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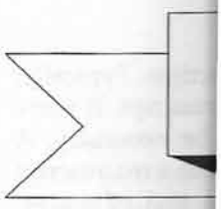

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LETTER FROM THE EDITORS

To our readers:

Volume Two begins with an article comparing two learning assistance programs, one in the United States and one in Australia. The two authors describe their programs which, while different, are both based on the needs of the students at their institutions. It is interesting to note that their differences are driven by the academic tasks expected of their respective students. This co-authorship highlights the value of collaboration and looking at our programming through a wider lens.

In addition to the core article, we invite you to *Join the Conversation* by responding to Martha Maxwell's article with your experiences related to faculty referrals. She calls the process of making these referrals an "art" and admonishes faculty in her article to be "tactful" when getting involved. Let us know how you feel about this sensitive process. Do you have experiences that exemplify either the positive or the negative aspects of referring students to the learning center? Send them to us, and we will publish them in the next issue.

The book that is reviewed in this volume reflects much of what we have been hearing at educational conferences lately, science faculty taking a hard look at the undergraduate science curriculum. Science departments seem to be leading the effort currently to explore ways to incorporate active learning into their classrooms. They are reaching out across the curriculum for ideas and ways to reach students. Antonio Pagnamenta, a physics professor, lauds the authors of *Talking About Leaving: Why Undergraduates Leave the Sciences,* for providing data that comes from the students themselves about the various reasons that cause them to avoid science in college.

One of the ways that we solicit manuscripts for the journal is by attending conferences and asking presenters to send us manuscripts based on their talks. To presenters of sessions that we are unable to attend, we send letters requesting them to send us a manuscript based on their presentation. At the recent AERA conference in Chicago, we made contact with over 30 potential authors, some of whom we have heard from already. If you are planning to attend a conference in the near future, let us know. We will send you information that you can use to give to speakers whose presentations you think might make particularly informative articles for our readers.

Consider sending us your work as well. We are eager for manuscripts. Typically, the review process involves two reviewers' evaluations of a manuscript. If there are few revisions required, a second round review may not be necessary. A second round review is required if there are substantial revisions to a manuscript based on reviewers' suggestions. Reviews and revisions take time, and, of course, commitment on the part of authors. We know that our busy schedules provide little time for developing ideas for an article. But we want to encourage you to do so. In fact, at MCLCA's conference in Chicago in early October, we will be making a presentation on how to turn your practice, whether it is teaching, tutoring, mentoring, administrating, counseling, or advising into an article. Consider attending and getting a head start on an article!

As we constantly remind our students, reading is an active process. That means that you need to get involved with the authors. We would like to share that interaction with colleagues, so please send us your thoughts, and we will start a professional response section in the journal.

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ARTICLE

AUSTRALIA AND THE UNITED STATES: A COMPARISON OF LEARNING ASSISTANCE PROGRAMS IN TWO LIBERAL ARTS UNIVERSITIES

By Gretchen Starks-Martin, St. Cloud State University, and Joanne Tiernan, University of Western Sydney-Nepean

Abstract

The comparison of two learning assistance centers in liberal arts universities in Minnesota, USA and New South Wales, Australia revealed some interesting similarities and some illuminating differences between the centers. The differences appeared to be based on the academic learning tasks required of students. For example, in the USA university, freshmen students were primarily evaluated with objective examinations, wheras Australian university students were assessed with writing assignments and essay tests. The programs offered by these two learning assistance centers were also compared based on historical trends and national contexts, as well as the academic tasks required of students.

Introduction

In fall 1995, St. Cloud State University's academic learning center in St. Cloud, Minnesota, hosted a learning center faculty member from the University of Western Sydney-Nepean in New South Wales, Australia. During conversations it became evident that our structures, objectives, and instructional methods had not only interesting similarities, but also significant differences. These differences appeared to be influenced both by national contexts and historically derived approaches to education resulting in specific educational practices and pedagogical approaches in each institution. A further influence on how the centers were organized was determined by the required academic tasks faced by the students in each university. The purpose of the two centers was the same; that is, to facilitate the development of academic skills necessary for student success in each of the institutions. However, the learning center programs differed in how they accommodated the specific needs of the students in each institution.

Background of Learning Assistance

United States

Colleges and universities have incorporated some form of learning assistance within their institutions since colonial times. Carpenter and Johnson define learning assistance as "programs which include any remedial or developmental program intended to help students succeed academically in college" (1991, p. 28). In the 1960's and 1970's, open admissions policies became widespread as federal funding was tied to university commitments to affirmative action and equal educational opportunity. As larger numbers of disadvantaged students, adult students, and women enrolled, learning assistance programs expanded and flourished.

At this time, the mission of learning assistance expanded from serving the "underserved" to providing assistance for ALL students. During this era, a number of national and statewide surveys indicated growth nationally in the *number* of programs and an increase in the *type* of programs. Many learning assistance centers became multifaceted to include peer tutor programs, supplemental instruction, courses in reading, writing, mathematics, and study skills, paired or adjunct courses with a content area course, learning assistance laboratories with computers, tapes, and other self-paced materials, advising and counseling services, student orientation programs, grant-funded programs such as TRIO, and individualized tutoring in drop-in centers (Starks, 1994). Some centers incorporated student disability services and adult basic education outreach. In 1983, Susan Roueche found that only 11% of U.S. colleges and universities lacked some form of learning assistance (Roueche, 1983). In 1986, Boylan estimated that 1.5 million students were involved in learning assistance programs with more than 30,000 faculty and staff to support them (Boylan, 1986). According to the U.S. Department of Education, 46% of all college students take at least one remedial or developmental course during their four years (*Career Opportunities News,* 1996).

