available to students with disabilities.

Knowledge about Various Disabilities

Participants also reported gaining knowledge about various physical and cognitive disabilities, and how these disabilities could impact a student's learning. One participant reported "I learned about physical and psychological disabilities, how they are different from each other, and how to go about understanding the client's needs." Other participants reported they received helpful training of the symptoms and "red flags" that indicate a particular learning disability may be present. The participants reported the knowledge of on-campus resources for necessary referrals would be important to have in future work.

Discussion

Based on the results of the tutor self-reports, tutors reported receiving numerous benefits from the Faculty Mentorship Program. Tutors reported the acquisition of basic communication techniques when working with students with disabilities, strategies to implement in their tutoring sessions, understanding a disability is not equated with poor intelligence, information regarding resources available to tutors, and technology available to help guide tutoring sessions. Vogel, Fresko, and Wertheim (2007) reported a major problem to be addressed in the tutoring environment is when tutors do not have "sufficient skills to enable them to deal with the tutees' learning disabilities" (p.489). The results of the present study reinforce the importance of including tutor training in mentorship programs. For a mentorship program to successfully assist students with disabilities, a multi-faceted approach must be taken. Watkins and Wentzel (2008) reported that peer tutoring can positively impact students with disabilities. Furthermore, Heron Welsch, & Goddard (2003) report that students favor peer tutoring and that such an environment can provide not only academic benefits but also interpersonal gains.

For tutors to provide high quality service and create an environment that supports effective learning, they must be comfortable and knowledgeable in what they are doing. Greater comfort and knowledge comes from training and practice in providing services for students with disabilities. Qualitative data provided immediate feedback regarding ways to best address the tutors' needs. This information was then implemented into future training sessions for tutors. The evidence provided in the present study suggests that tutor training programs can serve as an integral component of mentorship programs. As college and university campuses continue to become more diverse, it is imperative that faculty, staff, and administrators actively pursue means of serving all students on their campuses.

Limitations and Future Research

The present study utilized qualitative self-reports as a means of tracking progress and the effectiveness of the current program. However, future researchers would do well to incorporate quantitative analytic methods of assessing tutor development throughout the duration of a training program. Measures administered to tutors at the outset of a program can provide a baseline for future comparison. Post-training assessment would then provide an overall picture of whether tutors developed as a means of the training program. However, administering a quantitative assessment measure at the end of each tutor training seminar would provide a more detailed analysis of change and development in tutors. Another limitation of the present study is that no correlations can be made between the effectiveness of the tutor training program and the outcome of students with disabilities receiving tutoring services. Future research would benefit from analyzing the relationship between the training of tutors and the outcomes of those students receiving tutoring services. Another limitation is the lack of attention given to attitudes tutors had towards students with disabilities. Future research would benefit greatly from assessing the attitudes and perceptions individuals have of persons with disabilities. Finally, the present study experienced fluctuations in participation as well as

participant attrition. Future studies may benefit from altering the schedule of the training, in addition to considering requirements that tutors attend to ensure participation.

Conclusion

Based upon the review of the literature and the results of the present study, it is apparent that a multi-faceted approach would be beneficial to take when providing services to students with disabilities. The results of the present study indicate this approach of offering services to students with disabilities has been effective due to careful consideration of barriers that students face and of ways to assist students in achieving academic success. The tutor training was implemented in order to provide a higher quality of tutoring to students with disabilities. Such a program is especially important for Non-FMP students because it provides additional support by well-trained and effective tutors. Efforts will be made in the future to build upon the foundation that has been established. We recommend that future programs examine current attitudes towards students with disabilities in general education classroom settings, and continue to address ways to advocate for the rights of these students as well as foster their own independence.

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Appendix 1 Providing Quality Tutoring for Students with Disabilities

Overview of the In-Service

In order to provide quality tutoring for students, tutors need to be aware of the resources and accommodations available for their clients. This in-service outlined the transition to college for students with disabilities, the responsibilities of the Disabled Student Development office, the services provided to students with disabilities, and knowledge of different learning styles.

Outline of the In-Service

- I. Description of the various types of disabilities represented amongst students at Ball State

- II. Introduction of the responsibilities and services provided by the DSD office
 - A. Determine a student's eligibility for disability services
 - B. Determine and implement reasonable and appropriate accommodations
 - C. Balance the legitimate civil rights of the student with a disability while protecting the standards and expectations of the university

- III. Explanation as to why the transition to college can be difficult for students with disabilities

- IV. Characteristics of different learning styles
 - A. Reading skills
 - B. Spelling Skills
 - C. Written Language Skills
 - D. Oral Language Skills
 - E. Mathematical Skills
 - F. Organizational Skills
 - G. Social Skills

- V. Group discussion about the tutors' past experiences and encounters with students with various disabilities and different learning styles.

Session Evaluation

Tutors reported learning the following skills:

- Basic guidelines of how to interact with students with disabilities
- Accommodations available to students with disabilities
- Strategies for helping students with different learning styles

CRLA TOPIC REQUIREMENT: AWARENESS OF DISABILITIES, COMMUNICATION SKILLS, KNOWLEDGE OF RESOURCES AVAILABLE TO TUTORS AND STUDENTS, DEFINITION OF TUTORING RESPONSIBILITIES

Appendix 2

Providing Quality Tutoring for Students with Disabilities: Overview of Learning Disabilities

Overview of the In-Service

Before delving into the specifics of various learning disabilities, tutors were provided with a general definition of what a learning disability is and what areas of learning they can affect. Information was given regarding how tutors could best gather information from clients when meeting them for the first time. After the presentation, tutors broke into groups to participate in two activities to discuss strategies for working with various learning styles as well as how to respond to several tutoring scenarios. At the end of the session, confidentiality between tutors and clients was stressed.

Outline of the In-Service

I. "I have a learning disability..."

- a. What to do when a student discloses that they have a learning disability
- b. What does a learning disability mean?

II. Learning Disabilities

- a. Definitions
- b. Where LDs manifest themselves in the student's learning – reading, writing, listening, speaking, spelling, or mathematics

III. Gathering Information

- a. When a student discloses a learning disability, it doesn't provide much information
- b. How to ask questions to obtain more knowledge
- c. Awareness of accommodations available to clients in the Learning Center

IV. Activities

- a. Strategies that can be used when working with students with various learning styles
- b. Respond to scenarios
 - i. How would you approach the situation?
 - ii. What are the key points you'd observe?
 - iii. How would you address them?
 - iv. What strategies would you try?
 - v. Have you had a client like this?

V. Additional Points

- a. Confidentiality is paramount
- b. Referrals to DSD office are always appropriate
- c. Students with disabilities are held to the same standards
- d. Ask the expert!

Session Evaluation

Tutors reported learning the following skills:

- "Having a learning disability does not mean you're not smart"
- "I learned to ask questions of the client to learn how the disability impacts his/her learning"
- Information about the different learning disabilities
- Strategies for how to handle various tutoring situations

CRLA TOPIC REQUIREMENT: INFORMATION GATHERING, USE OF PROBING QUESTIONS, ACTIVE LISTENING

Appendix 3 Tutoring Students with Visual Impairments

Overview of the In-Service

There are disabilities that students have that present particular challenges to not only the student but to the tutor helping them as well. Students with visual impairments provide tutors with a particular challenge, for tutors may have to employ new techniques they are unfamiliar with. Techniques were discussed for working with students who have various visual impairments. Furthermore, tutors were presented with information regarding the adaptive technology offered to students with visual impairments at the university.

Outline of the In-Service

I. General Information

- a. Not all people with visual impairments are completely blind
- b. Specific devices and aids the client may bring with them (cane, dog, Braille translator device)

II. Techniques when working with students with visual impairments

- a. Outlining things in black marker can be beneficial, use manipulations, auditory methods
- b. Asking clients how they best learn
- c. Strategies and techniques for when tutoring specific courses

III. Adaptive Technology

- a. Use of software that enlarges text
- b. Drawing board, tactile graphics, CCTV
- c. Computer software that reads text aloud
- d. Software that converts text into Braille

Session Evaluation

Tutors reported learning the following skills:

- Learning about the adaptive technology
- Varying degrees of visual impairments
- Approaches to working with clients who have varying degrees of blindness

CRLA TOPIC REQUIREMENT: KNOWLEDGE OF ADAPTIVE TECHNOLOGY AND VARIOUS USES, USE OF VARIOUS RESOURCES AVAILABLE, CREATIVITY IN INSTRUCTION, COMMUNICATION SKILLS

Appendix 4 Tutoring Students with Asperger's

Overview of the In-Service

There are a variety of difficulties faced by individuals with Asperger's. It affects a person's social communication, understanding, imagination, as well as sensory and information processing. The purpose of this session was to help tutors become more aware of the characteristics of this disorder. Furthermore, tutors were educated regarding the many areas of life this syndrome affects and were presented with alternative approaches to helping students with this diagnosis. Tutors were given the opportunity to engage in discussion with their peers as well as with the presenters regarding effective approaches to working with these students.

Outline of the In-Service

I. Overview of Asperger's

- a. What is it?
- b. Who it affects

II. Areas of life and learning affected by Asperger's

- a. Three main areas affected:
 - i. social communication
 - ii. social understanding
 - iii. imagination
- a. More specifically:
 - i. sensory overload
 - ii. social interactions with peers
 - iii. dining hall experiences/ dietary issues
 - iv. housing issues
 - v. interactions with professors or instructors
 - vi. difficulty with change
 - vii. navigating campus and the community/ transportation
 - viii. hygiene and self care
 - ix. stress tolerance

III. Video Presentation giving example of interaction between two individuals with Asperger's

IV. Open discussion among tutors and presenters regarding tutoring strategies

Session Evaluation

- Overview of symptoms and cues (red flags)
- How individuals with Asperger's learn/process information
- Personal testimonials from other tutors/staff members
- The video clip
- Strategies and tips for tutoring individuals with Asperger's

CRLA TOPIC REQUIREMENT: TUTORING GOALS, PLANNING, STRATEGIES, STUDY SKILLS, LISTENING AND INSTRUCTIONAL TECHNIQUES

Assessing Rhetorically: Evidence of Student Progress in Small-Group Writing Tutorials

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Abstract

A year-long exploratory project examined how well students could effectively respond to a piece of first-year writing using an articulated framework—Assignment, Focus, Organization, Support, and Proofreading (AFOSP). The students in these small-group writing tutorials received peer-facilitated support while they were enrolled in first-year composition. Results from a one-way repeated measures ANOVA showed statistically significant gains in students' abilities to respond to writing using the framework. The findings suggest that teaching students to use such a framework can improve their ability to critically assess writing.

This exploratory study examines students' experiences in small-group, credit-bearing writing tutorials in an attempt to identify ways to articulate empirical outcomes from the facilitated writing group experience. Like many university writing centers, the Writing Center at Washington State University (WSU) has struggled to articulate quantifiable outcomes for its tutorial programs. The Writing Center views the work done in our small-group tutorials as important and necessary, but most of the assessment work has been collected qualitatively through student reflective papers in narrative form at mid-semester and at the end of the semester. For many years, assessment based on students' observations indicating increased confidence, acquisition of new skills, and a clearer understanding of effective peer reviews seemed sufficient. However, this study came forward as part of a desire to use objective measures for improving understanding of what students took away from the course.

Exploring tutorial outcomes through quantitative measures was daunting because these researchers had not previously examined what students learn from the small-group tutorial experience using empirical methods. Like other universities who face the onslaught of accreditation and accountability demands handed down from central administration, legislators and the public, these researchers were motivated to look for ways to verify students

learned over the course of a semester in the small-group writing tutorial. Concerns about what might be uncovered from such a study and what such implications would hold for the writing program were allayed by the work of Haswell (2005), Lerner (1997, 2003) and Johanek (2000) who advocate for the use of empirically based research methods in composition studies. All feel such research illuminates knowledge and helps construct our discipline in important and crucial ways.

Kail and Trimbur (1987) provide notable examples of key research into Writing Center outcomes when they outlined the theoretical differences between the two major types of tutorial offerings. They drew clear distinctions between tutorials that operate within the hierarchy of the institution—like the Brown Writing Fellows program—(Haring-Smith, 1986) and tutorials that operate separately from the curriculum and support student agency and development. Grego and Thompson (1996, 2008) have also theorized small, group tutorial programs and advocate a separate “ThirdSpace” that prioritizes student agency outside of the traditional classroom setting. To date, however, there are few examples documenting empirical outcomes from such small-group writing tutorials. Kail, Gillespie and Hughes (2010) detail outcomes for tutors who have worked in Writing Centers. Diederich and Schroeder (2008) document promising outcomes of structured tutorials for students who repeated first-year writing and who took a structured writing tutorial concurrently. Likewise, High and Damron (2009a, 2009b) examine gains made in student’s writing and critical thinking abilities in engineering courses connected to concurrent, small-group tutorials. None of these studies, however, have examined the merits or outcomes from the tutorial as an independent entity. This study uses quantitative methods to see what students learn from the small-group writing tutorial experience.

Background

History and Overview of English 102

WSU’s small-group, credit-bearing tutorial program began in the early 1990’s as part of the WSU Writing Program. The program explored outcomes from this freshman-level, small-group, credit-bearing tutorial program, English 102. Unlike many universities, the WSU Writing Program is separate from the English Department. At WSU, the Writing Program combines university-wide instructional support for students through the Writing Center, diagnostic assessment of student writing through the Writing Assessment Program, and support for faculty through the Writing in the Disciplines efforts, and it is housed in the University College. The English Department, on the other hand, operates as a traditional academic department—within the College of Liberal Arts— that offers courses and degrees. The English department is responsible for teaching first-year and other composition, creative writing, technical writing, and literature courses.

While English 102 relies on the first-year writing course to provide students with writing assignments with which the group can work in the tutorial, the Writing Program has separate aims from the English department and first-year writing curriculum. Three purposes are articulated for English 102: 1) help students develop the skills needed to effectively recognize and respond to strengths and weaknesses in writing, 2) give students the opportunity to learn how to give and accept critical feedback on writing, and 3) encourage

students to participate in an atmosphere of effective peer collaboration. The aims of English 102 are complimentary to the first-year composition curriculum, but are independent of it.

The small-group writing tutorials offered at WSU represent a unique hybrid of writing center theory. On the one hand, the tutorials exist as regular courses within the undergraduate curriculum and are identified to complement the work of the first-year writing course. The tutorial sections are scheduled with regular course times and meeting places. The small-group tutorial provides institutionally required support for writers based on a locally developed writing assessment examination. Based on the results of the WSU Writing Placement Exam, some students are required to take the tutorial, but many students opt to enroll in this course out of a desire for a structured tutorial experience.

On the other hand, the small-group tutorials are facilitated by a peer tutor and operate from student-centered writing center practices. Similar to Grego and Thompson (1996), our tutorial course was established specifically not to be a "hand-maiden" to other disciplines, but rather to exist independent of the curriculum and to operate as a ThirdSpace (Grego and Thompson, 2008). The tutorial operates as a peer-facilitated small-group in which the interactions are modeled upon the work of Bruffee (1984) and Kail and Trimbur (1987) ushering students into the type of disciplinary conversations they will encounter. Unlike the Writing Fellows program (Haring-Smith, 1986), the tutors are neither agents of the instructors nor the institutional hierarchy, but, instead, they are there to help clarify a framework through which students can assess the rhetorical aspects of their writing and the writing of others (Huot, 2002) going beyond grammatical concerns.

Toward rhetorical assessment

The focus of this study is to explore the interaction of the students enrolled in the small-group tutorial and the ways they respond to student writing to investigate the possibilities of articulating discernable outcomes. WSU's English 102 assumes students can be trained to use the vocabulary and insight of writing tutors to develop their own writing as well as the writing of others by providing feedback through a common framework. Bruffee (1984) and Kail and Trimbur (1987) argue for the importance of providing instructional settings free from traditionally hierarchal relationships, the pressure of instructor expectations, and a focus on grades. Their work argues for the importance of peers mentoring other students into the disciplinary conversations of the university. Kail and Trimbur assert these spaces needed to be separate from the regular curriculum and that a writing center would serve as this space. They questioned whether or not such a relationship could exist within the curriculum, arguing that a tutor situated within an actual writing course only serves as an agent of the instructor (as in the Brown Tutor Fellows model) and does not represent a free exchange of ideas idealized by Bruffee and peer learning advocates.

