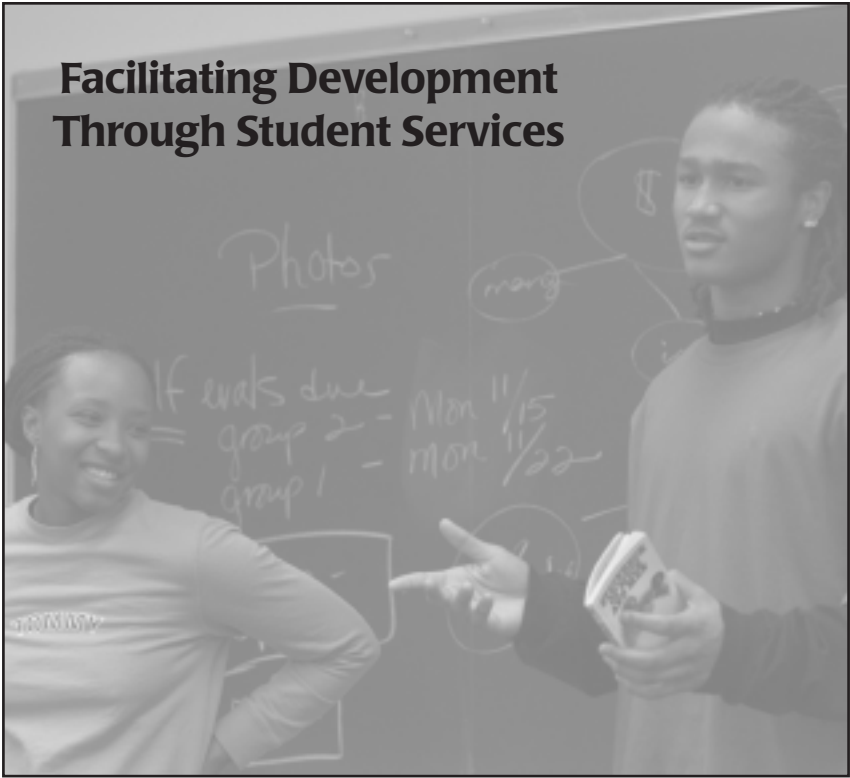


## Facilitating Development Through Student Services





# Facilitating Development Through Student Services

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## *Introduction*

General College (GC) has nationally recognized services in the college available to students, including advising, bridge programs for high school students, career services, academic resource centers, and support for student parents, among other programs. Its strength is in its breadth and active forms of outreach through an intrusive and multicultural advising philosophy, which is outlined in the chapter by Shaw and Neiman. GC's support services are the outgrowth of the college's strong foundations in student development theory.

Another popular and engaging resource for students in GC, as described by Opitz and Hartley, is the Academic Resource Center, which houses computer, writing, and mathematics support for GC students. Peer tutoring is available, and a multicultural approach is also embedded within the philosophy of this center. This model for supporting student learning in all subject areas reflects the multidisciplinary nature of the college and how student services work directly with curricular initiatives in academic affairs to strengthen the educational continuum for students.

## General College Student Services: A Comprehensive Model and How It Developed

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*Mary Ellen Shaw and Patricia J. Neiman*

### ABSTRACT

Throughout the history of General College, the student services area in the college has played a key role in the development of our students. This overview provides a history of General College student services, framing this history with a look at the changing mission and structure of the college. The chapter provides a full description of the current services provided to students in the college, with particular attention to the integration of exploration of majors and careers provided by the leadership of the Transfer and Career Center. Finally, the chapter presents a brief discussion of directions for future research and assessment in the program.

**A**n important component of the General College model of developmental education is the role played by student services in the college. Through its history, the college has invested a significant amount of resources into supporting students outside the classroom, and a distinctive model of student support has evolved over the years. Three contributing factors to the development of this model have been (a) the mission of the college itself, including the changes in the mission over time and the target student populations the college was designed to serve; (b) the key place that counseling psychology played in the early years of student services (for details on the model of psychological counseling used for the early decades in the college, see Chapter 4; and (c) the long-standing tradition of collaboration between academic and student affairs personnel in the college. In this chapter we present our understanding of the history of student services in the college and an overview of its current structure. This includes attention to special programs within the unit such as the Student Parent HELP Center and the TRIO programs.

## Changes and Continuities in GC Student Services' History

Student support services have played a key role in the General College since its beginning in 1932. Though the services have evolved with changing institutional goals and student populations, there has been a consistently high level of support provided for students, as can be seen from a scan of college bulletins published over the past 40 years. The history presented in this chapter will be broken roughly into four periods, with the evidence for the first two periods taken primarily from the biannual *General College University of Minnesota Bulletin* dating from 1961 into the mid-1980s, and the evidence for the second two periods obtained from later editions of the *Bulletin* as well as from personal recollection and a review of historic memos, reports, and committee minutes.