Currently, proposed downsizing in some four-year institutions include limiting remedial courses; however, a need for learning assistance services continues to exist. As an example, the State University of New York system is considering the elimination of developmental courses in four-year universities; however, it is proposing that faculty from neighboring community colleges provide the necessary instruction. Cuts to some of the other services, such as peer tutor programs, are not under discussion ("Developments," Spring 1996).

Australia

In contrast, Australia adopted a university educational plan which has been influenced by the British approach. The most obvious evidence of this is the relatively low participation rates of the Australian public in university education, reminiscent of the elite view of higher education inherited from Britain. Even today, despite recent growth, only a small proportion of the Australian public participate in university studies. For example, in 1994 a total of 132,860 people (or .74% of the national population) completed higher education courses nationwide (Australian Bureau of Statistics, 1996).

Rapid growth of learning assistance occurred approximately one decade later than in the United States with the proliferation of an English as a Second Language (ESL) population and national policies to admit more students. In 1965, the Australian undergraduate student population was equivalent to two medium sized universities (around 20,000 students in total). In 1995, the undergraduate population was 480,000 (Vivekenandra & Shores, 1996). This growth is the outcome of deliberate national government policies aimed at making university education accessible to a broad range of the Australian public. Added to this, in the late 1980's and early 1990's Australia entered the international education market and began actively recruiting students, particularly from Asia. These students brought cultural and linguistic skills different from what universities had been accustomed to. In addition, many Australians of ethnicity other than Anglo-Saxon or Celtic background began to attend universities in numbers which challenged the traditional institutional responses to students' needs.

Because the rapid proliferation of learning assistance centers did not occur uniformly, today a vast range of institutional locations and titles for these units/centers exist. Some centers are faculty-based, yet provide university wide services; others are housed in divisions such as Divisions of Student Services (also known as Student Affairs). Centers are also affiliated within teaching and learning centers. The services offered by learning assistance centers vary according to each center's institutional needs, its institutional location, and the expertise of its staff. Services include credit courses in English language and critical thinking, individual appointments, workshops for students, and staff development for faculty.

Student Profiles

St. Cloud State University

St. Cloud State University (SCSU) is a campus of approximately 15,000 students, 21% of whom are part-time and 22% over the age of 21. Approximately 70% are

first generation students and 95% have ACT scores at or above 25. In 1995-96, 10,180 students received financial aid; 1,415 were employed at the university on work study; 3,000 lived on campus; and 3.5% were international students (Summary of Academic Data, 1995-96).

University of Western Sydney-Nepean

The University of Western Sydney-Nepean (UWS) had a student body with just over 11,000 students in 1995. Like SCSU, most students are the first in their family to attend the university (71.9%). Over half (62.5%) must support themselves since Australian universities provide few student employment opportunities. Most seek jobs in the general employment market. Only 100 students live on campus. Most students commute to classes and, therefore, spend much less time on campus than do SCSU students. Approximately 39% of UWS students speak English as their second language and over half (58.9%) live in the area of Sydney considered disadvantaged. All of the part-time students (71.6%) are over 21 years of age (Development & Information Management Planning Services, 1995).

High Risk Students

At SCSU, approximately 500 students per year are admitted to the General Studies Division (DGS) with composite ACT scores below 23 and ranked between the 33rd and 49th percentile of their high school graduating class. These DGS students must take a two-credit orientation course and two terms of "paired" general education classes as part of their full-time academic load. For example, a biology course may be paired with a study strategies course in order to encourage the effective transfer of skills and knowledge (Summary of Academic Data, 1995-96).

Unlike SCSU, UWS students are not required to enroll in any specific course other than the core classes in their degree major. Students are made aware of the learning center's services upon enrollment and are free to seek assistance on a voluntary basis. Upon requests from faculty, learning center staff also conduct academic skills sessions in relation to subject area assignments and tasks. Most students utilize the learning center in response to the learning center's advertising (37%), or at a faculty's (26%), or friend's (15%) recommendation.

Thus, both SCSU and UWS enroll high-risk students. However, SCSU has a more systematic approach to the identification and support of "at-risk" students and appears to take more responsibility for these students. In contrast, UWS requires students to self-identify difficulties and they must access services themselves on a voluntary basis. UWS's Learning Center focuses on learning enhancement, but does not specifically target at-risk students in academic programs.

However, the learning center at UWS has a more difficult task of encouraging students to identify with the university because they do not offer course credit for their assistance. So, during individual appointments with learning center faculty, discussion takes place concerning the social as well as the academic adjustment to the university (Baker, McNeil, & Siryk, 1985; McInnes & James, 1996).

The Centers

St. Cloud State University

Historically, the Academic Learning Center (ALC) at SCSU has been housed in Student Life and Development within the Counseling Department. This is due to the philosophical belief that integration of the affective domain (counseling) and of the academic domain (learning assistance) is necessary to serve the "whole" student.