English 102 uses student-centered models to mentor undergraduates into the disciplinary conversations with the guidance of a peer tutor (Bruffee, 1984; Kail and Trimbur, 1987). The relationship is intentionally equal and imports the student-to-student interaction into a classroom setting. This

study's small-group tutorials allow students to discuss topics and self-assess their own writing in a space largely free from the hierarchical systems set up in their first-year composition classrooms. The framework of this study appears unique; it is rooted in the practices of rhetorical assessment articulated by Huot (2002). Huot argues:

. . . the discourses of assessment, grading, and testing have often overemphasized the importance of correctness, while at the same time ignoring the importance of rhetorical features. Certainly, most writing teachers see the need for instruction and emphasis on both grammatical and rhetorical aspects of writing. However, what we assess, grade, or test ultimately determines what we value. It is not surprising, then, that most student revision centers on correctness, since the value of correct writing has been emphasized over and over again in various assessment, testing, and grading contexts. We need to recognize that before students can learn to revise rhetorically, they need to assess rhetorically (p.170).

In English 102, tutors are advocates and mentors for the students, not "extension[s] of the faculty" (Kail and Trimbur, 1987, p. 208). The tutorials are not in service to the composition courses, encourage collaboration among writers, and give students tools to measure their writing's effectiveness independent of their instructors' grades and rubrics. The model disrupts traditional power dynamics and beliefs about the ownership and authority of knowledge, and "asks students to rely on themselves, to learn on their own in the absence of faculty authority figures or their surrogates. They must also learn to free themselves from their dependence on the faculty continually measuring and certifying their learning" (Kail and Trimbur, p. 207).

English 102 provides a regularly scheduled forum for students to meet and discuss their writing and is different from the conference/consultation model often used by first-year writing instructors or a typical tutorial session in a writing center. Kail and Trimbur assert "students have always banded together informally, in rap sessions and study groups, to deal with the intellectual demands of their experience as undergraduates. Collaborative learning, in this respect, is an effort by educators to mobilize the power of peer influence toward the intellectual activity of co-learning" (Kail and Trimbur, 1987, p. 207). By combining students' natural desire to discuss with peers and the formality of a regularly scheduled meeting, English 102 offers the philosophy of a writing center tutorial adapted to suit programmatic goals of collaborative learning.

To guide this interaction, WSU's Writing Center developed a framework representing a hierarchy of values used to guide tutors in their response to student writing (Appendix A). This framework, which has been used for nearly twenty years, includes the extent to which the writer attends to the course Assignment, provides appropriate Focus, adheres to a relevant Organization, integrates Support and evidence into the writing, and utilizes Proofreading strategies. The order deliberately prioritizes global issues of the writing task over the local issues of grammar and syntax. This framework:

Assignment, Focus, Organization, Support, and Proofreading (AFOSP) is used in the individual peer-to-peer tutorials as well as the small-group writing tutorials.

In an individual tutorial session within the Writing Center, a tutor talks with a writer and checks to see if the piece of writing follows the requirements of the assignment. Then, as a team, they see if the essay sets a clear context for the development of the writer's main point and supporting evidence. In addition to context, the "Focus" section concentrates on the writer's thesis statement or sentence that drives the main point of the writing. Next, students check to see if the writing demonstrates a logical progression of ideas, that transitions are present and instrumental to the understanding of ideas, and finally that the piece of writing has a recognizable beginning, middle, and end. Then they look at the piece of writing to see if the writer's assertions are backed up with logical arguments, personal anecdotes, and, when appropriate or required, by research which is correctly documented. Finally, the tutor and the student examine punctuation, spelling, syntax, and other sentence-level issues, and if necessary, patterns of error are identified.

The AFOSP framework is also used in the small-group writing tutorials, but the tutor operates in a slightly different way. Rather than serving as the individual consultant on each student's piece of writing, the tutor trains all of the students in the small-group tutorial to learn the language of the AFOSP framework and then to apply the criteria to other students' writing. At the beginning of the semester, the tutor teaches the framework and models its use. With each meeting, students take more control of the group and interact with each other instead of relying on the tutor to apply the framework to their writing. Ideally, as students practice peer review within their small-group, they form trust in each other, gain confidence in their reviewing skills, ask questions to each other, and rely less on the tutor or group facilitator.

Students should be instrumental in their own growth as writers. Richard Straub notes "with remarkable consistency, the recent scholarship on response has urged us to reject styles that take control over student texts and encouraged us instead to adopt styles that allow students to retain greater responsibility over their writing" (1996, p. 223). The approach of encouraging student agency ties into both writing center practice as well as instructional assessment. Student investment is an essential determinate in the work they produce and their likelihood to examine and change their own writing process. Student ownership of this process is augmented through collaborative learning. "The major characteristics of a studio in these different contexts are that learners are producing work, of which they take ownership, and that they work both individually and collaboratively in some way" (Grego and Thompson, 2008, p. 7). Providing students with the language of AFOSP grants them agency to use evaluative criteria in examining their own work. Instead of relying on instructors to provide the sole or primary feedback for a student's writing, English 102 students are asked to evaluate and analyze their own work and the work of their peers.

Some teachers or administrators might be nervous about the prospect of peers taking up the role of providing what Huot (2002) describes as "instructive evaluation...[which] is tied to the act of learning a specific task

while participating in a particular literacy event (p. 170). Huot argues two key features of instructive evaluation exist: 1) assessment is a common feature of any literate activity, whether reading or writing, authors and audiences are evaluating and categorizing information as they interact with it, and 2) the ability to assess quality is an essential component of any interaction (p. 165). However, Huot avoids conflating grading—as a means of evaluating or testing—and assessment—as a strategy to examine the application of successful and unsuccessful techniques. “The type of judgment we know as grading has little relationship to the type of evaluation writers constantly make in the drafting of a particular piece of writing...Giving students an A or even a B, even when we suggest revision, probably doesn’t encourage them to revise, because the grade itself carries more weight as an evaluation than what we can say about the need to revise” (p. 167).

The separation of grading and assessment is what allows students to focus on peer feedback rather than a subjective—and final—label of quality in English 102. Both peers and tutors are instructed not to discuss grades in English 102 and focus only on the writing. English 102 creates an environment—separate from the first-year writing course and the instructor—where grades and instructor expectations are absent and are replaced by a focus on rhetorical assessment and the students’ goals for their writing.

As Lerner (1997, 2003) has noted, not a great deal of empirical scholarship is available related to writing center outcomes. Haswell (2005) observed—more generally for composition studies—that a study that fails to conduct replicable, aggregable, data-driven studies does so at its own peril. Other studies for outcomes from structured tutorial experiences show promise. This study is guided by the desire to find out if there are discernable outcomes that extend the peer-centered philosophy into a course within the regular institutional curriculum.

Description of the study

Demonstrating how rhetorical assessment can benefit students is only half the battle. Without a means to know if or how such a system works, this process falls victim to common writing center practice which avoids quantifying our work using quantitative measures. Lerner (2003) asserts very few published statistical studies of writing center effects exist (p. 61). While anecdotal evidence provides comfort that the process has benefits, convincing others and ourselves those benefits can be replicated requires more data. Traditionally, empirically driven research and Writing Center studies have avoided crossing paths. As White (1994) observes:

The typical evaluation of writing programs (including writing projects, writing-across-the-curriculum programs, research and grant designs, in-service training seminars, and regular instructional programs) usually fails to obtain statistically meaningful results. This failure should not be taken to mean that writing programs are failures. The inability to get results ought, in general, to be seen as a conceptual failure, deriving, in part, from a failure to understand the state of the art in the measurement of writing ability (p. 248).

In our Writing Center, there is ample anecdotal evidence students are satisfied with their experience in the Writing Center, but it has never been systematically or empirically examined whether or not students gain anything from their experience in the small-group tutorials. Huot (2002) asserts,

we need to recognize that before students can learn to revise rhetorically, they need to assess rhetorically. Certainly much current writing instruction focuses on rhetorical concepts, but there is no clear evidence that our assessment of student writing focuses on these same criteria (p. 170).

This research project took this type of observation to heart and set out to answer whether students learn anything measurable about responding to each other's writing in a small-group, credit-bearing writing tutorial using the AFOSP framework representing the researchers hierarchy of values.

Method

In the spring of 2008, an exploratory research study was set up to examine whether or not students were able to learn how to apply the AFOSP framework to other students' writing. This framework was developed by the WSU Writing Program. This study sought to answer the following questions:

1. Do students' learn anything measurable about responding to each other's writing in a small-group, credit-bearing writing tutorial using a course framework that includes the following criteria—understanding of Assigned task, Focus, Organization, Support and Proofreading (AFOSP)
2. Is there a difference between the gains made in homogenous group tutorials comprised of students from the same section of first-year composition compared to mixed group tutorials comprised of students from a variety of sections of first-year composition?

Students enrolled in English 102 during spring semester 2008 were asked to participate in this study. There were 411 total participants. The design of the study examined students' responses to a piece of writing at the beginning of the semester and at the end of the semester, which required looking at paired samples. Of the 411 students enrolled in English 102, 72 completed the beginning and end of semester responses for this study, which meant there were 72 pairs of students' responses to a similar paper. All student participants signed an Institutional Review Board approved consent form for participation in this study.

Data Collection

The study explored two distinct issues: 1) potential outcomes from small-group, peer-review sessions and 2) the best method to facilitate this peer review. The first phase looked at students' abilities to respond to each other's writing using the AFOSP framework to see if gains were achieved from the beginning of the semester to the end of the semester; the second phase examined whether a difference in gains is present according to the make-up of the tutorial (homogenous vs. mixed groups). In other words, the

study explored if grouping students in small-group tutorials by similar first-year writing course sections was important or if ensuring the enrollments in the tutorials had students from various first-year writing courses was more important.

During the first week of tutorials during Spring 2008, the English 102 tutors were asked to distribute copies of the paper "The Watering Hole" (Appendix B). "The Watering Hole" was written for an actual freshman composition class by an actual student. The paper, used with permission, contains multiple problems. Tutors gave the students a copy of the paper, which also briefly outlined the writing assignment. Students were instructed to give feedback to help the student revise the paper, and they were asked to write their suggestions on the response sheet (Appendix C). Tutors did not prompt the type of feedback the students should provide for the paper. Students were given ample time during the tutorial to provide written feedback for "The Watering Hole." When the students were finished, they returned their written responses to the tutor, who subsequently returned them to the program administrator.

Nine weeks later, during the final week of the semester, tutors were asked to distribute copies of "The Watering Hole" as well as the response sheets. Students were again instructed to write down revision feedback for the author of "The Watering Hole." Again, students were not instructed or prompted to give any specific type of feedback and they were given ample time to write down their revision suggestions. Materials were returned to the tutor who then returned them to the program administrator for coding. Students responded to the same piece of writing, "The Watering Hole," at the beginning and end of the semester to ensure a uniform comparison of the quality of their feedback.

In the first round of student responses to "The Watering Hole," much of the initial feedback focused solely on grammar, in some cases providing line-by-line editorial changes for the sample piece of writing. For example, student A gave extensive editorial suggestions: "Take out 'be' in line 1. Change 'that' to 'who' in line 2. Change 'Families'" to "Family's." The student focused only on grammatical feedback and provided line-by-line editing for two of "The Watering Hole's" three pages. While a focus on grammar was common for the beginning-of-semester responses, the end of semester responses employed more variety in the types of feedback, in some cases writing AFOSP along the margin of the page to correspond with their feedback. Student A's feedback at the end of the semester still included grammatical concerns, but they were not the sole focus. Student A addressed the major categories of AFOSP with comments like "The paper seems to lack purpose. It fails to answer any of the questions," which directly relates to assignment and focus. Student A also asked questions regarding content and purpose, such as "how does women socializing at the watering hole tie in?" and "Why are you telling us this?" Student A seemed more equipped with a structure and vocabulary for responding to writing that went beyond grammatical concerns. For a comparison of Student A's response at the beginning and end of the semester, please see Appendix D.

There was an adequate amount of time—at least nine weeks—between the first and last data collection points. Students would have been engaged

in a variety of other activities, homework assignments and extra-curricular activities to minimize their recall of “The Watering Hole” thus limiting any type of practice effects. Likewise, the tasks for this project at the beginning and end of the semester were the same—the students were instructed to provide feedback without any particular guidance of the type of feedback they should give. Although all of the students had been in the course for the entire semester, this study sought to verify empirically that the students could learn how to apply the AFOSP framework. For the research project, assigning the same task and same sample paper provided appropriate comparisons.

Rating Procedures

Two separate rating sessions were held to evaluate the quality of students’ feedback to “The Watering Hole.” A group of five Writing Program faculty served as evaluators for this project. Raters were asked to evaluate each revision suggestion using the criteria of the AFOSP framework. The AFOSP Inventory was developed for the raters to collect their evaluations (Appendix E). Each revision suggestion was evaluated based on the quality of the student’s feedback for “The Watering Hole.” Raters were instructed to evaluate the quality of the student’s feedback according to five discrete areas: attending to the assignment, focus, organization, support and proofreading. Raters were asked to decide if a student’s response to a particular area represented a weak, adequate or strong response (Table 1). Raters were also encouraged to use ‘in-between’ scores to best reflect their assessment of the quality of the feedback. If a student did not provide any feedback on a particular area, the rater was asked to mark the box to the left of the Weak box to indicate no response.

Table 1. Example of AFOSP Rating Inventory

Dimension	No response (1)	Weak (2)	(3)	Adequate (4)	(5)	Strong (6)
Assignment						
Focus						
Organization						
Support						
Proofreading						

As a result, the qualitative assessments of the raters could be translated into a six-point scale then used for statistical analysis. This rating methodology was adapted from Condon and Kelly-Riley’s (2004) methodology for rating critical thinking.

A norming session was held before each rating session to review actual samples of students’ responses to ensure that raters were employing similar understandings of the benchmarks for the rating scale. Likewise, the weak-strong benchmarks were emphasized as needing to be defined within the context of the type of feedback a freshman could provide. The essays were coded so the raters did not know whether the responses had been written early or late in the semester. As a result, the 72 student participants provided feedback suggestions at the beginning and end of the semester to

"The Watering Hole," so a total of 144 student responses were evaluated.

Stemler's (2004) approach to estimate reliability was followed. Stemler argues that "the general practice of describing interrater reliability as a single, unified concept is at best imprecise, and at worst potentially misleading." Recognizing the limitations in simply examining inter-rater agreement, resulted in structuring the study to focus, instead, on how well the raters measured the construct of AFOSP and examined the consistency estimates. Stemler states "consistency estimates of interrater reliability are based upon the assumption that it is not really necessary for two judges to share a common meaning of the rating scale, so long as each judge is consistent in classifying the phenomenon according to his or her own definition of the scale." The first rating session examined the overall quality of students' responses on the discrete AFOSP dimensions. This analysis employed a one-way repeated measures ANOVA. This analysis had a Cronbach's Alpha of .7668 indicating very good reliability. The second rating session examined the difference in student performance by group composition. This data was analyzed using an independent samples t-test. This analysis had a Cronbach's Alpha of .7873, again suggesting very good reliability.

Student grades intentionally were not chosen as a measure for this study. While Lerner's studies (1997, 2003) both use grades as a measure of Writing Center effectiveness, student grades were avoided as a measure for several reasons. First, the study focuses on small-group, peer-facilitated writing groups, which have received little to no research attention compared to research of Writing Center effectiveness. Actual grades are not assigned in the tutorial, as the course is Pass or Fail. Second, while grades may be a more commonly appreciated outcome, they are often inconsistent across sections of courses. At WSU, over 50 sections of first-year writing are scheduled with at least 26 students enrolled in each section. With a program this large, variations will exist between student experiences, for peer review, instructional feedback, and so on. In addition, the grades in first-year writing are reflections of many variables within a course; therefore, extrapolating how much the small-group tutorial plays in a student's final grade is difficult. Lastly, because our Writing Center has a policy of not discussing grades, our choice to avoid them as an outcome is consistent with our pedagogy and practice.

Results

First, the exploratory study looked at whether or not students improved in their ability to respond to each other's writing. A one-way repeated-measures, ANOVA, was used to examine 72 students' abilities to apply the AFOSP framework to a piece of writing. Students' AFOSP scores were averaged together at the beginning of the semester for AFOSP-A and again at the end of the semester for AFOSP-B. Intentionally, the analysis for the discrete criteria areas of AFOSP was not run in order to see how well students used the framework as a whole (as opposed to the individual parts). This decision was to prevent any appearance of data mining for the best possible outcome, so our analysis relied solely on the use of the entire framework. Students' AFOSP scores showed statistically significant gains in their abilities to respond to others' writing using the AFOSP framework from the beginning of the semester to the end of the semester.