The ALC offers two courses, Reading Rate Improvement (Reading 120) and Reading and Study Strategies (Reading 110), which are taught by academic faculty with doctorate degrees in reading and learning theory. The reading courses are sometimes paired with other courses such as biology, English, chemistry, criminal justice, and child and family studies as part of the DGS program. In addition, a computer laboratory offers practice in reading rate improvement, critical reading comprehension, vocabulary development and provides assessment of study skills behaviors.

The SCSU academic learning center also has a peer tutor program co-ordinated by a graduate student who directs fifteen tutors. Tutors meet one-on-one with students or in small study groups and tutor in approximately 125 academic courses offered on campus. Tutors facilitate content learning and assist students in predicting test questions, writing essay answers and analyzing textbook and lecture notes. The ALC refers students to personal and career counseling, and computer-assisted instruction for studying for the state's teacher education licensure exam.

University of Western Sydney-Nepean

The UWS learning center is located in the Division of Student Affairs and Services. Like SCSU's center, the philosophical underpinnings acknowledge that the affective and cognitive domains are integrally related to each other and to the students' academic performances.

The learning center offers general workshops based on typical written assignments, conferencing with students, and individual consultations with staff.

Many of the workshops and individual sessions aim to help students deal with the written discourse of their academic majors.

The voluntary nature of student attendance at the learning center and the fact that attendance does not provide credit towards a degree creates a situation where students are highly motivated. Students have, to some extent, identified their own learning problems and are highly motivated to implement the strategies suggested by learning center staff to achieve these goals. This results in effective interventions by the staff, but it also has the disadvantage that some students who require additional assistance do not elect to take advantage of the services.

Academic Tasks

St. Cloud State University

During their freshman year at SCSU, most students enroll in one or more large lecture classes which are evaluated primarily through objective exams over lecture and textbook material (multiple choice, true-false, matching). A few of these lecture courses require short papers. The instructional (pedagogical) implications for the ALC reading courses are thus to assist students in taking lecture notes, identifying non-verbals in lecture, taking textbook notes, predicting objective test questions, learning memorization systems emphasizing details, recognizing testwiseness clues for objective examinations, and developing critical reading strategies for content-based textbooks. Standardized pre- and post tests in reading and a commercial study behavior inventory are administered. Writing discourse is not emphasized unless a specific DGS paired course warrants it. A standard five-paragraph essay organizational pattern is taught in relation to the specific academic course.

University of Western Sydney-Nepean

By contrast, students in the arts or social sciences in Australian universities attend lectures (sometimes quite large) and smaller tutorials where they discuss issues and concepts raised in the lecture in relation to the readings set for that topic. Science-based subjects and degrees operate similarly, but include laboratories instead of tutorials. Tutorials in courses leading to Visual and Performing Arts degrees usually include creative activities.

Typical assessment tasks in the arts and social sciences are essays. Examinations usually include essay questions. Writing tasks in science-based subjects include laboratory reports and short answer questions. Written material which is analytical rather than descriptive is emphasized. Because the majority of the academic tasks requires extensive writing, the influx of students who use English as their second

language has led to a focus on the proper form of English in writing. Consequently, learning centers are staffed by people with language/literacy qualifications as well as education qualifications. Increasing reading rates and comprehension scores, computer-assisted instruction, and measurement of study behaviors are not a part of the UWS center functions or concern. The emphasis on study strategies at UWS focuses more on written discourse, critical analysis and argument in essays, identifying main issues, and using evidence to support the views argued in essays.

Conclusion

The activities at each Center focus on the needs of the students being served by customizing the services. The needs of the students are driven by the academic tasks they face. As a result, the learning center at UWS focuses on the development of writing skills because of the predominance of written assessments. In contrast, the Academic Learning Center at SCSU focuses on reading, memorization, and test-taking skills in response to the predominance of multiple choice assessments.

At SCSU, the learning center offers credit courses to assist students. Faculty have a strong background in learning theory and the teaching of reading. In contrast, the center at UWS offers non-credit seminars, workshops and short courses for students. The establishment of centers at a time when English language ability was a primary concern led to the employment of linguistically trained staff.

Future Trends Related to the Faculty Visit

After discussions with our Australian guest, the academic learning center at SCSU is placing more emphasis on written discourse and coordination with the ESL department at the university. Advice from our UWS colleague will help with this "internationalization" of our program. As a follow-up from the Australian visit, a mini-assessment grant was funded during Winter 1996 to evaluate SCSU's reading curricula to put more of an emphasis on critical argument and critical thinking issues and the integration of writing.

UWS has been introduced to alternative ways to train and use students for peer tutor support. In addition, it was through the visit to SCSU that UWS was introduced to the "paired course" concept. As a result, UWS is commencing the training and employment of students in variants of this paired course approach.

SCSU's identification of and support for at-risk students also provided a model for similar programs at UWS. It will require more discussion to determine how UWS

can more systematically identify and provide opportunities for the support of students within their own learning center approach.

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Joanne Tiernan *is an assistant professor at the University of Western Sydney-Nepean in Australia.*

References

Australian Bureau of Statistics. (1996). Yearbook of Australia, No. 78. Canberra: Commonwealth of Australia.

Baker, R., McNeil, O. V., & Siryk, B. (1985). Expectations and reality in freshman adjustment to college. Journal of Counseling Psychology, 32, 94-103.

Boylan, H. R. (1986). Facts, figures, and guesses about developmental education programs, personnel, and participation. Research in Developmental Education, 3, 1-6.

Career Opportunities News. (1996, January/February). Quoted from The Career Planner. (1996, Spring). St. Cloud State University, p. 2.

Carpenter, K., & Johnson, L. L. (1991). Program organization. In R. F. Flippo, & D. C. Caverly (Eds.), College reading and study strategy programs (pp. 28-69). Newark, DE: International Reading Association.

Development & Information Management Planning Services. (1995). Student intake survey. Sydney: University of Western Sydney-Nepean.

"Developments." (1996, Spring). SUNY may limit remedial college courses. Journal of Developmental Education, 19, 36.

McInnes, C., & James, R. (1996). First year on campus. University of Melbourne: Center for the Study of Higher Education.

Roueche, S. D. (1983). Elements of program success: Report of a national study. In J. E Roueche (Ed.), A new look at successful programs (pp. 3-10). San Francisco, CA: Jossey-Bass.

Starks, G. A. (1994). Retention and developmental education: What the research has to say. In M. Maxwell (Ed.) From access to success: A book of readings on college developmental education and learning assistance programs (pp. 19-28). Clearwater, FL: H & H Publishing Co., Inc.

Summary of Academic Data. (1995-96). Institutional Studies: St. Cloud State University, p. 100.

Vivekenanda, K., & Shores, P. (1996). Uni is easier when you know how. Sydney, Australia: Hale and Iremonger.

JOIN THE CONVERSATION

FACULTY REFERRALS—THE KISS OF DEATH OR A POWERFUL MOTIVATOR? WHAT MAKES THE DIFFERENCE?

By Martha Maxwell, M. M. Associates

> If a student refuses to accept a referral from a faculty member, it may mean that the student is left with the problem that inspired the referral and the confirmation of his suspicion that faculty members do not care about individual students (Warnath, 1971, p. 41).

Successfully referring failing students to the appropriate support service can be an art and must be done tactfully. Some students in academic difficulty may feel that their instructors are abandoning them if they are urged to get tutoring or told to check out the reading improvements program--or they may think that they are being judged stupid or are being punished. Still others are in such deep denial that they can't accept the reality of failing and won't follow any suggestion. (See Silverman & Juhasz's, 1993, study of the help rejectors). There are even students who consider help as denigrating, demeaning, and demoralizing. In fact the word "help" is considered pejorative, patronizing, and even racist by some groups as I learned when I advertised a Graduate Record Examination (GRE) review session at Berkeley during the 70s. The ad read "Do you want help in preparing for the Graduate Record Exam?" Black students boycotted the session because of the word "help", while others came in droves. Next time around, we rephrased the ad, "Do you want to improve your GRE scores?" and students from all groups came.

Although it seems reasonable to expect that students who are told by their instructors to seek assistance will follow their advice, few do. No matter how much concern the instructor expresses nor how much time he or she spends talking with them, students frequently do not follow faculty referrals. In fact, they seem to get lost between the instructor's office and the service even though it's located in the next building. This can be discouraging to both the student and the instructor. In this article I identify some of the difficulties faculty members face in

referring students to learning support services, and suggest ways that they can make their referrals more effective.

"Kiss of Death?"

I used to call faculty referrals the "kiss of death" because so few students faculty sent to our learning center kept their appointments. In fact, surveys suggest that less than 10 percent of students who visit learning centers say they heard about the program from a faculty member—a fact that surprises and no doubt disappoints those faculty who regularly refer students (Davis, 1992). Students who are motivated find their own ways to the center.

Unfortunately, students who have the greatest need for academic support are usually the least likely to take advantage of it and if asked "Why?", they give many excuses—"I can't spare the time it will take away from my studies"; "I don't think I need it right now", and so on. However, underneath the excuses, they may see the offer of help as threatening. Even when students do follow-through, they seem determined to just get the answers, not improve their learning. In contrast, the brightest, most self-confident students seek help gladly if they feel it will enable them to become more successful academically. These more competent students are not interested in just getting answers, but they want to become more effective and independent learners, in other words, professional students, and will gladly seek out their instructors or any campus service that offers them a way to improve.

The chances of a student's going to an academic service are particularly low if they have been told by the instructor that they are failing. A case study used in faculty training illustrated this by quoting a professor who tells a student, "Your recent test scores are not improving, you haven't been trying hard enough, and, moreover, you seem to be carrying a chip on your shoulder" (Argyris, 1983, as quoted in Wiley & Hegeman, 1990, p. 30). It is very difficult to soften such negative feedback as faculty participants soon realize. They conclude that the instructor's explanation was not effective, pointing out that the statement was too judgmental, or that remedial students can't handle harsh criticism.

When asked to create better responses, the faculty suggest including statements like "It is my opinion..."; "Research will back this up..."; or "I've known you for a long time." Unfortunately each of these attempts inevitably leads to a closed conversation. In other words, none of the professors could produce scenarios that met their own criteria of effectiveness or were different from that of the professor in the case study. Regardless of how they phrased the statement or how gentle they tried to be, their suggestions fell on deaf ears. In other words, negative

evaluations cut off communication, and create resistance and defensiveness in the student (Wiley & Hegeman, 1990).