Table 1: Analysis of Variance for Differences in AFOSP Application

Source	df	F	eta Squared	P
	Within subjects			
AFOSP Ax	1	27.381**	.278	.99
AFOSP B	71	(.994)		
A x B within group error				

Note. Value enclosed in parentheses represents mean square errors. ** $p < .01$

A one-way repeated measure ANOVA was run to see if there was a difference in students' abilities to apply the AFOSP framework at the beginning and end of the semester in a small-group, credit-bearing writing tutorial: English 102. An analysis of variance showed that the effect of teaching students to apply AFOSP was significant, $F(1, 71) = 27.381$, $p = .05$ such that the beginning AFOSP score was lower ($M = 2.26$, $SD = .92$) than the end of the semester AFOSP score ($M = 3.13$, $SD = 1.33$). The effect size was large at .76, and the observed power was .99. The strength of these gains was quite strong.

Second, a separate exploratory study was conducted to see if there were differences in students' performances based on the makeup of the tutorial group. This study compared homogenous groups, in which students from the same sections of the first-year writing course were in the same small-group tutorial, to mixed groups in which students in the tutorial group were from a variety of first-year composition sections. An independent t-test was conducted between the performances of homogenous groups and the mixed groups. For the homogenous groups, $n = 63$ ($M = 2.30$, $SD = .94$); for the mixed groups, $n = 71$ ($M = 2.59$, $SD = 1.19$). No significant difference between the tutorial group type and students' ability to apply the AFOSP framework $F(132) = 4.04$, $p = .120$ was found. This meant that the make-up of the groups did not affect the students' performances. This was an important finding because this information streamlined the WSU registration practices which had been very labor intensive.

A few limitations appeared in this study. First, this study is exploratory. Therefore, the researchers caution readers against using these findings as strong generalizable claims for in other Writing Center settings. The findings from this study for this center were compelling enough to share the design and the outcomes for providing an opportunity for others to explore the issues in wider writing center contexts.

Additionally, this is a quasi-experimental study conducted within the constraints of an active program. As Campbell and Stanley (1963) observe, "there are many natural social settings in which the research person can introduce something like experimental design into his scheduling of data collection procedures...even though he lacks the full control over the scheduling of experimental stimuli" (p. 34). To that end, several limitations were found in the interpretation of the findings. First, the results tended to be a bit of "a chicken and egg predicament" because true experimental

design dictates a precise and validated definition of the treatment students receive as the instructional model for the small-group writing tutorial. However, the dynamic and social nature of an actual small-group writing tutorial program makes it difficult to extensively chronicle and define the instructional treatment. Suffice to say, the AFOSP framework was a common tool for all tutors who served as facilitators in the WSU Writing Center and it was a reasonable framework to conduct this exploratory investigation. It is not, however, feasible to account for the variety of ways in which tutors might present the AFOSP framework. Again, as in most Writing Center settings, differing approaches are encouraged and it is virtually impossible to capture a precise definition of how the AFOSP framework may have been presented to the various groups. A dissertation length study could address the precision of the facilitation received in small-group writing tutorials.

Second, limitations exist in the test study population. The WSU Pullman campus has a fairly homogeneous population who would enroll in English 102. Most of the subjects at WSU institution are traditional 18-24- year-olds who attend a residential campus. Predominantly, the student population at WSU comes from white, middle-class backgrounds. Furthermore, this study did not include multilingual writers because most multilingual writers take a different first-year writing course than native speakers of English.

Finally, it was necessary to give students the same piece of writing to respond to at the beginning and end of the semester in order to have what Campbell and Stanley (1963) call a "time series quasi-experimental design." Such a design opens the study up to potential problems with history or the interaction of our assessment with other variables since the study takes place in a setting that cannot be controlled. But, given the context of the exploratory study, having students examine the same piece of writing with nine weeks in between was a reasonable way to retain some of the issues of experimental control that was forfeited with the dynamic setting of a small-group undergraduate writing tutorial. Given these limitations, the findings provided hopeful directions that might open up further lines of inquiry.

Discussion

The exploratory studies found students in small-group facilitated tutorials were able to effectively provide guided feedback for writing improvement. According to the analysis, students made statistically significant gains in the ability to respond to each others' writing through the AFOSP framework. These gains are strong in both effect size and power. Such gains speak to Huot's contention that students need to be able to assess rhetorically before they can revise their own writing, and given the opportunity, students can respond to each other's writing in meaningful ways. Such findings illustrate the value of having students work in peer facilitated small-group writing tutorials without the pressure of the instructor or grades, and such an interaction has meaningful instructional and quantifiable outcomes.

Likewise, the results also suggest the student make-up of the group does not affect their ability to effectively provide feedback to each other. For us, this was an important finding. The operating assumption that students needed to be in the same tutorial and first-year composition course since English 102 was conceived nearly 20 years ago. Trying to make this

configuration work resulted in huge amounts of administrative effort and ran counter to institutional procedures and infrastructure. The findings from this study helped the researchers to decide to significantly streamline the approach to grouping students.

This study embraces the concept of necessary peer-facilitated spaces that allow students to mentor each other while also supporting a more balanced power structure — tutors are student peers. The findings from this study suggest a course, facilitated by peer tutors, is possible within the curriculum—a separate space, or ThirdSpace in Grego and Thompson’s terminology—that can produce meaningful student learning outcomes.

Additionally, this study shows Writing Center administrators and personnel empirical studies can be part of writing scholarship. The informal anecdotal feedback model has been an intrinsic piece of Writing Center identity and such modes of inquiry are central to the way Writing Centers view themselves. However, in the modern university’s budget climate, Writing Centers may exist in more dangerous territory facing cuts or outright elimination because of the tendency to stay away from easily quantifiable measures or outcomes. Studies like this can be used as a model for other Writing Centers to examine and communicate value based on data to university officials. Likewise, such studies help us define and articulate outcomes of writing center work in ways that Haswell (2005) deems essential to the discipline of composition studies. Such empirical forays help validate the theoretical suppositions often held about writing center theory and practice. These inquiries help us determine the effectiveness of our face-to-face practice with students.

This study examined students’ abilities to provide effective feedback to one another based on the rhetorical assessment vocabulary of our hierarchy of values framework, AFOSP. The intended outcome of this study was to demonstrate teaching first-year writing students a vocabulary based on rhetorical assessment, instructive feedback, and writing center pedagogy would lead to better evaluation of the work of their peers. While the results of this exploratory study support this outcome, the larger implications of how these effects translate to a student’s success in first-year writing or their development as students over their college career remain to be explored.

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Appendix A**WSU Writing Program Writing Assessment Criteria**

Assessment Criteria: The following criteria are used to assess both the Writing Placement Exam and the junior Writing Portfolio.

Assignment

Your assignment attends to the instructions set forth by the instructor.

Focus

Your writing demonstrates an understanding of:

- the assignment
- essay writing conventions:
 - The essay sets a clear context for the development of your main point and supporting evidence.
 - The essay uses a vocabulary consistent with your context and which demonstrates an interest in the topic.
 - The essay provides reader information which is accessible or recognizable to the reader and relevant to your main point.

Organization

- Your essay has a recognizable beginning, middle & end.
- The introduction clearly explains your purpose; the body “flows” logically in support of that purpose; the conclusion provides a sense of closure.
- You have chosen the correct format for your writing task.
- You avoid redundancy or unnecessary repetition of ideas and information.

Support

- Your assertions are backed up with personal anecdotes, logical arguments, and, when appropriate or required, by research which is correctly documented according to MLA (Modern Language Assoc.), APA (American Psychological Association), or Chicago (footnoting) documentation styles.
- Your research can be confirmed by the reader, if necessary.

Proofreading

- Punctuation is correct and appropriate.
- There are no spelling errors.
- Vocabulary (word choice) is appropriate for a university-level audience.
- Subjects and predicates are in agreement; tenses of verbs are correct.
- Pronouns are in agreement with antecedents and consistent with guidelines for non-sexist language.
- Capitalization is appropriate.
- Sentence structure is correct (no run-ons, comma splices, fragments).
- Use of numbers is correct.

Appendix B "The Watering Hole"

Used with Permission

Assignment: Write a 3-4 page profile of a location in Pullman. Use observation and interpretation to give the reader some sense of a place.

Name

Instructor's Name

Course Information

Date

The Watering Hole

Since the beginning of time most people have chosen to be wash their clothes every so often, and for those that haven't I would rather not discuss them in detail. In the past, women have traditionally gone to the local watering hole to wash and dry her families' weekly laundry. This was also when women often took time to socialize and gossip with other women. However, since then the washer and dryer has been invented and people no longer need to do their laundry in a nearby stream instead they go to the Laundromat. In the twenty-first century usually students, travelers, or the less fortunate are the ones who typically use the laundromat. Occasionally the wealthy might be spotted there if the need arises to wash their king size comforter (because it won't fit in their brand new Kenmore).

Since I'm a college student and I'm not able to do my laundry at home any longer, I have chosen to go down to the local laundromat. The idea of this first time experience excited me. I envisioned the typical Laundromat stereotype something you would likely see in a movie: meeting the love of my life, finding my long lost twin, or maybe even finding a winning lottery ticket in they dryer. I doubted I would have such an extreme experience, but was ready for an interesting afternoon (plus I would least get to check out cute college guys and, if nothing else, get two weeks of laundry out of the way).

Before I even reached the laundromat my adventure had already begun. Reaching my car was a challenge the involved struggling with my hands full in trying to open the door and when I looked behind me I realized that my sparkly thong was in the middle of the crosswalk, so I sprinted back, extremely embarrassed, and tucked them into my back pocket.

I then walked a few blocks and entered the stuffy laundromat that smelled of downy fabric softener, and fresh lavender flowers. In the midst of the heat I could barely breath, but luckily I held back my sneezes so that I don't drop any more thongs, or my handful of quarters. I took my quarters and spent two dollars for two tickets, so I was able to wash and dry one load. I threw my clothes along with some soap in the washer, push in the ticket and press start.

I then found a quiet place to sit in the corner and admire the lovely wall décor. The bottom half of the wall is a blue chalk color, while the other half is a light blue with big fluffy clouds. These color were probably purchased in a mass quantity for a cheap price at a paint store going-out-of-business sale. I sit a few feet away from a woman filling out a job application, and I look behind me and see a sign saying "Help Wanted." I think maybe I could work here, but decide I need to get a better feel for the place first. To the other side of me is and a young man doing his mechanical engineering homework and sipping from his Starbucks' coffee cup. For the rest of the afternoon I sit in my plastic lawn chair typing away on my little laptop, constantly peeking over the top to observe the other laundry doers. I keep thinking to myself, "where are the cute guys?" Nothing much interesting is happening and I think, "how am I supposed to write about the ugly blue walls in possibly any more detail?"

The next couple to walk in is carrying large garbage bags of clothing, as if they haven't done their laundry in years. The woman looks to be no older than twenty-five, and the man she is with looks to be well over fifty. They both have wedding rings, so I assume they are married. I sit there staring (like a creep) trying to figure out the relationship of this couple. I come to the conclusion that he is probably a professor that had an affair with one his young students, got fired, is currently unemployed and now living in some cheap college apartment with her. Since he doesn't have a job anymore, he has to embarrass himself at the mall laundromat with the wife that is less than half his age. The couple then begins to separate their laundry by putting them into five different machines. I over hear them arguing that they have to spend so much money on their laundry they say it is the other partners fault that they have so much laundry. Eventually they settled their laundry differences and decided to sit down and read their unusual reading materials.

It perplexes me how any one could possibly study, or read with all the obnoxious dryer and washer sounds. The washer cycle begins with a muffled rush of water and then for the next twenty minutes goes swish, swish over and over. The other annoying sounds come from the old creaky dryer that thud and thump with every turn. I listen and detail these awful sounds as I stare at the old Mickey Mouse clock on the childish blue walls. I wait a few more minutes until my laundry finally finishes. While transferring my laundry from the washer to the dryer, I dread having to stay any longer in order to describe how many pounds of dirt, dust and lint lie under the machines. I think to myself, "this might just be the most boring experience of my life, and that listening to my math lectures sounds fun."

I decide to see what else I can find out about this job that is being advertised, so I ask the woman working at the front desk what one would do if employed here. She tells me that the job consists of helping customers with laundry problems and ironing. After she said "ironing" I didn't even listen to the rest of what she had to say. As much as I acknowledge that I need to be responsible for my own laundry for the rest of my life, I don't think working in a hot small room ironing other people clothes is my ideal job, no matter what I would be paid. I walk back to my old crappy plastic lawn chair and wait another twenty minutes, which feels like eternity, until my clothes are finally dry. I leave my observation post with a story, but not with the promise of a paycheck: the love of my life, my lost twin, or a winning lottery ticket.

Appendix C Student Response Sheet

YOUR TASK: Provide feedback on "The Watering Hole" to help guide the author through revisions

Include all of your suggestions for revision on this sheet (DO NOT WRITE ON THE WATERING HOLE PAPER). Use the back of this sheet if necessary. Your comments do not have to be complete sentences.

WATERING HOLE ASSIGNMENT: Profile a cultural location.

Recreate a time and place for the reader using specific details and examples. Include a strong thesis that addresses one or all of the following questions.

- 1) What does the chosen location say about our culture and/or values?
- 2) What informs your reading of this location?
- 3) How might people with other perspectives view your location differently from you?

REVISION FEEDBACK

Appendix D Sample student feedback

Student A – beginning of semester feedback to "The Watering Hole"

Page 1

- Take out 'be' in line 1.
- Change 'that' to 'who' in line 2.
- Change 'Families' to 'Family's'.
- 'In the past' is past & 'have' & 'gone' are present, change to 'went'.
- 'I' between stream & instead in line 6
- Move 'usually' in line 6 to between 'are' & 'the' in line 7.
- Lowercase 'laundromat' in line 8.
- Separate 'if the need arises' with commas
- Lowercase laundromat line 12
- Insert 'as' between 'stereotype' & 'something' line 12.
- Take out 'likely' line 12.
- "I" not "I" line 12.
- Insert 'at' between 'would' & 'least' line 13
- Change 1st sentence in line 17 to 'My adventure began before I reached the laundromat'
- 'The' to 'that' line 18
- Separate 'with my hands full' with commas line 18
- Change 'in' to 'and' line 18
- Take out 'and' and end sentence with 'door.' 'When starts new sentence line 18

Page 2

- Change 'them' to 'it' line 2.
- Take out comma after 'softener' line 4.
- Take out comma after 'things' line 5.
- Take out 'took my quarters and' line 6, take out comma after 'tickets,' & take out 'so I was able' line 6.
- Change 'push' to 'pushed' line 7 & 'press' to 'pressed.'
- Change 'color' to 'colors' line 10.
- Comma after 'quantity' & 'price' line 11.
- Change 'sit' to 'sat' line 12.
- Change 'look' to 'looked' line 13.
- Change 'think maybe' to 'thought' line 13.
- Change 'decide' to 'decided' line 14.
- Change 'need' to 'needed' line 14.
- 'Is' to 'was' line 14.
- 'Sit' to 'sat' line 16.
- 'Keep' to 'kept' line 17.
- 'Is' to 'was' & 'think' to 'thought' line 18.
- 'Is' to 'was' line 20 'haven't' to 'hadn't'
- 'Looks' to 'looked' line 21.
- 'Is' to 'was,' 'looks' to 'looked' line 22.
- 'Have' to 'had' 'assumed' to 'assumed' 'are' to 'were' line 22.
- 'Sit' to 'sat' 'come' to 'came' line 23.

Student A – end of semester feedback to "The Watering Hole"

- Chose a better 1st sentence that grabs the reader.
- How does women socializing at the watering hold tie in?
- Thesis? Why do we care that people now use the Laundromat? Why are you telling us this?
- Avoid all the parenthesis
- You said you carried the stuff to your car, then walked there...?
- Too much detail about the wall, off-topic.
- Restructure sentences and take out " " around your thoughts.
- The paper seems to lack purpose. It fails to answer any of the questions. You just told a story about your trip to the Laundromat.
- You said how you view the Laundromat, how would others view it? (Question 3)
- There is a lot of irrelevant information. The first paragraph does not fit with the rest of the paper.
- Work on conventions & grammar: spelling & typos, same verb tense, tense confusion (past & present tense, singular & plural), sentence structure, capitalization, punctuation, conventions.

Appendix E

AFOSP Inventory Scoring Sheet
WSU Writing Program

Mark the box that indicates the quality of the student’s response to “The Watering Hole” for each dimension:

WSU ID Number:

Color of Check Mark:

Dimension		Weak		Adequate		Strong
Assignment						
Focus						
Organization						
Support						
Proofreading						

WSU ID Number:

Color of Check Mark:

Dimension		Weak		Adequate		Strong
Assignment						
Focus						
Organization						
Support						
Proofreading						

WSU ID Number:

Color of Check Mark:

Dimension		Weak		Adequate		Strong
Assignment						
Focus						
Organization						
Support						
Proofreading						

Integrating Reading, Information Literacy, and Literary Studies Instruction in a Three-Way Collaboration

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Abstract

This article describes a unique course-based collaboration involving an English professor, a Learning Strategies Counselor, and a Librarian. The potential benefits and barriers of collaborative teaching in literature are reviewed. The article delineates a three-way instruction model built around an annotated bibliography assignment in a junior-level English class. The model integrates instruction in information literacy, critical reading, and literary studies to help students become effective readers and researchers. The results indicate that students benefit from this teaching model. The article also offers ways to make collaborative teaching work and provides suggestions for further research.

The collaboration came about because an English professor at the University of Houston was trying to help the students who were struggling with the research assignments in his ENGL 3301 class. In their work leading up to a final research essay, these students encountered difficulties at three crucial stages of their semester-long research process: searching for relevant secondary criticism, reading this material critically, and synthesizing ideas from their reading in their own work. These issues, which speak to the interrelatedness of information literacy, critical thinking, and reading and writing skills, represent common problems among our students. This essay will describe the steps he took with two other collaborators, a Learning Strategies Counselor and a Librarian, to devise an integrated set of presentations that would help students move through the complex demands of an annotated bibliography assignment.

The University of Houston (UH) is an urban public research university that has been recognized for its highly diverse student population; UH was recently named by the US News and World Reports (2010) College Rankings as #2 among national universities in terms of racial diversity. This diversity extends to students' educational backgrounds: more than half of our 37,000 undergraduates are transfers from community colleges or other two- or four-year schools, and many of them represent the first member in their family to attend college. The lack of a predictable student profile within and between sections of the same class makes teaching here a significant challenge.

There is a huge range of academic competencies represented in every class and at every level of the curriculum. So how can faculty begin to address this tension between the variations in individual students' abilities and the broader teaching objectives necessarily imposed upon a class as a whole? The first step lay in thoughtful course design and curricular development.

To address the wide range of abilities and backgrounds found in every class ENGL3301: Introduction to Literary Studies was created more than a decade ago to prepare students for the academic demands of undergraduate literature courses (Mazella, 1998). The skills taught in this class are meant to be used throughout a student's academic career. The class introduces students not just to literary texts, authors, and genres, but to the key issues and approaches to the academic study of literature. Since this course was first developed, the English department typically offers five or six sections annually.

Subsequently, it became clear that students needed additional assistance with the research process. The question at hand was whether specifically targeting students' reading comprehension and information literacy skills might help to bridge the gap between the stronger and weaker students. To strengthen students' skills in both areas, a collaboration was initiated between the professor, Learning Strategies Counselor and a Librarian. They were each invited to make separate in-class presentations designed around an annotated bibliography project. In their separate presentations, the librarian taught students how to search for and evaluate secondary sources for this assignment, while the learning strategies counselor demonstrated how to read secondary sources more critically and analytically. Even after these presentations, however, students were still struggling to master the various skills involved in the creation of an annotated bibliography. Each presenter's treatment of the topics in isolation had failed to convey to students the need to combine, align, and master these skills together. Ultimately, the goal was for students to develop a single, integrated research process that helped them choose topics, locate, gather, and synthesize information, construct arguments, and refine their thoughts in an orderly and self-regulated fashion. In order to help students digest all these critical skills, it seemed that both sets of instruction (i.e., information literacy and critical reading) needed to be incorporated into a more unified presentation that might potentially have a greater impact on students. Thus, the three decided to strive towards integrating the content of the presentation in a way that would provide students with a more holistic, less fragmented view of the research process.

This article reviews earlier research regarding collaborative teaching in higher education and presents the three-way collaborative teaching method while assessing its impact on student learning.

Background

Collaborative teaching practices have often been proposed as a way to enhance undergraduate learning because faculty and other professionals have as much to gain from collaboration as their students. Learning communities, for example, help deepen learning for faculty, librarians, or other professionals by multiplying opportunities for discussing problems

or generating alternative solutions. These characteristics are true of any kind of group work, at either the student or professional levels (Svinicki & McKeachie, 2011).

Expert to expert collaborations, however, whether among faculty or other campus professionals, have the added benefit of introducing experts trained in one field to those engaged in a separate field for the sake of solving a common problem. This has the effect of forcing each side to rediscover and make explicit its tacit assumptions to the other, so that both sides can generate at least a provisional common framework for understanding their problem. To use the terms of organizational theorists Argyris and Schön (1978), this kind of collective reflection and deliberation is crucial for what they call “double loop learning,” a form of organizational learning that begins to question and reflect upon its own assumptions in order to solve problems otherwise insoluble within a single intellectual framework. Collaboration and the double loop learning it fosters help to alert specialists to the limitations of their own approach, and can, therefore, combat the usual academic tendencies toward “silozation” (the vertical but not horizontal flow of expert knowledge), compartmentalization, and fragmentation of potentially useful insights within the contemporary research university (Mazella & Grob, 2011).

While still uncommon, cooperative teaching is nonetheless gaining recognition for higher education instruction (Davis, 1995). So why collaborate? One obvious reason is to enhance instruction, but in a way that also increases the collaboration’s potential impact (more people are affected by the change) while making it easier and less time-consuming for faculty to attempt new pedagogical techniques and strategies. For example, Rehling and Lindeman (2010) claim that team teaching has enriched their curriculum, has given them both more confidence, and has encouraged them to “reveal and rethink [their] pedagogical philosophies” (p. 95), and has enabled them to talk over how to deal with difficult classroom situations. Additionally, the three collaborators’ multi-disciplinary experience suggests that collaborative teaching has been an effective way to bring together the variety of disciplinary approaches necessary to achieve a common goal: to help students acquire the skills needed to sustain a complex process that unites their reading, research, and writing.

Although universities often provide rhetorical support for collaboration as a concept or buzzword, in practice, collaborations can be difficult to initiate or sustain because of the way that research universities are organized. The disciplinary organization of academic departments, for example, makes it much harder for individuals in different units to combine their efforts, even while trying to advance recognized institutional goals. As a result, departments and professors from different units remain isolated from one another, even in regards to the one circumstance they do generally share, their teaching. Though this problem of squaring the disciplinary organizational structures of departments with their teaching mission has been widely recognized for several decades, there have been some encouraging trends toward some institutional acceptance of collaboration. Some examples would include initiatives like the Information Literacy Competency Standards for Higher Education issued in 2004 by the Association of College & Research Libraries (ACRL); the interest of regional accreditation agencies in encouraging instructional innovation; and the emergence of university teaching centers

as found the University of Houston's Center for Teaching Excellence.

While librarian-faculty collaboration has been more extensively discussed in the secondary literature (Campbell, 2010; Association of College & Research Libraries, 2004; and Caspers, 2006), student affairs professionals seem much less likely to collaborate with faculty than librarians (Kezar and Lester, 2009; McMurray and Sorrells, 2007). This discrepancy may be caused by the longstanding institutional divides among faculty, academic affairs and student affairs units, or perhaps by each group's divergent assumptions about teaching. For example, Schroeder (1999) writes that "the primacy of the curriculum and course work (particularly in the major) are highly valued by faculty whereas informal learning that occurs through out-of-class experiences is not" (p. 10). While faculty seem to recognize the benefits of working with librarians, historically they have not pursued a similar line of activities with student affairs professionals. Further, the collaborative practice documented in the literature tended to involve a simple one-on-one exchange between members of two disciplines, whereas this project introduced the complexity and multidimensionality of teaching students higher order critical thinking skills regarding the sources used in their research essays (Kantz, 2000). As such, it seemed to entail a more comprehensive and integrated approach to instruction.

Key Components

The collaboration united the expertise of a student affairs professional (teaching reading skills), a librarian (teaching information literacy skills), and an English professor (teaching both specifically literary research skills and the "content" of Jonathan Swift's *Gulliver's Travels* and its critical history).

Annotated bibliography assignment. Each group of students had to annotate two journal articles, two websites, and two books—all organized around an assigned sub-topic in literary criticism (Swift and Religion, Swift and Empire, etc.). Their bibliographies were shared with other students in the class so that everyone could benefit from the information that was discovered. And, of course, the group work in the annotated bibliographies done in the first part of the semester constituted part of the "scaffolding" for their independently researched and written essays done in the final weeks of the semester. A form of this assignment long recognized as one of the best ways to teach students information literacy (Mackey & Jacobson, 2004), became the focus the joint effort. By requiring students to work in peer groups to find sources, evaluate them, and cite them, this assignment's goal was to introduce students to the skills necessary to begin doing independent research in the field of literature. It also gave them further practice in each step of an extended, incremental research process in a peer group context providing them with opportunities for modeling these skills for one another.

Information literacy instruction. The Librarian, focused on information literacy instruction, helping students develop skills in identifying, searching for, and evaluating the articles necessary for the assignment. This segment involved class demonstration, in-class practice, and facilitated discussion. Take-home assignments were used to reinforce skills taught in class.

Reading skills instruction. The Learning Strategies Counselor focused on assisting students in their work on the scholarly articles necessary for

the bibliography. Because most of these articles followed the same general format, she sought to explain this format explicitly to the students. To help them recognize the format, and to then locate the information and arguments more efficiently, she used the notion of “form schema” developed by Rigney and Munro (1977, as cited in Brooks & Dansereau, 1983). The “form schema” is an abstract prototype containing general information about the format and conventions, but not the content, of articles within a particular discipline. For example, most research articles in the social sciences have an introduction, method, results, and discussion section. Similarly, each article in literary criticism had an introduction containing a thesis statement, textual evidence supporting the claim made by the thesis statement, and a conclusion. After modeling for students the process of inquiry—how one reads and understands systematically the writings of secondary criticism on literary texts, by using a roadmap specific to their discipline—the learning strategies counselor had the students practice finding these key parts of an article, using an example she discussed with the entire class. After the “clues” were pointed out, students could use to look for these parts when they examined articles on their own.

The multidisciplinary aspect of the collaboration reflected Argyris and Schön’s notion of “double loop learning,” that the deepest, most effective group learning occurs when tacit knowledge (in this case, the tacit knowledge of a disciplinary expert) is brought to the surface, questioned, and explained collectively. This instruction component, therefore, helped bridge the gap between the professor’s and the students’ disparate understandings, while helping the professor understand which aspects of the assignment were most confusing to the class.

Secondly, the reading skills instruction, based on the counselor’s expertise in Educational Psychology—especially the psychology of reading—aided students who generally had only superficial prior encounters with peer-reviewed scholarship and may never have had significant practice in independently identifying these features or extracting this information for themselves. The counselor was the one who was able to identify some of the potential gaps or breakdowns in their process, and who was able to suggest ways for them to begin mastering the process. Because literature teachers are typically trained to regard reading and reading instruction as pre-disciplinary and distinct from literary study (Hamel, 2003), it is unsurprising that a different field’s scholarship was critical to uncover why students were struggling with these aspects of reading.

Course blog. The course-blog acted as a multiplier, enhancing the impact of the collaborations taking place among both instructors and students. This occurred because the blog facilitated collaboration and discussion among both groups, while providing all instructors with a platform to directly communicate with students about their online contributions (Walsh & Kahn, 2010). The course-blog also enhanced the collaborations of students in a number of ways. They could see what their classmates had written, thus expanding the pool of examples to draw from when they wrote their own work. They could also see the professor’s comments about their classmates’ work, and learn more about the criteria by which their own work would be judged. At the same time, it opened up additional opportunities for further collaboration, since each member of the team was able to view students’

progress on their assignments throughout the instructional process and reinforce the instruction offered by other team members.

Content integration. In order to integrate their teaching content, the collaborators met individually and jointly multiple times to decide the content, sequencing, and methods of instruction for each aspect of the three-day presentation. Detailed teaching outlines then circulated among the team. Eventually the content was broken down into still smaller units and rearranged in a sequence that better reflected the students' optimized research process. The final outline described the teaching responsibilities of each team member, along with times allotted to each presentation, in-class practice session, and general discussion segment. Such tight scripting was necessary because of a 50-minute class-time, along with the desire to emphasize as much as possible the hands-on and inquiry aspects of the research process. With that in mind, a decision was made to take the time between sessions to reinforce skills taught. Wednesday, Friday and Monday were selected deliberately to complete the three sessions and also allow one weekend in between for students to complete an extensive group assignment.

Team teaching in class. All three collaborators were present for all three class sessions. The professor introduced the goals and the structure of the consecutive three-session workshop at the beginning of the first session. (The same information was also made available on the course blog, which also made available each day's teaching materials for students to review after class.) The counselor introduced the assignment and gave an overview of the purposes of annotated bibliographies and the steps required to complete one. The librarian demonstrated how to search for scholarly books and articles, helping to familiarize students with library resources, the formulation of search strategies, and the identification of appropriate scholarly resources. The content was delivered via presentation, demonstration, group activities, and brief reflection/discussion exercises. At the end of class, students were given a take home assignment that required them to use a variety of information resources to find scholarly articles relevant to their group's assigned topic.

The second session focused on critical reading skills. The counselor used the "form schema" concept (Rigney and Munro, 1977, as cited in Brooks & Dansereau, 1983) to explain the format and conventions of scholarly articles in literary criticism, which showed students how to quickly identify the key information in the articles they were skimming for possible inclusion in their bibliographies. After that, students did a quick literature review exercise and were then asked by the librarian to evaluate the sources they had found. Afterwards, students were given an out of class assignment that further elaborated upon the evaluation of information sources and resources. Students were required to post their completed evaluation assignments to the course blog over the weekend.

The main focus of the third session, which was facilitated primarily by the librarian, was on evaluating information, which included strategies for determining the most appropriate and credible information sources (e.g., internet vs. scholarly sources) and resources (print vs. electronic databases) for their specific topic. It aimed at helping students reflect their own observations over the assignments.

Results

The results are analyzed based on the class evaluations and observations about the students and their subsequent work done in the class.

The students were given 15 minutes to complete an evaluation form at the end of the third session. The evaluation was designed based on the learning outcomes set by all participating instructors. Instead of testing students' performance of the skills taught, the design of the evaluation was to ascertain the impact of the instruction sessions. The evaluation form contains thirteen 4-level Likert scale questions, one multiple-choice question with open answer, and three short-answer questions (see Figure A for the evaluation form and figure B for the results of the evaluation).

Figure A

ENGL 3301 Workshop Evaluation Form

Title _____
Instructor _____ Date _____

Please rate your confidence in the following skills. (SA= strongly agree, A=agree, D= disagree, and SD=strongly disagree).

- | | | | | |
|--|----|---|---|----|
| 1. I can use the library catalog to find a book or journal article on a specific topic. | SA | A | D | SD |
| 2. I can use a major literature database (MLA, JSTOR, Project Muse) to find a critical article on a topic. | SA | A | D | SD |
| 3. When I am searching the database, I know how to refine my search to cut down the number of irrelevant results, or to expand the number of possible results. | SA | A | D | SD |
| 4. I can connect to library resources remotely | SA | A | D | SD |
| 5. I can find the full-text articles of an academic journal in the Library, even when the article is not available online. | SA | A | D | SD |
| 6. I can distinguish a citation of a book chapter from a citation of a journal article, just by reading a database record. | SA | A | D | SD |
| 7. I can locate an article, if given a citation | SA | A | D | SD |
| 8. I understand the purpose and format of an Annotated Bibliography. | SA | A | D | SD |
| 9. I can skim an article and select important information. | SA | A | D | SD |
| 10. I can determine which sources are credible. | SA | A | D | SD |
| 11. I can determine which sources are relevant to my topic | SA | A | D | SD |
| 12. I can write a paragraph summarizing an article for an AB. | SA | A | D | SD |
| 13. I understand the steps involved in creating an AB | SA | A | D | SD |

Please list one new skill you can start using immediately to improve your performance in Engl 3301.