For that same reason, English instructors are careful to make comments and suggestions on an essay first and grade the student at a later time. They know better than to write suggestions on a paper they've graded a "D" or "F" because students won't read them. Students figure that if they flunked, there's no point in looking at the teacher's comments (MacDonald, 1991). One tutor describes it thus: "Our self-esteem determines the amount of work we're willing to expend on a (writing) project." Most of all students need to feel good about their writing. That doesn't mean we should pass out meaningless compliments, but perhaps students need to hear positive things about their work more frequently. A confident writer is eager to revise a paper so that it becomes better, but a doubting writer just wants to do the assignment as quickly as possible. Referring to an essay as an author's brainchild, Murphy notes, "Nobody wants to be told they have an ugly baby" (Murphy, 1996, p. 15-16).

Thus, being told one is failing threatens one's self esteem and presents instructors with the dilemmas of when and how to disclose negative information so as not to make the student act defensively. Because such interviews can be unpleasant, faculty members often dread talking with failing students probably as much as these students dread talking to their instructors.

What Can Faculty Do to Improve Referrals?

There are steps that faculty can take to make their referrals more effective and guarantee that students will use the campus academic support services. Learning center directors suggest that faculty first learn about the various services available for students, i.e., tutoring, skills help, supplementary instruction, writing lab, counseling, financial aid (for the student who complains she can't study at night because she can't pay the electric bill), or other services related to the nature of students' needs. Then endorse and validate the support services as early in the term as possible by making announcements or by inviting learning specialists to speak to the class, and consistently encourage students to use the programs. Specific individual referrals are then easier to make, providing that the faculty member personalizes them rather than just refers students to a service. Finally, insist on following up by talking both with the people who work with the student and the students themselves.

Learn About Campus Academic Support Services

Faculty need to know what the various academic services on their campus can do for students, where they are located and to whom students can be sent. Once

they are knowledgeable about the services, they can determine the types of service students in their course might need. Most support services concentrate on lower division students although occasionally a student in an upper level course may need to be referred for special help in spelling, mathematics, writing, or even reading skills. So the type of service that might be appropriate will vary with the content and level of the course as well as with the type of problem the student is experiencing

Faculty should ask themselves whether the entire class should be targeted for academic support or should individuals be targeted. Individual students can be referred for skills help, tutoring, counseling, writing and math services; however, if a course is difficult and thirty percent or more of the students get grades of "D," "F," or "W" (Withdraw), then faculty members might consider group services like Supplemental Instruction (SI), adjunct skills classes or paired courses. Supplemental Instruction (SI) refers to a program in which a trained student leader is assigned to a particular content course, and serves as a model student (attending all the classes, taking notes, perhaps even taking exams). The SI leader meets with the students in the class each week to model and explain study strategies, textbook reading, note-taking and exam preparation related to the course content. Students who voluntarily attend SI sessions average significantly higher grades in the course than those who do not, and faculty who sponsor SI get higher evaluations by students (Martin & Arendale, 1992, 1994).

Adjunct skills courses are similar to SI, but they are usually taught by skills instructors rather than student leaders and are a popular way to help underprepared students through basic mainstream courses. An optional way to insure better academic performance for large numbers of students is "paired courses"—which involves scheduling students in a set of courses such as a reading and study skills course as well as a course like political science, or a mathematics course or freshman chemistry. In these cases, students register for both courses, and the instructors coordinate their class activities and assignments. Faculty also may offer paired courses in advanced writing intensive courses, e.g., pairing an English composition course and an advanced biology course or an engineering course and a technical writing course. Another method is to arrange team taught courses where instructors from both departments share a course. All or some of these options may be available and faculty should make every effort to learn about them.

Start Early in the Term

Faculty members need to know how to get students into their offices in the first place, an activity that is rarely discussed in faculty training sessions. At the first class meeting, faculty should greet the students in such a way that they know that

coming in for help is not only okay, but expected. Faculty should explain to students that they are willing to talk with each of them and that if they are unable to help, they know the people in the services on campus who can. Instructors should brief classes early in the term about the services students might need to pass the course and encourage them to use them. Also faculty might include a description of the support services in the course syllabus and explain where they are located and who to call so students can find them when they need them.

Faculty should be encouraged to remind students of the services at appropriate times during the term, such as when assigning term papers or before and after exams. Learning centers or writing centers often offer special workshops on "Writing better essays"; "How to study effectively for final exams" and "How to read mathematics and science texts". The schedule of these workshops should be announced in class and students urged to attend.

Representatives from the learning center and other support programs might be invited to give brief announcements in content classrooms. Tutors are particularly effective at this, and students relate well to them. For class demonstrations on how to be a more successful student in a particular course, focusing on taking lecture notes, preparing for exams, mastering technical vocabulary, or topics related to learning specific content, learning specialists or other Center staff can either come to a class or arrange another time for the class to attend such sessions customized for that particular course.

Assess Students Needs

To assess what skills students need, instructors should look at each student's homework, class notes and exams, and, if possible, students' transcripts and placement or assessment scores as early as possible in the semester. While time consuming, this helps faculty discover those students who will need help based not only on the content of the course but also on general preparation for college learning. Alternatively, instructors might give a quiz on a selection from the textbook early in the semester and if students do not do as well as instructors think they should, then suggestions to attend a reading service or tutoring might be better heeded by students because such suggestions are directly linked to students' success in the course. For individual students who are having difficulty with a course, faculty members should refer each one to a tutor or skills specialist, provided that the students have heard about the program in class or read about it on the syllabus. It helps if a list of tutors and their specialities is available for students. Additionally, faculty might meet with those who tutor for their courses to explain the course goals and their expectations for students. This saves time rather than explaining goals to each student individually.

Angelo and Cross (1993) suggest some fast and easy Classroom Assessment Techniques (CATs) that faculty can use to point to students who need services. For example, one of the techniques faculty might use takes only five minutes. In the midst of a lecture, faculty members ask students to take one minute to answer a question on the material just covered. This question may be as simple as asking students to describe the topic of the lecture or explain the main point of a particular idea. Faculty then ask students to compare answers and to write a revised answer to the question. This quick assignment helps faculty to understand what confusions developed in the lecture and which students are having conceptual difficulties with the material.

Personalize Referrals

Individual faculty members should make sure that they refer students to a person rather than an impersonal service. This is friendlier and easier for students to accept, especially if their instructor knows the service provider and feels that he or she is understanding and effective. It is a ggod idea if the faculty member calls the service provider while the student is in the office in order to explain what the student might need. Sometimes, it may be preferable to have the student describe the problem to the tutor and schedule an appointment. If the tutor, counselor or skills specialist is not available, instructors should leave the student's number so that the student can be contacted directly. In other words, the referrer must not only encourage the student to go to a service but must personalize the referral and validate the importance of it.

While it is important that faculty are familiar with those who tutor in their subjects (most often former students who they themselves have recommended as tutors), it is equally important that faculty members describe to students how to prepare for tutoring sessions, what kinds of results they might expect from the tutor's efforts, and how tutoring has benefitted others. For example, instructors might clarify to students that tutors will not do their homework nor prepare their papers. Faculty should explain that students are expected to come to each session prepared to discuss problems in doing homework or planning an essay or whatever the task. To assure attendance at tutoring sessions, students may initially need to be accompanied by a faculty member to the Center and introduced to the person with whom he or she will be working. Still more important, faculty members might be encouraged to give assignments that students can complete in tutoring or give students extra credit for working on special projects. Some may call it bribing, but it works well with at-risk students.

Faculty members should insist on follow up. Faculty should make it clear to students that they want to hear about how the program works out for them. In addition, instructors should encourage Center staff or tutors to contact them by

phone or e-mail to let them know whether the students are attending, and for a summary of meetings (with the students' permission, of course).

How to Make Faculty Referrals a Powerful Motivator

One of the best ways to motivate students to follow instructor's referrals is to encourage a learning center or academic support program to adopt a policy requiring that instructors give students permission for tutoring. Here are examples of how faculty referrals changed when policies changed:

> For several years we operated with an intake form that included the question, "How did you find out about our services?" 70% answered from a friend, 20% from a brochure or letter, and 10% from a faculty member. Then, our university system changed the rules and said that we could count the hours generated in tutorial and lab as time accruing FTE's IF (sic) the work was based on a faculty referral. Now 95% of the students come in with a signed faculty referral and about 70 faculty have signed blanket referrals for all their students. Professors in one entire department announce the first day of class: "I have a blanket referral at the Learning Center—when you go for help just use my name. Kiss of death?—no, just a powerful motivator." (J. Marshall, *Personal Communication,* September, 1996)

> I insisted on setting up a faculty referral form for tutoring for two reasons. Philosophically, I think that instructors and students having difficulties ought to talk to each other; this [tutoring] at least provides an opportunity. The other reason was that Longwood [College] has an honor code and a student run honor system. I wanted to be sure (and wanted students to be sure) that tutoring was not violating the honor code. If faculty know that a student is being tutored, they have a chance to express whatever constraints they feel need to be there. An extra benefit has been the public relations gains for the program and feedback to faculty. When half the class lines up with the infamous blue cards after a test, faculty start to think about what is happening. When they see improvement in those who signed up for tutoring their attitude about our service changes. (S. Lissner, *Personal Communication,* September, 1996)

If faculty members are still uncomfortable about referring a student, they might give the service director the names of students they believe need the service and ask the director to follow up directly with the students. As R. Schotka of Roxbury Community College explains, "Phone calls, letters and even messages in class demonstrate to the students that we are proactively seeking them out and they

are less likely to get 'lost' between the classroom and the center." (*Personal Communication,* September, 1996)

In some cases, it may be better for faculty to work through others to make sure students who need help will use the program. Students are more likely to take the advice of advisors and counselors who tell them to go to a support service than that of their instructors. Perhaps it is because students have an ongoing relationship with counselors and advisors and/or that neither give students grades. Athletes present a special problem is; however, faculty should be encouraged to contact the athletes' coach or athletic advisor, who can make sure they come to the service.

In summary, for faculty to make effective referrals to academic support programs, they should be knowledgeable about the services and describe them to students in their classes early in the term. Faculty must endorse the use of the service and repeatedly encourage students to attend. Finally, the most important element of faculty referrals is personalization. Faculty should initiate contact with the appropriate services, should prepare the student for expectations of the service, and their role in making the experience successful, and should follow up with both the student and the service to learn the outcome. With some effort, faculty members' referrals need not be "the kiss of death".

Since retiring from the University of California at Berkeley in 1979, where she founded the Student Learning Center, ***Martha Maxwell*** *has been consulting and writing. Her recent books include* Improving Student Learning Skills, 2nd ed., (H&H Publishers, 1997); Evaluating Academic Skills: A Sourcebook, 3rd ed., (MM Associates, 1996); *and two edited books,* When Tutor Meets Student (University of Michigan Press, 1994); *and* From Access to Success: Readings on College Developmental Education and Learning Assistance (H&H Publishers, 1994).