How confident are you that you will incorporate this new skill into your academic studies?

1 2 3 4 5
Not at all Somewhat Very Much

What might prevent you from using this new skill? (check all that apply)

___ low interest ___ low commitment ___ low motivation
___ procrastination ___ time constraints ___ difficulty in implementing
___ disbelief in its effectiveness ___ other-please list _____

If you did begin using this new skill, what impact would that have for you academically.

General comments about the presentation:

In about three weeks you will be emailed a follow-up survey regarding the skill listed above. Please make note of this skill. Thank you.

Figure B

Questions	Average Score (Score level: 4=strongly agree 3= agree 2= disagree 1=strongly disagree)
1. I can use the library catalog to find a book on a specific topic.	3.3
2. I can use a major literature database (MLA, JSTOR, Project Muse) to find a critical article on a topic.	3.7
3. When I am searching the database, I know how to refine my search to cut down the number of irrelevant.	3.4
4. I can connect to library resources remotely.	3.4
5. I can find the full-text articles of an academic journal in the Library, even when the article is not available online.	3.1
6. I can distinguish a citation of a book chapter from a citation of a journal article, just by reading a database.	3.2
7. I can locate an article, if given a citation.	3.2
8. I understand the purpose and format of an Annotated Bibliography.	3.4
9. I can skim an article and select important information.	3.4
10. I can determine which sources are credible.	3.4
11. I can determine which sources are relevant to my topic.	3.5
12. I can write a paragraph summarizing an article for an annotated bibliography.	3.5
13. I understand the steps involved in creating an annotated bibliography.	3.4

List one new skill you can begin using immediately: Database searching skills (8 students listed a skill in this area), Other online and library resources (10 students listed a skill in this area), annotation and writing skills (10 students listed a skill in this area), Critical reading skills (4 students listed a skill in this area), Time management (1 student listed a skill in this area), No new skills learned (2 students felt they learned no new skills)

How confident are you that you will incorporate this new skill into your academic studies? (5-level rating: 1=Not at all, 3=Somewhat, 5=Very much)
Average results= 4.4

What might prevent you from using this new skill? (Check all that apply)

Low interest = 3	Low commitment=0	Low motivation=4	Procrastination =9
Time constraints = 7	Difficulty in implementing = 2	Disbelief in its effectiveness = 1	Other=2

Overall, students expressed a very positive experience with this teaching model, and almost every student listed a new skill that they had learned (see Figure B). Their self-reported confidence level for using each skill was high (see Figure B). Among all questions, students expressed most confidence in their ability to use a major literature database (MLA, JSTOR, Project Muse) for finding a scholarly article on a topic. This is an encouraging result, because most of the students had at best a superficial knowledge of the scholarly databases before they took the class, and some of them were learning about these resources for the first time. The result indicates that students acquired new knowledge of scholarly resources and also gained confidence in using them. They were comparatively less confident when asked whether they could "find the full-text articles of an academic journal in the Library, even when the article is not available online." Students also

believed strongly (4.4 on a 5 point scale) that they would use the skills learned for their future studies.

When asked to “list one skill you can start using immediately to improve your performance in English 3301,” students cited the ability to do literature searches 8 times (among 17 answers) and their reading skills 4 times. On the question “If you did begin using this new skill, what impact would that have for you academically?” students believed that the skill would have a positive impact. Most believed that in the future they would have better research skills, use better resources, and be prepared to write better papers.

Based on the professor’s observations of and interaction with students, it appeared that this integrated approach to reading and information literacy instruction has had a positive impact on students’ independent learning and critical reading skills.

Discussion

Overcoming Obstacles to Collaboration

Before collaborative work could begin, it was necessary for someone to break through the “silo” mindset enforced by the university and disciplinary thinking to initiate the project. The faculty member was able to play this role for a number of reasons: he had experience with multidisciplinary collaborative projects through his work on the University of Houston Faculty Senate, had been teaching the English 3301 course for years, and, most importantly, because he recognized that students were encountering problems that his own instruction was not able to resolve. Driven by a commitment to student-centered learning, the professor explored what resources were available on campus to supplement his own teaching effort and found professionals on campus who not only had the necessary expertise but were also prepared to tailor their own presentations to the specific demands of the course and the students.

The second obstacle, however, involved the difficulties of professionals communicating across disciplinary lines. As noted previously, the difference in professional orientation between those providing for the social welfare of the student (student affairs) and those developing the mind of the student (faculty and academic affairs) meant that the two groups were not used to collaborating. For example, the counselor (trained as a psychologist) did not know very much about English literature prior to working on this project; therefore, she needed to educate herself about this field before being able to offer assistance to the students. What seemed to help with this issue was keeping the needs of the students at the forefront. All three collaborators wanted the students to succeed and we were able to keep that as our primary goal.

Benefits of Our Collaboration

On a concrete level, the collaboration benefited the students. From the perspective of most faculty, learning skills and information skills (reading, researching and evaluating information) are assumed instead of being explicitly taught. However, students learn best when they are put in a context with tasks and skills taught and practiced in a logical and coherent

manner. This collaboration helped to create a rich learning environment, which provided intellectual frameworks, tools (protocols, guidelines, and resources for developing key information literacy and reading skills), and assigned tasks (an annotated bibliography assignment) for practicing those skills—all within the context of an authentic problem (selecting appropriate criticism of *Gulliver's Travels*). As a result, students were able to make sense of how and why a subject is researched, studied, and communicated within their chosen discipline. This domain-specific, case study approach helps to foster a more advanced and refined form of critical thinking than students would receive from more abstract presentation of the content (Svinicki, 2004). Moreover, because the focus of the collaborative was to maximize the impact of our instruction, sequencing lessons mimicked the actual research process of the students.

From observations of the students over the years in the target course, their research process, and their final papers, this collaboration format appeared to indicate increased mastery of research skills. When comparing a typical annotated bibliography entry from 2007 to one from 2010, for example, the first group selected less relevant texts, annotated them with less precision, and followed MLA style less closely (See Figure C). Students' own observations corroborated this assessment. For several years, at the semester's end, the professor required students to compile group and individual portfolios containing all their coursework, including their online postings. They read through their body of work and then wrote a brief self-assessment essay detailing what they have learned in the class. Because the collaboration (and this article) evolved over several iterations of the course from Fall '09 forward, the initial set of portfolios and self-assessments were not preserved, but documentation from subsequent iterations of the course indicate favorable results. One student wrote, for example, that "outside presentations by the . . . staff were extremely helpful to me, especially the database lesson and the critical reading lesson." Another student has written, "I feel that my ability to research and understand texts has been increased significantly through this class." And students have made similar comments over the years in their course evaluations (e.g., "my research skills have greatly improved"). From a longer-term perspective, moreover, students were also introduced to two offices that could help them throughout their academic careers--the library and the campus learning center.

Figure C

Sample of Student Work Pre- and Post-Intervention

Fall 2007, *Swift and Femininity*, Books:

1. Bloom, Harold. *Modern Critical Interpretations: Gulliver's Travels*. New York: Chelsea House Publishers, 1986. A collection of critical essays on "Gulliver's Travels". The book contains essays on Gulliver's motives throughout his travels, politics, gender, philosophy, and other themes.

Fall 2010, *Swift and Femininity*, Books:

Hammond, Brea. "Swift and Women." *Jonathan Swift*. Portland: Irish Academic Press, 2010. 100-116.

Brea Hammond examines Swift in his role as mentor and his subsequent interactions with women. According to Hammond, Swift learned how to be a role model from Sir William Temple. The processes and social skills acquired influenced Swift's ability to create and maintain relationships, both platonic and romantic. Hammond concludes that Swift's constant need to act-the-teacher and to be admired made intimacy with friends and potential lovers difficult.

On a professional level, although this integration demanded a much higher degree of coordination and teamwork than any of the team members were used to undertaking, each member of the team benefitted considerably from this collaboration. For example, as a result of this experience, the counselor learned how to articulate and market her skills in a new way to professors on campus and has had further experiences (in other disciplines) where she focused intensely on the content of a course in order to assist students with necessary skills. On a broader level, the university benefitted from the collaboration by witnessing a potential model for other collaborations in the future.

Implications and Suggestions for Further Research

University staff reading this might wish to reflect on their own specific skills and on how these might be of use to others on campus striving to advance the university's teaching mission. For librarians and learning center professionals, marketing is often necessary for faculty to learn about these services and how they might fit into their courses. Such services should not just be offered as free-standing "workshops" or "seminars" but as presentations embedded within a curriculum, designed to assist students in learning particular, course-specific skills. Once one connection has been made with a faculty member, that connection can be leveraged to form new ones, with the benefit of the previous collaborative experience to make the process even smoother.

Faculty reading this case study may recognize the benefits of acknowledging an instructional problem, asking for help, and admitting that they don't always have the answers when a problem arises. There are professionals on every campus trained in information literacy and student learning issues (and many other things).

Nonetheless, while this study represented an innovative example of what can happen when three diverse professionals work together, others engaged in such collaboration could develop a rubric system to assess results of both the library assignments and the final research project more systematically, along with the existing portfolio and self-assessments. This will ensure that the resulting student assignments are examined in a methodical, rigorous way to see if the essential elements are present, and that the necessary skills were taught. Ideally, all presenters should be involved in designing and implementing such a rubric system.

Conclusion

Although much research related to cooperative teaching among faculty members, or faculty with librarians is available, this specific course design builds on that concept by incorporating expertise from learning professionals and librarians into the teaching of a specific, key assignment. This type of collaboration was very effective for improving students' academic skills. The traditional one-shot "guest speaker" or "library tour" model cannot compete with more active and integrated forms of instruction that increase both engagement and "time on task." Students learn best, however, when they learn these skills in a specific context that allows them to see their application in situations as close to genuine disciplinary practice as possible.

Davis (1995) has stated that collaboration is time-consuming while requiring much more imagination and accommodation than traditional methods. It demands more preparation and communication from instructors. Nonetheless, we believe that this teaching model helped to achieve results that could not have been accomplished using the traditional, one-shot presentation. For one thing, the collaboration team was able to explicitly demonstrate and model the research process step-by-step in front of the students. Through their observing the sequence of the collaborative teaching, students could clearly identify the various stages of the research process and realize the iterative nature of the process. Further, the collaboration, undertaken in front of a classroom full of student groups, helped to foster and model peer-learning and team work among students. As for the three collaborators, the intensive collaboration helped each participant gain considerably from each other's expertise, thus confirming the observation of Rehling and Lindeman (2010) that collaboration helps every participant reevaluate his or her philosophy of pedagogy and beliefs about instruction. Best of all, the collaboration was able to provide students a better-organized and integrated presentation of two academic skills—reading and researching—that are essential for success in their chosen intellectual domain.

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Getting Science Students to PASS-UIW: A Successful Collaboration Between Students, Staff, and Faculty

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Abstract

This article explores the reasons that Peer Assisted Study Sessions (PASS) at the University of the Incarnate Word (UIW), commonly called PASS-UIW, has been successful in science courses at the University. The intent is to provide information for other institutions to launch, evaluate, or improve their own programs. PASS-UIW is a student-led program to assist undergraduate students taking Chemistry and Physics gateway courses. PASS-UIW has shown improved student engagement and created an opportunity for student leaders to gain valuable experience teaching peers. Several key criteria have been identified as impacting the success of the program: 1) extensive training, 2) use of collaborative learning techniques, 3) communication among constituents, and 4) dedication of leaders and faculty.

The University of the Incarnate Word (UIW) has a large population of students who are the first in their families to attend college (36%), as well as many students with marginal high school backgrounds. UIW also has a relatively large number of transfer students who come from other colleges and universities which have varied levels of expectations of their students. Often, as both faculty and students have commented, these students have not had the opportunity to develop the study skills necessary to succeed academically in college-level courses. In addition, on average, 7.1% of students are typically enrolled in one or more developmental courses their first year. These developmental courses are designed to bridge the gap between their high school experience and college-level coursework. With this same intention in mind, the goals of the Peer Assisted Study Sessions (PASS-UIW) program are to increase student retention and grades for Chemistry, Physics, and Business Statistics, as well as to stress learning skills that will help the students succeed in these and other courses.

The student body composition at UIW, and in particular the School of Mathematics, Science, and Engineering (SMSE), has an atypical mix of gender and ethnicity. Although the university and the SMSE have the same proportion of students based on gender (67% female and 33% male), this proportion differs from the national average for degree-granting institutions

as reported on the National Center for Education Statistics (NCES, 2010a) website (59% female and 41% male). The NCES (2010b) further reports the proportion of minority students in the School of Mathematics, Science, and Engineering (70%) is higher than that of the university (65%), and both are higher than national degree-granting institutions (33.5%).

As part of its mission to be committed to educational excellence and promotion of life-long learning, UIW seeks to provide all students with educational experiences that are tailored to their individual needs and learning styles. Many studies have examined learning styles as a function of gender and race as well as the positive results of collaborative learning (Mather & Champagne, 2008; Reese & Dunn, 2007-2008; Riding & Rayner, 1998). Review of these studies suggests that a modified Supplemental Instruction Program would be beneficial for UIW's diverse student body. The Dean of Student Success, the Director of the Learning Assistance Center (LAC), chemistry faculty members, and an undergraduate chemistry student (who was recommended to become a leader) collaborated to create a modified Supplemental Instruction (SI) program to provide an opportunity for students to develop their study skills and help each other learn in a collaborative environment. The program was named PASS-UIW, for Peer Assisted Study Sessions, and was modeled from the University of Wollongong's program of the same name (PASS, n.d.). It is worth noting that at least one other program called PASS has been described in the literature; Saunders and Gibbon (1998) have reported the successes and challenges with the Peer Assistant Student Support program at the University of Glamorgan in the United Kingdom. In the course of analyzing the pilot for PASS-UIW, several key criteria emerged as impacting the success of the program: 1) extensive training 2) use of collaborative learning techniques, 3) communication among students, faculty, leaders and administrators involved in the program, and 4) dedication of leaders and faculty.

The benefits of SI programs have been known for some time (Blanc, DeBuhr, & Martin, 1983) and have been shown to include improvements in retention (Bowles & Jones, 2004), grades (Congos & Schoeps, 2003), and timely graduation (Bowles, McCoy, & Bates, 2008). Studies on various programs have indicated they can be particularly beneficial to women and minorities (Lundenberg & Moch, 1995; Van Lanen & Lockie, 1997; Peled & Kim, 1996).

It is also a well-established fact that "collaborative learning makes a strong contribution toward students becoming active learners rather than passive recipients of information" (Tinto, 1998). This is exemplified in a study by Van Lanen and Lockie (2008). Collaborative learning and the relationships among those involved play key roles in PASS-UIW. Therefore, the selection and training of leaders was carefully considered.

Method

The pilot for the PASS-UIW program was launched in the spring of 2008 with one course, Organic Chemistry I; two professors and one leader hosted two weekly sessions of two hours each. From the beginning, the program was assessed in order to make improvements as well as to understand and demonstrate its effectiveness. During the pilot, the program was

small enough that the key personnel could meet regularly and discuss improvements. Students were administered surveys at the end of each semester to collect feedback.

Review of the survey data and discussion of the way the program functions demonstrate the lessons learned and the changes that have been made since the pilot. The intent is that other institutions will use this information to evaluate, improve, or start their own programs. The key elements examined are related to training, the use of collaborative learning techniques, communication among those involved in the program, and the characteristics of the both SI Leaders and Faculty.

Training

Training building blocks consisted of University of Missouri-Kansas City Supplemental Instruction (SI) materials combined with tutor training and other learning-related materials tailored to specific needs. Basic training varied from four to eight hours, and it was followed by developmental training according to the needs of the individual leaders or the group. The core of the basic training was divided into administrative and session-related topics. It aimed at providing general employee information, preparing them to be responsible employees, giving specific and essential information about SI and PASS-UIW, and preparing leaders to conduct group and individual sessions, as well as to manage situations that could come up with students or professors.

Trainees received information about our Learning Assistance Center policies and the tutoring appointment system. They also discussed professionalism, ways to advertise the program, and the purpose of meetings with professors, supervisors and team members. As a team, leader trainees participated in creating fliers and posters that were later displayed around campus. Much was packed into those few hours of training; therefore, observing the leaders during the first weeks of the semester was very important to immediately address any issues with individuals or with the group.

Collaborative Learning Techniques

The heart of successful PASS-UIW sessions is the use of collaborative learning techniques by the leader to engage all the students present and empower them to take ownership of their learning. During training, new PASS leaders learn the collaborative learning techniques and learning strategies they will use during the sessions by being an active participant in them.