References

Angelo, T. A., & Cross, K. P. (1993). Classroom assessment techniques: A handbook for college teachers (2nd ed.). San Francisco: Jossey-Bass.

Davis, K. (1992, March). What the faculty know about what we do. The Writing Lab Newsletter, pp. 4-6.

MacDonald, R. (1991). Developmental students' processing of teacher feedback in composition instruction. Review of Research in Developmental Education, 8(5) 1-4.

Martin, D. C. & Arendale, D. R. (1994). Supplemental instruction: Increasing achievement and retention. New directions for

teaching and learning, No. 60. San Francisco: Jossey-Bass.

Martin, D. C., Arendale, D., & Associates. (1992). Supplemental instruction: Improving first-year student success in high risk college courses. Columbia, SC: National Resource Center for the Freshman Year Experience.

Murphy, P.C. (1996, October). Understanding human nature through tutoring. The Writing Lab Newsletter, pp. 15-16.

Silverman, S., & Juhasz, A. M. (1993). A developmental interpretation of help rejection. Journal of Developmental Education, 17(2), 24-26, 28, 30-31.

Warnath, C. F. (1971). Old myths and new realities: College counseling in a time of transition. San Francisco: Jossey-Bass.

Wiley, M. Hegeman, J. (1990, March). Reflective practice in developmental education programs. In Atkinson, R. H. & Longman, D. G. (Eds.), Celebrating our past: Creating our future. Selected Conference Abstracts. The 14th Annual Conference of the National Association of Developmental Education, Boston, MA., 30-32.

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BOOK REVIEW

TALKING ABOUT LEAVING: WHY UNDERGRADUATES LEAVE THE SCIENCES

By Antonio Pagnamenta, University of Illinois at Chicago

Research scientists, science educators, parents, even politicians are concerned with the "pipeline problem" in the sciences. Why are so many talented (and less talented) students leaving the sciences, dropping from the pipeline, switching to other majors? Those of us who teach gateway courses in the sciences have observed a precipitous drop in enrollments and, at the same time, are concerned about the poor science literacy of the general public. Some of us blame ourselves or the "system" for poor teaching and communication skills. Others blame the "lazy and undisciplined students" of today. Everyone, of course, has a different explanation, but no cure, for the pipeline problem.

Elaine Seymour and Nancy M. Hewitt, the authors of *Talking About Leaving* (Westview Press, 1996), decided to ask the students themselves why they left or did not leave the Science-Math-Engineering (SME) curriculum. They interviewed 460 undergraduates with a minimum mathematics SAT score of 650. Thus, interviews were conducted with students who had at least the basic preparation necessary to be able to handle course work in the sciences. The students were from seven different private and public colleges in the East, Midwest, and West. These interviews produced a rich body of data that includes demographic, social and economic background information.

After a thorough review of related research that dealt with the same issue, the authors present and review their multidimensional body of data, categorizing their findings by the many types of reasons that students give for leaving the sciences and switching to other majors. These reasons include the impact of science preparation in high school and accommodation in college, the influence of the "good or poor" professor, (where the authors find that students do not equate good with excellent lecturer, but more with the personal attention they received from the professor), the racial/ethnic background of the student, gender differences, poor career guidance, and even such prosaic elements as unrealistic expectations for life style and financial reward. As students realize that SME

majors generally have more modest life style expectations than non-science majors, the poor monetary reward-to-effort ratio in the long science curriculum becomes a major factor in switching. As a professor of physics at a major research and graduate institution, I suspect this last reason will become more pronounced in the next years in view of the poor job market in the sciences.

Some reasons the students give are more relevant than others and switchers do only represent a fraction of all SME students. Therefore, the reasons that students give for switching may be only incidental, may represent excuses or, alternatively, may actually be only the tip of an iceberg of underlying root causes. Thus, it is important to ask which factors are perceived as troublesome by all SME majors. The authors find that criticisms of faculty pedagogy, together with those of curriculum design and student assessment practices, constitute the largest group of factors named by both switchers and non-switchers. The authors represent their findings symbolically with an iceberg, placing those factors most often cited by students at the top of the iceberg. So in actual fact, the authors' iceberg is upside down.

A claim that the authors' data seem to refute is that only students with failing grades switch; not all switchers are, therefore, drop-outs. So, I was surprised the authors did not make more of an observation I have made of science "switchers": Switchers, who are a loss to the science curricula, need not be a net loss to society. Many switchers are excellent science students who find a suitable niche in other fields, such as medical sciences, law, economics, among others. These fields certainly gain by the influx of qualified, and at least to some degree, scientifically gifted students.

The beautiful analysis provided by Seymour and Hewitt can only be a first step. The publication of this book makes the rich body of data now available to a wide audience, and surely these data will be reanalyzed and interpreted in many ways. Indeed, the rich data set is an important value of the book. However, it is the authors' meticulous method, analysis and classification system for understanding the reasons students leave SME fields that is the chief asset for faculty and administrators who are trying to improve the science-math-engineering curricula at their institutions. While the authors clearly show that not all the reasons students give for switching are in the realm of the university, the four most common reasons cited by both switchers and non switchers are:

- Lack or loss of interest in science.
- Belief that a non-SME major holds more interest, or offers a better education.
- Poor teaching by SME faculty.
- Feeling overwhelmed by the pace and load of curriculum demands.