The techniques that leaders report work the best in their sessions are traditional group discussions, discussions moderated by someone chosen from the group at random, individual presentations, and organizers such as concept maps. One sample topic for moderated group discussion used in training is testing tips; the facilitator comes up with suggestions that the leaders validate, build on, and use to spark their own ideas. Individual presentations keep leaders engaged during training and give them a powerful tool to use in their sessions. For example, during the training, each leader practiced the introduction they would give students during their first PASS-

UIW session or when presenting the program to the students the first day of class. This practice speech challenged the leaders' preconceptions that they can walk into a session without preparation and that they do not need training. When the leaders go on to use this technique in their sessions, it is especially effective at engaging passive students and helping them overcome their anxieties, shyness, and self-doubt. One of the leaders shared a clever method of choosing students to present to the rest of the attendees during her sessions: "For the longest time I had trouble getting students to come to the board. My solution to this was Luck of the Draw. This way I was not just calling a specific student out. It's just the luck of the draw if you get called."

Communication

The success of a program such as PASS-UIW depends on the communication, relationships, and characteristics of the people involved. Leaders host study sessions for specific courses in which they not only assist students in understanding course content, but also share learning strategies and study skills. Leaders are students with good communication skills who have succeeded in the target courses, demonstrated interest in helping other students, and been recommended by faculty teaching those courses. Assessment of need determines which courses are selected—although PASS-UIW is only offered when it will be supported by faculty.

Since the inception of the program, frequent communication has been critical to the success of the PASS-UIW program. During the pilot, the team met frequently to discuss the progress of the sessions, need for changes, additions and ways to improve the program, and to review survey results. The communication that occurred reflected the interactions among the people involved (see Process Flow Interactions illustrated in Figure 1). The professor and leader met weekly in preparation for the sessions. The professor and director met four times to discuss the structure of the program, responsibilities, and progress as well as to share information. The leader and director met every two weeks to discuss session attendance, do developmental training, and create advertisements. A great sense of excitement, expectation, and hope characterized communications and general attitudes toward the program. The professor and leader communicated with students face to face and by email or text messaging as often as necessary. The director visited the classroom twice in the semester and had conversations with some of the students who attended the sessions. In all of these communications, the director, professor, and leader all had an equal voice.

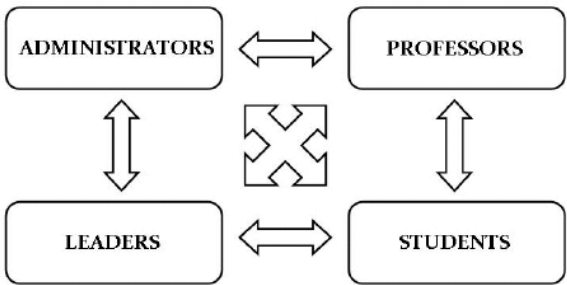


Figure 1. Process Flow Interactions in the PASS-UIW Program

Dedication and Personality

Successful PASS-UIW leaders are outgoing, engaging, highly self-motivated, filled with initiative, and empathetic. They are easy to talk to, maintain a positive outlook, and are encouraging to other leaders and students alike. Such leaders bring not only a characteristic sense of responsibility to their job in the program, but also tremendous dedication. They understand that their role in assisting fellow students to succeed is facilitated by their perspective of looking at the material from one or two semesters away, plus the more advanced material they have learned in subsequent courses. When leaders realize that their opinions and ideas matter to the administrators and faculty, they take ownership of the program, and their enthusiasm shows in many ways.

For example, in this project, some leaders involved themselves in creating and modifying session surveys to ascertain how to improve their service to the students. Some of the leaders who did not regularly attend class visited the classroom from time to time to inform, cheer, and exhort the students. By being conscientious of dates for important activities such as exams in the classes and surveys from the LAC, good leaders are prepared ahead of time and help these activities run smoothly.

The leaders who invested extra effort in the program ensured the seamless continuation of their contributions by recruiting and helping train fellow students who will build on their work. When the program was still relatively small, many of the early leaders were more involved in the administrative aspects of the program. These leaders saw the needs of the program and took the initiative to help organize and run it. They essentially became leaders among leaders because of their exceptional dedication to the program. The PASS-UIW program offered them the opportunity to put in as much creative energy as they wanted to. One characteristic of the leaders who go far beyond the core responsibilities of their job is that their attitudes consistently reflect their ownership of the program; for example, they refer to it as "our program" rather than "the program" or "your program."

Perhaps the leaders' dedication to the program is, at least in part, emulating the commitment they observe in their professors, who are available to them for consultation, support, and guidance. The professors use the weekly meetings with the leaders to provide guidance and support. Frequently, these meetings deepen what is already a close working relationship between a professor and a student who may also be an advisee or research student. While the primary focus of these meetings is on course content, the professors also give the leaders guidance on classroom management, addressing different learning styles, and other issues related to facilitating sessions. Wolfe (1990) has reported similar benefits of faculty mentoring student leaders.

The professors who volunteer their assistance with training sessions provide an extra dimension to the training program. Having the professors' perspectives provides the leaders with examples and experience related to the mentoring aspect of their jobs. The professors' endorsement of the leaders and the program carries a lot of weight with the students. Consequently, the professors play a critical role in promoting their leaders and the program

to their students. Seamless incorporation of program surveys into their class time underscores the professors' belief in the program.

The professors provide support not only to the leaders but also to the director of the program. The two professors who first worked on the program contributed in a variety of ways like finding classrooms in which to hold the sessions and providing supplies needed by the leaders. These individuals have become liaisons to their departments and have consistently promoted the program to their colleagues. They have developed into an unofficial advisory board offering support, their own perspective as faculty, additional analysis of the program, and their own suggestions for improvement.

Assessments

In order to examine how the students were influenced by the PASS-UIW program, the following multiple methods were used: indirect and direct evaluations, chiefly surveys and attendance rosters, collected data on a variety of points including attendance and the students' impression of the PASS leaders.

1. Indirect evaluation. Indirect evaluation, often in the form of surveys given to students, is a time-honored method of garnering information on the success of the program as well as identifying opportunities for improvement (Jarrett & Harris, 2009; Hall, 2007). In this program, a voluntary survey is administered during lectures near the end of each semester before finals. The survey used in the spring of 2009, the results of which will be the focus of discussion, is included below in Figure 2. This survey was piloted in previous semesters, and has evolved each semester as it is improved. Additional questions are added or deleted as necessary to address specific program outcomes. The seven items measured in the current study are as outlined in Figure 2.
2. Quantitative measurement. Students were asked how many sessions they attended and what grade they expected to earn; additionally, they were asked to use a Likert-type scale to evaluate both the sessions and leader in five facets each using a three-point Likert-type scale (Very Useful, Useful, Not Useful). The choice for "Not Applicable" was also provided.
3. Qualitative measurement. Students were also asked for a qualitative evaluation of when they attended sessions and, if no sessions were attended, why not. Lastly, one open-ended, free-response question was utilized to gather additional ideas and feedback for the program.
4. Direct evaluation. Attendance (which is voluntary) is recorded at each PASS-UIW session via sign-in sheets. Direct evaluation frequently focuses on measurable student outcomes like grades, as discussed in the works of Peled and Kim (1996) and Webster and Hooper (1998). Course grades have been collected from each participating professor since the beginning of the program.

P.A.S.S. PROGRAM SURVEY - SPRING 2009

COURSE _____

Thank you for answering this survey. We want your opinion, suggestions and feedback whether you attended the sessions or not. Please use the back of the page if needed.

1. How many sessions did you attend?	Please CIRCLE your answer: <div style="display: flex; justify-content: space-around; font-size: small;"> none 1-2 3-5 5-7 more than 7 </div>
2. If you did not attend any sessions, please indicate why and skip to question #6.	Please CHECK all that apply: <div style="margin-top: 5px;"> <input type="checkbox"/> I did not need them—I understood the material <input type="checkbox"/> The time of the session conflicted with class/work <input type="checkbox"/> A friend explained what I did not understand <input type="checkbox"/> I did not know about the sessions <input type="checkbox"/> Other _____ </div>
3. I attended the sessions...	Please CHECK all that apply: <div style="margin-top: 5px;"> <input type="checkbox"/> As often as I could <input type="checkbox"/> Right before the exam <input type="checkbox"/> Right before homework was due <input type="checkbox"/> Because the chapter(s) was (were) difficult <input type="checkbox"/> Right after the exam was returned <input type="checkbox"/> Other _____ </div>
4. Please rate the usefulness of the sessions in the following aspects.	RATING SCALE: 1: very useful 2: somewhat useful 3: not useful 4: not offered/not applicable <div style="margin-top: 5px;"> <input type="checkbox"/> Additional examples were provided <input type="checkbox"/> Additional time given to explaining difficult concepts <input type="checkbox"/> Easier to ask questions in PASS than in the lecture <input type="checkbox"/> Having an alternate explanation of the material <input type="checkbox"/> Having a scheduled time outside the class to learn the material <input type="checkbox"/> Other _____ </div>
5. Please rate the leader on the following criteria.	RATING SCALE: 1: excellent 2: okay 3: poor <div style="margin-top: 5px;"> <input type="checkbox"/> Knew the material and explained it in terms I understood <input type="checkbox"/> Was friendly and welcoming <input type="checkbox"/> Made the environment informal and comfortable <input type="checkbox"/> Explained study skills for the course <input type="checkbox"/> Provided alternative explanations to the ones given by my professor <input type="checkbox"/> Provided more problems for practice <input type="checkbox"/> Other _____ </div>
6. The grade I expect to make in this course is...	Please CIRCLE ONE ONLY: <div style="display: flex; justify-content: space-around; font-size: small;"> A B C D F </div>
7. What could we do to improve? Use the back of the page if you need more room.	

Figure 2. Spring 2009 End of Semester Survey.

However, direct evaluation based on student grades can be complicated. In particular, separating out the effect of the program can be challenging as it is difficult to define control groups and so many factors are involved in student performance (Maxwell, 1990; Bowles & Jones, 2003; McCarthy, Smuts, & Cosser, 1997). For instance, student performance can be affected by not only the preparation they received in high school but also the student's performance in previous university courses.

Results

The program was evaluated in part using surveys administered near the end of the semester, a practice dating from the pilot program in spring 2008; however, the survey results presented in this study are from spring 2009 (see Figures 3 through 6). Spring 2009 was chosen to best represent the overall responses over the years for two reasons. First, previous semesters have included smaller numbers of sections, thus making the sample error much larger. Second, the survey has evolved over the semesters, so that the previous surveys are not conducive for incorporating consistent data into a longitudinal study. The 2009 survey responses—which generally echo the other surveys— in the section entitled, “Usefulness of PASS Session” (see Figure 3) overwhelmingly support the program, with an average 70% of respondents indicating the PASS sessions across all the categories as “very useful,” the most favorable choice. The next favorable choice “Somewhat useful,” garnered an average 26% of respondents, a clear indication that students felt every category represented in the survey was very useful. Further, students in both classes ranked “examples provided” as the most useful aspect of the session (with 80% of Physics students and 71.4% of the Chemistry students choosing this option).

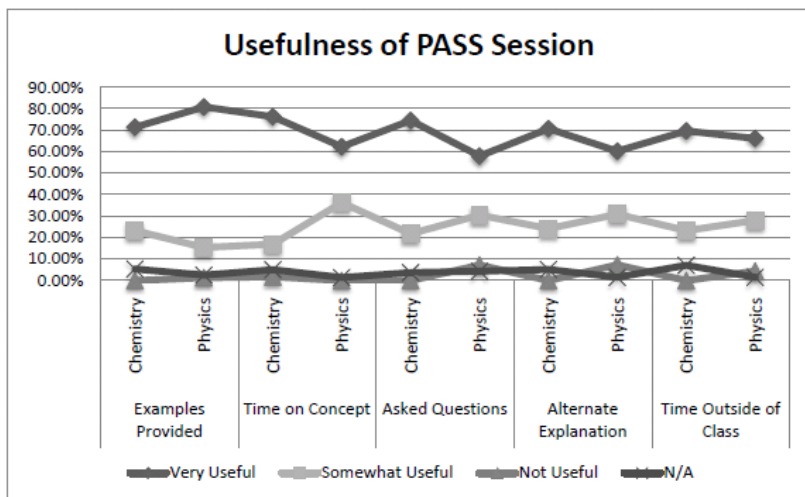


Figure 3. Perceived Usefulness of the PASS-UIW Sessions.

The results in Figure 4, “Value of the PASS Leaders,” also indicate a consistent ranking of the PASS leaders as “excellent” in all categories, with a range from a low of 60% percent of the respondents indicating an “excellent” ranking in Chemistry for “alternate explanations” category to a high of more than 90% percent of the respondents indicating an “excellent” ranking in Chemistry “friendly and welcoming” category. In evaluating the leaders, physics and chemistry students alike cited among the top attributes their leaders’ ability to possess a “friendly and welcoming manner” and creating a “comfortable environment.” In physics, the use of “additional examples” was also rated highly, with 80% ranking as “excellent.” The only area in which students gave a significant negative response was that 15% of respondents

ranked the chemistry leaders' knowledge of the material as "poor," but an equal percentage of respondents (15%) also ranked the chemistry leaders knowledge as "okay." The similar rankings for this question may reflect the difficult nature of some of the chemistry courses, and possibly misperceptions on the part of the students about what the leader can do for them and their own responsibility in learning. Nevertheless, these comments emphasize the importance of regular contact between leaders and their faculty mentors. Written comments from students on the surveys emphasized and elaborated on these findings. Many said that PASS-UIW provided regularly scheduled time to study. Several students wrote comments like "the regularly scheduled time helped with a subject that I find I do not like or is intimidating." The students were more comfortable asking questions during the sessions than in the classroom because the leaders created a comfortable, welcoming environment in which the students have a sense of control over the pace of the sessions.

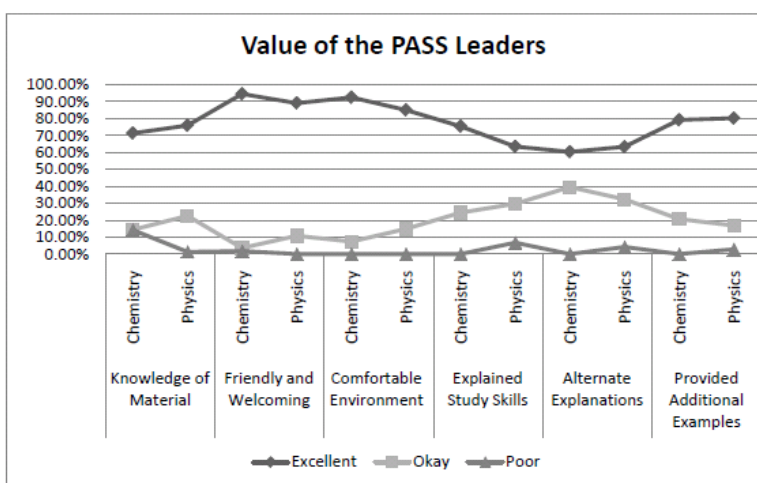


Figure 4. Perceived Value of the PASS -UIW Leader.

Based on self-reported attendance (see figure 5, "PASS-UIW Sessions Attendance"), more than 70% of the student in the Physics course voluntarily attended at least one session of the program and 52% of the students in Chemistry course voluntarily attended at least one session of the program. While the overall attendance at the physics sessions was better than at chemistry sessions, this statistic may be due to more physics faculty providing more enthusiastic support of the PASS-UIW program. Interestingly, while students in Physics classes consistently out-attended the students in Chemistry courses for the 1-2 sessions category (with 34 % student attendance for Physics compared with 16% student attendance for Chemistry) and the 3-5 sessions category (with 28% student attendance for Physics compared with 14% student attendance for Chemistry), that ratio flipped for the next two categories, with Chemistry students more than doubling attendance—and in one case tripling—the attendance rates for the Physics students. For instance, 15% of the Chemistry students attended for

more than seven sessions compared with 5% of Physics students attending this same category. It may be that chemistry students were using the sessions more as a consistent part of their study plan. Although these numbers were estimates that students self-reported on the survey, the numbers correlate reasonably well with formal attendance records.

How many sessions did you attend ?	Chemistry	Physics
None	47.17%	29.17%
1-2	16.04%	34.17%
3-5	14.15%	28.33%
5-7	7.55%	3.33%
More than 7	15.09%	5.00%

Figure 5. PASS-UIW Sessions Attendance.

Reasons for attending also showed some interesting correlations (See figure 6: Purpose for Attending PASS-UIW Sessions). Of the students who attended at least one physics session, the largest number indicated they went for assistance “right before an exam.” On the other hand, students in chemistry also reported seeking assistance, “right before the exam,” as one of the top three motivations for attending sessions, but approximately equal numbers also reported they went to the program, “as often as they could” and “when the material was difficult.” This trend seems to fit well with the attendance pattern in that a larger fraction of physics students attended sessions mainly as an exam review, whereas chemistry students were more inclined to attend sessions regularly. For students who did not attend any sessions, the most frequently given response for both chemistry and physics was schedule conflict. As the program continues to grow, it will be interesting to note if fewer students report schedule conflicts for courses where a larger number of sessions are offered each week. For the physics sessions, the second most popular reason (21 responses out of 65) for not attending was by students who reported they did not need the help, whereas this reason was relatively infrequent in chemistry (only eight responses out of 65).

I attended the sessions...	Chemistry	Physics
As often as I could	32.50%	31.30%
Right before the exam	26.67%	47.33%
Right before homework was due	7.50%	3.82%
Chapter(s) were difficult	27.50%	11.45%
Right after exam was returned	5.83%	6.11%

Figure 6. Purpose for Attending PASS-UIW Sessions.

In terms of reported expectations on grades, a large majority (82%) of the students in physics reported expecting to get an A or B, with roughly an equal division between the two. In chemistry, however, only 17% reported expecting an A. About half (46%) of the chemistry students expected a B, while fully a third (34%) reported expecting a C, which was double the

fraction of physics students who expected a C (16%). Very few students in either course expected grades lower than a C. Not surprisingly, these expectations were not uniformly met. There is ongoing analysis of the relationship between students' expectations and their grades in the courses. (See figure 7: Expected Grades for Courses with PASS Leaders).

The grade I expect to make in this course is ...	Chemistry	Physics
A	17.31%	42.74%
B	46.15%	39.52%
C	33.65%	16.13%
D	2.88%	0.81%
F	0.00%	0.81%

Figure 7. Expected Grades for Courses with PASS Leaders.

Discussion

The program has grown tremendously since its inception to include 10 courses, 15 professors, 15 leaders, and four junior leaders in the fall of 2009. The growth has been driven by student and faculty demand and facilitated by funding from an external grant. In the process of expanding, the researchers have had to modify the approach to many aspects of program administration and build infrastructure to accommodate the increased number of students, leaders, and faculty involved. In the process of doing so, a great deal was learned about the factors contributing to the success of the program, and the intent is that readers will find some of these lessons applicable to their own programs.

In the process of examining why the PASS-UIW program has been successful, several key criteria emerged: 1) training of the PASS-UIW leaders; 2) collaborative learning techniques in the study sessions; 3) communication between faculty, staff, PASS-UIW leaders, and students enrolled in classes; and 4) the dedication and personality of the PASS-UIW leaders and participating faculty. As the program expands, these aspects of the design will be given particular attention.

Each new semester, while core training remains, trainees benefit from additional insights gained during previous semesters. With returning leaders, training emphasizes building upon their skills and knowledge of collaborative learning; as a result, leaders among leaders still emerge; the more experienced SI leaders take on a more involved role in organizing and mentoring other leaders.

Collaborative learning techniques remain a regular aspect of the training and continue to be part of the way PASS leaders run the sessions. They are taught, demonstrated, and discussed with leaders during their meetings with supervisors. Furthermore, leaders have the opportunity to comment, share and demonstrate collaborative learning techniques to the group during development training. The techniques, as taught in training, equip the leaders to guide more effective group discussions, solve problems and

improve communications among students attending sessions. Feedback from students who participated supports that working with the other students in the PASS session environment provides encouragement and an opportunity to learn from their classmates as well as the PASS leader. For example, during a recognition luncheon at the end of the semester, one of the students shared that “the PASS program is the reason I am still at UIW”. Because of the support the program provided, this student, who had considered dropping out, gained the confidence to learn the course material and continue in the program.

It is clear to all those running the program that good communication is essential for the program to be effective; therefore, a commitment was made to maintaining the regularity and quality of communications that have been critical to the success of the program. So far, communication has remained effective in spite of the increase in infrastructure. The original paradigm for communication was effective due to the small size of the PASS-UIW team; however, as the number of people involved has grown, including a graduate assistant who now fulfills many of the administrative roles the early leaders took on, a number of adaptations have been necessary. For example, it is no longer feasible for all the people involved to meet very often. We have adapted by starting to meet by subjects—chemistry, physics, and business—and by process flow interactions—administrators and professors, leaders and administrators, leaders and professors (see Figure 1).

The administration, which consists of the director and a graduate assistant, meets with all the professors involved in the program by department once per semester. The graduate assistant meets with the leaders every other week. The administrator and the graduate assistant have one officially scheduled weekly meeting and frequently meet more often. Additionally, leaders still meet weekly (or more often, as needed) with professors. This interaction is especially important to keep the leaders up to speed on topics being discussed in lecture and upcoming material. While having the leader attend lectures is helpful, meeting with the professor still adds value in that the leader can gain a clearer context for the material and be better prepared to anticipate students’ difficulties with the content and guide their learning.

In addition to training, collaborative learning techniques, and communication, the dedication and personality of student leaders and faculty members remains a key factor in the program’s success. Student leaders who are knowledgeable in the subject matter, are good students, and love to assist others in learning provide the expertise, dedication, and enthusiasm that help the program succeed. These dedicated leaders contribute to the success of the program in a myriad of ways. The positive attitude leaders have towards their students’ potential for success is an excellent foundation on which the students can build their confidence. In working with the students, the leaders’ enthusiasm for the subject and the program sets an example of the attitude successful students have towards their studies; the leaders become role-models of how to be actively engaged in their education and how to take responsibility for managing it. When problems with room reservations or other administrative details arise, for instance, they are cordial with people involved and proactive about finding solutions and communicating important information to students, easing what has the potential to be frustrating experiences for the students.

The leaders are not the only ones whose participation impacts the students in the program. Faculty members that believe in and support the program offer greater cooperation which helps make the program more effective. A feedback loop develops between faculty, students, and leaders which allows faculty to pinpoint needs of the students and communicate them to the leader. In turn, the leader can provide useful information about what students find difficult, when they do not understand very well, or when they need more or less clarification. Often, working with supportive faculty who are willing to collaborate makes it easier for the PASS leader to help the students succeed. Indeed, some faculty members have offered guidance and advice to not only the PASS leader assigned to their section but other PASS leaders as well. Moreover, one faculty member observed that working with the program can help new faculty members become more integrated into the campus and more active in helping their students succeed.

Implications

First, the program must be selective when determining the participating disciplines, courses, faculty, and leaders. Selection of faculty overlaps course selection, though choosing courses that students have difficulty with is especially important. The support the program receives from the discipline (department or school) also proves valuable. The PASS-UIW program has been fortunate that the Dean of the School of Mathematics, Science, and Engineering (SMSE) has supported it since its inception. This support has ranged from encouraging faculty to participate to dedicating financial resources to the program. The financial support, particularly under the SMSE's recent College Cost Reduction and Access Act (CCRAA) grant, has made the growth of the program to its current level possible. In addition, the Dean of Student Success and the Provost are highly supportive of the program. Furthermore, faculty members who appreciate the student-leader relationship as the cornerstone of the program are necessary to provide adequate support to the leaders and encouragement to the students. The program is designed to take advantage of the relationship between students and peer leaders. Therefore, choosing leaders who are empathetic, have good communication skills, and have sufficiently mastered the relevant course materials is critical.

The second issue that the PASS-UIW program needs to address is the design and implementation of faculty and peer leader surveys. The results from these additional stakeholder measurements could then be combined with the results of the student surveys for greater insight into the advantages and usefulness of the program. The stakeholder surveys will also facilitate the modification of the program to meet a variety of academic needs. As schools, disciplines, and courses begin to participate in the PASS-UIW program, the additional survey information could be used to justify the selection of courses and the training of peer leaders in an effort to develop a more customized service.

The third issue requiring additional study is the performance measurements used in determining the effectiveness of the PASS-UIW program. As the program begins to gain momentum, the measurements used in the evaluation of the program will also need to be modified. Attendance, usefulness, and value of the leader will still be important PASS-

UIW program goals. Students who do not attend sessions may seem like a natural control group, but since reasons for not attending sessions vary, and sessions are generally made available by course and not by individual course section, this delineation has proven unreliable. In addition, improvements within the departments and new faculty hires as the departments expand make comparison of current data to historical grade profiles implausible. The search for a method of correlating performance with participation in the PASS-UIW program that accounts for the many other variables that affect students' grades in the course is ongoing. With this goal in mind, further examination might seek to demonstrate what faculty and administrators in the program repeatedly hear from students: that the practice they had at the PASS-UIW sessions bolstered their confidence in a variety of ways, such as the experience of solving a problem on the board in front of their peers as well as studying in a group where they gave and received help. In informal discussions with PASS-UIW participants and in the comments section of the surveys, students report time and time again how helpful it is for them to be encouraged to go to the board during a PASS-UIW meeting to work a problem. They share that the experience builds their confidence in a supportive environment where they can get help and encouragement from their peers.

Future Study:

Future efforts will look for correlations with demographic factors such as first-generation college students, transfers, gender, and race, as well as introduce end-of-semester surveys for leaders and faculty to garner their input. In addition to this indirect evaluation, it is hoped to find a way to de-convolute some of the other variables that influence grades and make a meaningful evaluation of grades as a function of involvement in PASS-UIW.

Conclusion

This study developed, implemented, and expanded a modified SI program that has been beneficial for student attendees and student leaders alike. The results were evaluated using an end-of-semester survey given to students in the classes for which PASS-UIW was offered, by taking attendance at each PASS-UIW meeting, and through an experiential description of the program. Response to the program has been very positive, and the survey results and other feedback have been used to make improvements to the program. For example, there have been efforts to enhance students' perception of leaders' knowledge by focusing on improving communication between leaders and faculty to ensure leaders are well-versed in the current course content. Administrators have recognized the importance of emphasizing study skills during the sessions and the tendency of some leaders to drift towards just course content based sessions; therefore, during the training as well as at meetings with leaders each semester, they have stressed the development of study skill sets that will help the students in current and future courses.

This study confirms that the PASS-UIW program is both feasible and repeatable. However, as the program evolves and expands at UIW, the lessons learned have emphasized three additional considerations that need to be addressed for the program to remain sustainable.

Ultimately, the success of the program will depend on greater institutional objectives. Additionally, the program will need to demonstrate that it has a positive impact on both student retention rates and persistence to graduation. Although course grades and student GPAs will still be an important course level measurement, it will be the ability of the PASS-UIW program to enhance the students' overall academic experience at the University that will ensure its continued success.

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BOOK REVIEW: *Handbook of College Reading and Study Strategy Research*

Flippo, R. F. & Caverly, D.C. (Eds.). (2009). *Handbook of college reading and study strategy research* (2nd ed.). New York: Routledge.

**REVIEWED BY JOSH REID
ILLINOIS STATE UNIVERSITY (IL)**

Do not take my word for it—listen to the venerable Frank Christ, who calls the second edition of the *Handbook of College Reading and Study Strategy Research* “a ‘must read,’ or more correctly, a ‘must use’ collection Every learning center library, every developmental program bookshelf, every serious researcher, and every doctoral student must find a way to own this book because they will use it often when making their educational decisions” (p. vii). Enough said. There is absolutely no valid reason not to own this book or have ready access to it at your institution. And even more important, as Christ remarks, now is the time to take the book off the shelf and put it to use, whether to inform our research, legitimate our field with faculty, assess our programs, or defend our beleaguered centers against parsimonious provosts.

When it was first published (2000), the *Handbook* was the only one of its kind, and there has been no rival text for its dominance. As in the first edition, the *Handbook* provides 20-30 page essays on specific topics related to the instruction and administration of college reading and study strategies. Each article, written by preeminent practitioners and scholars in the field, is an extensive literature review, providing comprehensive distillation of the current research under the article’s purview. The articles are divided into clear subsections, and are often organized by a historical or categorical methodology. In the final subsections, the authors present recommendations for practice and for further research. Extensive bibliographies are included, with the most relevant sources marked with asterisks. These pieces present the definitive statements on the subjects covered, while also serving as a seedbed for future inquiry.

The new edition is a considerable update and restructuring of the first edition, informed by shifts in the field. While the first edition consisted of 14 separate chapters, the second edition is organized into four thematic clusters with a total of 16 chapters. Part I: Framework sets up the context for the field and has chapters on “History,” “Academic Literacy,” “Policy Issues,” and “Student Diversity”; Part II: Reading Strategies has chapters on “Vocabulary Development,” “Comprehension Development,” and “Reading/

Writing Connection"; Part III: Study Strategies has chapters on "Strategic Study-Reading," "Motivation and Study Strategies," "Notetaking From Lectures," and "Test Taking"; and Part IV: Program Delivery focuses on the delivery of the reading and study strategies from the prior articles and has chapters on "Addressing Diversity," "Technology Integration," "Program Management," "Program Evaluation," and "Reading Tests" (a chapter which includes an update of the appendix reviewing current reading tests). While many articles are renovated versions of the first edition, inflected with the latest research, there are new (and needed) pieces that reflect current institutional emphases and challenges, such as two articles specifically on diversity.

No text is perfect (although this one comes close), and one that tries like the Handbook to keep abreast of all relevant scholarship on a dynamic field like ours is a Sisyphean task. In some areas of coverage, the Handbook becomes dated as soon as it is published. Take Caverly et al.'s chapter on "Technology Integration," for example. The authors wisely spend much of the article on a theoretical framework (the same one used in the first edition), because the exploration of specific technology initiatives in the article include areas that are practically defunct, like MySpace, while new technologies for learning assistance have already been used, tested, and abandoned since the book's publication date. It is important to know that the most recent scholarship consulted by the Handbook authors appeared in 2007, and budgetary and political tectonic forces have dramatically shifted the higher education landscape since then.

After grazing on the articles, one cannot help but emerge with a sense of pride for the rigor of scholarship that undergirds our field. The Handbook has made that scholarship readily accessible to us through its careful pruning and culling of the best qualitative and quantitative research. We must not let the product of this bountiful collection wither on the vine. I intend to use the articles from the Part III: Study Strategies to benchmark our study skills workshops for best practices; Caverly et al.'s "Technology Integration" will be the beginning source for my own research on Wikis as a tutor training venue; and Boylan and Bonham's "Program Evaluation" will guide my assessment practices as I prophylactically store evidence-based learning assistance research to prepare for the defense of my program in an increasingly draconian budgetary climate. Now it is your turn: what will you do with the Handbook? It is languishing on your shelf.

BOOK REVIEW:

H3LT: The Hair Three-Legged Table Solution for Education

Hair, Beatrice (2011). *H3LT: The Hair Three-Legged Table Solution for Education*. Blue Ridge Summit: Edwards Brothers Inc.

REVIEWED BY SAUNDRA MCGUIRE
LOUISIANA STATE UNIVERSITY (LA)

The current challenges facing education in America are well documented. The steadily falling rank of American students on internationally administered tests of academic achievement and critical thinking skills, the low high school graduation rates of the Nation's youth, the high turnover rate of K-12 teachers, and the lack of parental involvement in education are problems lamented by educators, parents, and citizens alike. Numerous solutions have been proposed to address these challenges—curriculum reform, longer school years, more rigorous course requirements, to name a few. In *H3LT: The Hair Three-Legged Table Solution for Education*, Beatrice Hair presents strategies to address poor student behavior and performance, teacher frustration, and parental lack of knowledge of their role in the educational process. She asserts that an effective solution lies in forming a partnership among the student, the parent, and the classroom teacher (the three-legged table). Although the idea that teachers and parents must partner for student success is not new, Hair suggests specific strategies that for a successful collaborative effort to improve student behavior and performance in school.