Based on the authors' findings, there are several areas in which we, as SME teachers, must make improvements:

- SME faculty must be realistic and honest with students about the life style and financial reward that accompany work in the sciences.
- SME faculty must make every effort to be approachable, welcoming and available before, during, or after class.
- SME faculty must engage in less traditional evaluation procedures besides the typical multiple choice exam that is graded on a curve, since many students perceive this practice as demeaning.
- SME faculty must attempt to identify and remediate, as early as possible in a course, conceptual difficulties students face in learning the subject.
- The "weed-out" philosophy that drives many SME faculty to grade with excessive harshness must be replaced with a philosophy that is more centered on student learning and retention.
- Because of their importance in retaining students in the sciences, SME faculty, not Teaching Assistants, must teach gateway courses.
- SME curriculum, with its many prerequisites and requirements that tax students' endurance and sap their time, enthusiasm, and motivation, may need to be reconsidered by faculty without sacrificing quality or rigor. Less may be more!

The students themselves may not know all the answers. Some leave so early in their majors that they never have a chance to experience the varied courses in the math, science and engineering fields. The authors, however, should be congratulated for asking students what they felt were the crucial reasons behind their switching or staying. After all, these are the factors that motivated them to leave or stay. Why not begin by listening to the students?

Antonio Pagnamenta *is Professor of Physics at the University of Illinois at Chicago and a recipient of the 1997 Teaching Recognition Award at UIC, a university-wide award for excellence in teaching. He has long been concerned about the pipeline problem in the sciences, and has tried numerous methods to improve university teaching in gateway courses.*

Library Subscription for *The Learning Assistance Review*

The Learning Assistance Review is a publication of the Midwest College Learning Association (MCLCA). It is published twice a year, in the fall and spring.

The journal seeks to expand and disseminate knowledge about learning centers and to foster communication among learning center professionals. Its audience includes learning center administrators, teaching staff, and tutors as well as other faculty and administrators across the curriculum who are interested in improving the learning skills of postsecondary students.

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PUBLICATION GUIDELINES

As an official publication of the Midwest College Learning Center Association, *The Learning Assistance Review* seeks to expand and disseminate knowledge about learning centers and to foster communication among learning center professionals. Its audience includes learning center administrators, teaching staff and tutors as well as other faculty and administrators across the curriculum who are interested in improving the learning skills of postsecondary students.

The journal aims to publish scholarly articles and reviews that address issues of interest to a broad range of learning center professionals. 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 strategies, student assessment, and other topics that bridge gaps within our diverse discipline.

1. Prepare a manuscript that is approximately 12 to 15 pages in length and includes an introduction, bibliography, and subheadings throughout the text.

2. Include an abstract of 100 words or less that clearly describes the focus of your paper and summarizes its contents.

3. Type the text with double spacing and number the pages. Follow APA style (Publication Manual of the American Psychological Association, 4th edition, 1994).

4. Include your name, title, address, institutional affiliation and telephone number along with the title of the article on a separate cover sheet; the manuscript pages should include a running title at the top of each page with no additional identifying information.

5. Submit all tables or charts camera ready on separate pages.

6. Do not send manuscripts that are under consideration or have been published elsewhere.

7. Send three copies of your manuscript to the following address: Dr. Karen Quinn, Co-Editor, The Learning Assistance Review, Academic Center for Excellence, University of Illinois at Chicago, 1200 West Harrison, Suite 2900, M/C 327, Chicago, Illinois 60607-7164.

You will receive a letter of acknowledgment that your manuscript has been received. The review process will then take approximately three to six weeks at which time you will receive further notification related to your work. If your manuscript is accepted for publication, a computer disk will be requested.

MCLCA MEMBERSHIP INFORMATION

What is MCLCA?

The Midwest College Learning Center Association (MCLCA) is a regional organization dedicated to promoting excellence among learning center personnel in 12 midwestern states: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. MCLCA defines a learning center as a place where all students, from entering freshmen to graduate and professional school students, can be taught to become more efficient and effective learners.

What Does MCLCA Do?

The MCLCA Constitution identifies the following objectives for the organization:

- To promote professional standards for learning centers through education, curriculum design, research, and evaluation.
- To promote support for learning centers by acting on issues affecting learning assistance programs.
- To assist in the development of new learning centers.
- To assist in the professional development of personnel in learning assistance programs by providing opportunities for sharing professional methods, techniques, and strategies.
- To provide an annual conference for the exchange of ideas, methods, and expertise in learning assistance programs.
- To publish educational information and research in the field.

- To develop and expand a communications network among learning assistance professionals.
- To coordinate efforts with similar professional groups.

How Can I Participate?

The MCLCA Executive Board is anxious to involve as many learning center professionals as possible in achieving its objectives and meeting our mutual needs. Therefore, we invite you to become a member of the Midwest College Learning Center Association. The membership year extends from October 1 through September 30, and annual dues are $40.00. Membership includes the *MCLCA Newsletter* and *The Learning Assistance Review,* discounted registration for the annual MCLCA Conference, workshops, in-service events, and announcements regarding upcoming MCLCA activities. We look forward to having you as an active member of our growing organization.

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