Hair first identifies the needs of each of the three participants. She writes that students need structure, consistency, and individual attention; teachers need uninterrupted instructional time and the ability to conserve their valuable energy; and parents need support for their parenting efforts and a diplomatic understanding that stems from knowing their role in the educational process. To ensure that the needs of each partner are met in implementing a plan for student success, a teacher and parents design a Behavior Modification Contract, described in detail in the book. The contract is developed during an "Up Front Power Meeting" where the student, the teacher, and the parent set goals for modifying student behavior and determine incentives to be given when the goals are met, and consequences that will be imposed when the goals are not met. In providing the rationale for this meeting, Hair states "The purpose of the up-front power meeting is to save time in the long run. This is where The Hair Three-Legged Table™ philosophy is conveyed and negotiations begin." (p. 31) She then provides a checklist to ensure that the meeting will be successful.

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Whereas the focus in the book is on changing the inappropriate behavior of poorly performing students, the techniques presented can be used with all students. According to Hair, “The contracts are effective with high-level, moderate-level, and low-level achieving students. The goal is for students to experience a complete transformation of old behaviors and habits” (p. 22). Hair recognizes that even top performing students can implement strategies that will improve their learning.

She provides examples of attractive incentives, such as dinner at a favorite restaurant or a trip to a theme park with a friend, as well as examples of reasonable consequences, such as extra household chores or loss of privileges. Recognizing that some parents may be unable or unwilling to participate in this behavior modification process, Hair suggests ways that teachers can create their own incentive system without parental involvement. For example, teachers could provide extra recess time or gift certificates for incentives, and extra assignments or loss of classroom privileges for consequences. This variation in the Three-Legged Table solution results in the teacher assuming responsibility for two of the three legs. However, this may not be possible in schools with scarce resources and inflexible scheduling.

The educator-author provides a number of testimonials from parents and students who have attended the *Salisbury Tutoring Academy, Ltd. The One-on-One School*, a franchised private afterschool tutoring academy for ages four-to-adult, of which she has been founder and owner since 1996, and where she implements the Three-Legged Table Solution program. She spent eight years teaching elementary school before she decided to provide one-on-one tutoring for students whom she felt would benefit from individualized instruction. Many of the students tutored at the tutoring academy have been diagnosed with Attention Deficit Hyperactivity Disorder (ADHD), and she helped to create an ADHD Summer Camp. Her first book, *ADHD in the Classroom: A Powerful, Practical Solution*, published in 2004, presents the same strategies described in the current book, but as a system to help students with ADHD.

Hair’s short treatise presents no theoretical basis for her system nor any empirical evidence based on systematic research, yet, the testimonials from parents, educators, and government officials attest to dramatic academic improvement resulting from Hair’s interventions with students. This level of improvement is quite familiar to learning center administrators, all of whom have witnessed that when students receive one-on-one tutoring in a supportive environment that may or may not involve a contractual agreement, significant improvements result.

The primary strength of Hair’s book is the straightforward way in which the author presents the proposed strategies to address the problems faced by students, parents, and teachers. For example, she provides suggested timeframes for implementing the Behavior Modification Contract (eight weeks for students six and over; four weeks for students under six), samples of positive wording for behaviors to be modified, and a mechanism for allowing students to retroactively earn goals. She recommends that negative commands such as “No back-talking”, be replaced with instructions such as “Speak respectfully to others.” She suggests that students be allowed to

“retroactively” earn a reward for a goal that was accomplished after its original time frame, especially if the missed goal was not the student’s fault. The example she provides involves a student who got the homework agenda signed by the teacher (the original goal), but left it in the car which went to the repair shop. The student will receive an “R” until the signed homework agenda is produced, at which point the reward is provided.

The book’s brevity (58 pages) has advantages for time-strapped administrators, teachers, and parents, but I found it to be a significant weakness. If Hair had spent more time discussing tools that teachers could provide students (such as effective learning skills and efficient time management strategies) or that parents could employ to help students (such as establishing a regular time and a specific place for studying) the book would be more useful. Another beneficial addition would have been a few case studies in which the actions of the teacher, the parent, and the student were presented, along with a discussion of the resulting improvement in behavior and/or academic performance. Additionally, providing at least one example of a case in which the system was not successful, and discussing the circumstances that led to the failure of the process (such as a mismatch between student preparation and academic requirements) would have increased the utility of the book.

The Three-Legged Table Solution for Education presents a mechanism to develop behavior modification goals and a way to develop incentives and consequences, but it does not provide strategies for helping students meet the goals. A publication that does this quite effectively is *106 Ways Parents Can Help Students Achieve*, published as part of the *Parents as Partners* Series in 1999 by a partnership between the American Association of School Administrators and Rowman & Littlefield Education. The practical strategies in this book provide the tools by which the goals in Hair’s Behavior Modification Contract might be met. Without these tools, students will more often be doing the dinner dishes than riding the roller coaster at their favorite theme park!

Whereas “the intended audience of this book is teachers, parents, and students who want to work as a team to develop agreed upon goals...” (p. 23), it is not likely that K - 12 students will read it. There are, however, nuggets to be gleaned by learning center professionals at the college level. For example, involving parents in a plan for student success is now feasible on most of our campuses. Today’s so-called “helicopter parents” are very involved in their students’ college experience, so why not engage them in an academic success plan? This involvement would of course require a signed FERPA (Family Educational Rights and Privacy Act) Waiver if we want the parents to have access to grades in order to award incentives or impose consequences, but most students will likely readily agree to this because their parents have had electronic access to their grades in high school. And parental involvement does work – even at the college level. I enlisted parental assistance with a student who was dismissed from the university because he had failed all of his classes during his first two semesters in college due to his lack of effort and extremely poor class attendance. When it was determined that the self-destructive academic behavior was partially caused by a psychological disorder, the student appealed his dismissal and was readmitted, with the stipulation that he receive psychological counseling.

When the parents got involved with a plan devised by the learning center professionals and his psychologist, and with the student's full concurrence, he attained a 3.5 GPA that term!

Although Hair does not address self-confidence directly, an important factor in the success of the Three-Legged Table solution that she proposes is its ability to bolster the student's belief that s/he can be successful. As Carol Dweck points out in *Mindset: The New Psychology of Success*, when students understand that their ability to learn (their intelligence) is not fixed at birth, but can be increased by specific learning activities, they begin to embrace challenges, persist through difficult tasks, and are willing to put forth considerable effort to master difficult course material. These actions lead to success, which bolsters confidence, which motivates the student to spend even more time on learning tasks, leading to even greater success. If this positive cycle can be created for many more students, from pre-K through adult, we will have developed a powerful tool for improving student performance, reducing teacher frustration and the resulting high turnover rate, and increasing parental involvement in education. The strategies proposed by Hair in H3LT: The Hair Three-Legged Table Solution for Education will begin the cycle, but for a sturdier table, teachers, parents, and students will need specific tools for achieving their goals.

Pertinent Publishing Parameters

The Learning Assistance Review (*TLAR*), the national peer reviewed official publication of the National College Learning Center Association (NCLCA), publishes scholarly articles and reviews that address issues of interest to learning center professionals (including administrators, teaching staff, faculty, and tutors) who are interested in improving the learning skills of postsecondary students. Primary consideration will be given to articles about program design and evaluation, classroom-based research, the application of theory and research to practice, innovative teaching and tutoring strategies, student assessment, and other topics that bridge gaps within our diverse profession.

Categories for Submission

Articles

- ◆ Topics: *TLAR* will accept manuscripts that address our purpose: to publish scholarly articles and reviews that address issues on program design and evaluation, classroom-based research, the application of theory and research to practice, innovative teaching and tutoring strategies, student assessment, etc.
- ◆ Types: *TLAR* will accept manuscripts for the following four of the article types outlined in the American Psychological Association Manual: empirical study and articles on review, theory, and methodology. Follow 6th edition APA manual (sections 1.01-1.04) for specific requirements and structure for each type; regardless, all manuscripts need a clear focus that draws a correlation between the study, review, theory, or methodology and learning assistance practices.

Joining the Conversation

- ◆ Idea Exchange: Discussion directly related to articles published in *TLAR*. Submissions are limited to fewer than 4 paragraphs and are to be constructive idea exchanges. In addition to the name, title, college, and contact information from the submitter, Idea Exchange submissions are to include the details of the referenced article (Title, author, and volume/number, and academic semester/year). A submission form may be found online on the *TLAR* website.
- ◆ Further Research: Article submissions that have a stated direct link to prior published *TLAR* articles. These articles will be considered following the manuscript submission guidelines.

Book Review

Book review requests should be accompanied with two copies of the book to facilitate the reviewing process. Potential book reviewers are urged to contact the editorial team for details.

Manuscript Guidelines

Manuscripts and reference style must be in accordance with the Publication Manual of the American Psychological Association (6th ed.). Submissions that do not comply with APA style will be returned to the author(s). Manuscripts must be original work and not duplicate previously published works or articles under consideration for publication elsewhere. The body of the manuscript may range in length from 10 to 20 pages, including all references, tables, and figures. Longer articles will be considered if the content warrants it. The authors are responsible for the accuracy of all citations and references and obtaining copyright permissions as needed. The only acknowledgments that will be published will be those required by external funding sources.

Submission Guidelines

Submission packets must include:

- ◆ A cover page
- ◆ The original manuscript
- ◆ A masked manuscript for review
- ◆ One hard copy of these materials must be mailed to the address listed below.
- ◆ An electronic copy must be submitted to the e-mail address listed below.
- ◆ The title page must include the title of the manuscript (not to exceed 12 words); the name(s) and institutional affiliation(s) of all authors.
- ◆ The lead author should also provide work and home addresses, telephone numbers, fax, and e-mail information.
- ◆ All correspondence will be with the lead author, who is responsible for all communication with any additional author(s).
- ◆ The second page should be an abstract of the manuscript, maximum 100 words.
- ◆ To start the reviewing process, the lead author will be required to sign certificate of authorship and transfer of copyright agreement. If the manuscript is accepted for publication, all author(s) must sign an authorization agreement.
- ◆ Figures and tables must be black and white and according to APA style.

**Please send your comments and/or article submissions to:
TheLearningAssistanceReview@utoledo.edu with a hard copy to
Christine Reichert, M.A., Editor, The Learning Assistance Review
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Review Process

Author(s) will receive an e-mail notification of the manuscript receipt. The review process may include a peer-review component, in which up to three members of the *TLAR* editorial board will review the manuscript. Authors may expect the review process to take about three months. Authors may receive one of the following reviewing outcomes:

- (a) accept with minor revisions,
- (b) revise and resubmit with only editor(s) review,
- (c) revise and resubmit for second full editorial board review, and
- (d) reject.

As part of the reviewing correspondence, authors will be electronically sent the reviewers' rankings and general comments on one document and all the reviewers' contextual markings on one manuscript. Manuscript author(s) must agree to be responsible for making required revisions and resubmitting the revised manuscript electronically by set deadlines. Manuscript author(s) must abide by editorial revision decisions.

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The Learning Assistance Review (TLAR) **Editor Job Announcement**

The Learning Assistance Review (TLAR) is the official publication of the National College Learning Center Association (NCLCA). *TLAR* seeks to foster communication among learning center officials. Its audience includes learning center administrators, teaching staff, and tutors, as well as other faculty members and administrators who are interested in improving the learning skills of postsecondary students. *The Learning Assistance Review* is published twice a year, in the spring and fall.

The position is a 3 year term which is an appointed position to the NCLCA board with full privileges. The Editor receives a modest stipend for each issue .

Duties:

- Publicize the Call for Submissions and contact potential authors.
- Edit manuscripts for revisions including structure, organization, transitions, word choice, grammar and mechanics, and other elements related to cultivating a professionally-written article.
- Edit manuscripts and list of references for adherence to APA style.
- Mentor authors in order to provide feedback for manuscripts.
- Participate in all NCLCA board meetings and requirements and present at the annual NCLCA conference to foster a discussion with members regarding professional writing for *TLAR*.
- Determine and authorize copyright requests
- Oversee and assure that the Managing Editor tasks are completed.

Required Qualifications:

- Be an active professional in the field of learning assistance in higher education.
- Be knowledgeable about and interested in different aspects of learning centers, including scholarship and research.
- Be an excellent writer and editor.
- Be able to communicate effectively with a variety of audiences, including the editorial board, authors, and NCLCA board.
- Be willing and able to make a commitment to edit the journal for at least three years.

In order to apply for this position please forward the following:

- 1) Letter of intent including reason(s) for interest including experience with APA format.
- 2) Letter of support from College/Institution administration.
- 3) Professional Resume
- 3) Additional information/documentation you feel support your candidacy.

Please send completed application documents to Christine.Reichert@utoledo.edu or fax to 419-383-3150

Subject line : NCLCA/TLAR Editor Search Committee

Deadline for Submissions: December 15, 2011

Additional details available at <http://www.nclca.org/tlar.html>



The Learning Assistance Review (TLAR) **Managing Editor Job Announcement**

The Learning Assistance Review (TLAR) is the official publication of the National College Learning Center Association (NCLCA). *TLAR* seeks to foster communication among learning center officials. Its audience includes learning center administrators, teaching staff, and tutors, as well as other faculty members and administrators who are interested in improving the learning skills of postsecondary students. *The Learning Assistance Review* is published twice a year, in the spring and fall.

Duties:

- Assist in publicizing Call for Submissions and contacting potential authors.
- Receive manuscripts from authors and maintain filing and tracking system of submissions.
- Maintain a database of reviewers and distribute manuscripts for review.
- Serve as a point of contact with printing and mail distribution services.
- Prepare layout and formatting of manuscripts for publication, or arrange for other staff persons to complete layout and formatting.
- Maintain contact with the Membership Officer on the NCLCA board for the purposes of coordinating transmittal of mailing lists of members for journal dissemination.
- Prepare mailing of journals or coordinate mailings of the journal with mailing services and distribute the complementary copies to authors, reviewers and other appropriate designees.
- Submit electronic transmittals of the journal to the various on-line abstract/listing agencies to which TLAR is a participant
- Prepare and submit invoices.
- Present at the annual NCLCA conference to foster a discussion with members regarding professional writing for TLAR.
- Receive a modest stipend for each issue upon completion of distribution.

Required Qualifications:

- Be an active professional in the field of learning assistance in higher education.
- Possess excellent organizational skills.
- Have experience with computer database programs such as Excel and Access.
- The managing editor must have experience with InDesign, desktop publishing software.
- Be willing and able to make a commitment to edit the journal for at least three years.
- Institutional support required.

In order to apply for this position please forward the following:

- 1) Letter of intent including reason(s) for interest including experience with APA format.
- 2) Letter of support from College/Institution administration.
- 3) Professional Resume
- 3) Additional information/documentation you feel support your candidacy.

Please send completed application documents to Christine.Reichert@utoledo.edu or fax to 419-383-3150

Subject line : NCLCA/TLAR Managing Editor Search Committee

Deadline for Submissions: December 15, 2011

Additional details available at <http://www.nclca.org/tlar.html>

NCLCA Membership Information

What is NCLCA?

The National College Learning Center Association (NCLCA) is an organization of professionals dedicated to promoting excellence among learning center personnel. The organization began in 1985 as the Midwest College Learning Center Association (MCLCA) and "went national" in 1999, changing the name to the National College Learning Center Association (NCLCA) to better represent its nationwide and Canadian membership. NCLCA welcomes any individual interested in assisting college and university students along the road to academic success.

NCLCA defines a learning center as a place where students can be taught to become more efficient and effective learners. Learning Center services may include tutoring, mentoring, Supplemental Instruction, academic and skill-building labs, computer-aided instruction, success seminars and programs, advising, and more.

Join NCLCA

NCLCA seeks to involve as many learning center professionals as possible in achieving its objectives and meeting our mutual needs. Therefore, the NCLCA Executive Board invites you to become a member of the Association.

The membership year extends from October 1 through September 30. The annual dues are \$50.00. We look forward to having you as an active member of our growing organization.

Membership Benefits

- A. A subscription to NCLCA's journal, *The Learning Assistance Review*
- B. Discounted registration for the Fall Conference and for the Summer Institute
- C. Regular issues of the *NCLCA Newsletter*
- D. Voting privileges
- E. Opportunities to serve on the Executive Board
- F. Special Publications such as the Resource Directory and the Learning Center Bibliography
- G. Opportunities to apply for professional development grants
- H. Access to Members Only portion of the website
- I. Announcements of other workshops, in-services, events, and NCLCA activities

Membership Application

On-line membership application or renewal available with PayPal payment option at: <http://www.nclca.org/membership.htm>. Contact Membership Secretary to request an invoice if needed.

OR

Complete the information below and send with your \$50 dues payment to the NCLCA Membership Secretary. Be sure to check whether you are a new member or are renewing your membership. If you are renewing your membership, please provide updated information.

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