### *1961–1971: A Period of Relative Stability*

From the discussion of counseling psychology in General College's first few decades presented earlier in this book (see Chapter 4), it would be reasonable to assume that the student services described in *Bulletins* for the period of the 1960s would reflect a continuity from the decades earlier than 1960. The 1961–1963 *General College Bulletin* section on "Student Services and Activities" (p. 9) described a division of labor between the faculty, who did academic advising (i.e., giving guidance in "matters relating to program planning and academic progress" [p. 9]) and the counseling staff, who did personal and educational counseling. Faculty advisors referred students who needed additional support to the psychological counselors; the counselors also referred students to other University offices as needed. The counselors, though they were psychologists, did a fair amount of what appears to be academic support as well:

The College maintains a staff of professionally trained counselors whose time is devoted to working with students on an individual basis. These counselors can assist the student in assessing his [*sic*] own interests, abilities, and aptitudes, thereby enabling him to establish realistic educational-vocational goals and to progress toward those goals. The counselor can also assist the student in the areas of study habits, social skills, and emotional adjustment. (1961–1963 *Bulletin*, p. 9)

Interestingly, the work of the counseling staff described in this passage resembles the work done by present-day General College counselor advocates doing academic advising, with the exception of the assistance with "social skills" and "emotional adjustment," at least at the level of support appropriately offered by trained psychologists.

The 1965–1967 *Bulletin* has language in the section on Student Personnel

Services and Activities (p. 8) identical to that of the earlier *Bulletin*, indicating no changes in the structure or nature of the services offered. Counseling was described as being handled by the Division of Student Personnel Services in the 1965–1967 and 1967–1969 *Bulletins*; the Division was listed alongside the other academic divisions, and the staff members (five in 1965–1967, eight in 1967–1969, and nine in 1969–1971) held a dual rank of Instructor or Assistant Professor and Counselor. This speaks to a long tradition in the General College of treating the counseling staff as part of the faculty, by seeing them as playing an important role, rather than viewing them as primarily supportive to the work of the teaching faculty. It is possible that this tradition of full collegiate participation of those student personnel staff members has contributed to the legacy of collaboration and mutual respect that is such an important part of the interrelationship between academic and student affairs in the college today.

Through the 1960s, the college mission that informed the work of both academic and student affairs remained consistent. The 1961–1963 *Bulletin*, in the section on “The Role and Function of the General College,” cited the two primary purposes for the college given by President Lotus Delta Coffman, under whose administration General College was established.

One, to provide an opportunity for the study of individual abilities, interests, and potentialities of a very considerable number of young people whose needs were not being met elsewhere in the University; and second, to experiment with a new program of instruction, a program which involves the revamping, reorganizing, and re-evaluation of materials of instruction with a view to familiarizing students more with the world in which they are to live and which uses new techniques of instruction. (p. 7)

The centrality of the counseling function in the college was highlighted in the next passage in this section of the 1961–1963 *Bulletin*. The students intended by this statement were further described as those who,

in some instances . . . received poor marks in high school, or . . . have a low standing in college aptitude tests. . . . Many years of study show that a large number of these students have difficulty adjusting themselves to the fast pace and vigorous scholastic competition found in the 4-year colleges and professional schools. They are therefore given the option of entering the General College, one of the regular undergraduate colleges of the University, where they can take advantage of a well-developed and effective personnel and counseling service, and where they may adjust gradually to college level work. (p. 7)

Later 1960s bulletins softened the language about the “deficiencies” of the students but continued to highlight the importance of the counseling function to

help students explore their educational needs. These bulletins stressed the value of the general education provided by the college as distinctly different from preprofessional and narrow disciplinary study and as providing both personal and intellectual growth for students, including the ability to “develop a sense of personal integrity, . . . think critically and constructively, . . . participate intelligently in civic affairs, . . . [and] discover an appropriate life work” (1969–1971 *Bulletin*, p. 7). This set of expectations reaches back to the founding of the college, and it suggests the impact of educational philosopher John Dewey, whose work was especially influential in the first decades of this past century, and included an emphasis on career or vocational exploration and involvement in civic life (Dewey, 1916/1997; Shaw, 2002).

### *The 1970s Through Mid-1980s: Expanding Mission and Service*

The 1969–1971 *Bulletin* showed the beginning of a new development in the college mission in a section on “Community Programs in the General College” (p. 9). In this section the *Bulletin* described the college’s role as an “agent of the University” (p. 9) in housing the federally-funded Upward Bound program as well as the Project New Careers, which combined “University courses and supervised work experience in the Minneapolis Police Department, the Minneapolis Public Schools, and a number of Twin Cities social service agencies” (p. 9). The growth of these programs corresponded with academic innovations and a development of career-specific certificate programs also shown in the *Bulletins* of the later 1960s, and they also were connected with the development of the early Higher Education for Low-Income People (HELP) Center, which served those students brought in by the special programs and helped them overcome academic skills deficiencies and adjust to college life. Here is a description of the early HELP Center:

By means of a staff composed of faculty, counselors, tutors, and a social worker, the center offers academic advising, scholarship assistance, group orientation, vocational guidance, training in effective study, and other services to students enrolled in all of the college’s community programs. (1969–1971 *Bulletin*, p. 9)

At the point of the 1969–1971 *Bulletin*’s publication, the Upward Bound program had been in place for 3 years, but there had been no mention of it in the prior *Bulletin*. The “community programs” seemed to have been marginal to the rest of the college at the point of the 1969–1971 *Bulletin* as well, as no further mention of the programs or the associated HELP Center services was made. The HELP Center staff was also not listed in the staff section, and the section on student services was unchanged from earlier 1960s bulletins, listing only the advising and counseling services discussed previously.

However, by the 1971–1973 *Bulletin*, the HELP Center had a much more

visible role in the *Bulletin*, including a more detailed description of the community programs it served and of its services, and listing its staff members parallel to the faculty listings of the academic divisions, suggesting a shifting emphasis in the college toward a more explicit role in social amelioration and being an agency of the University in responding to issues of poverty and racism. Indeed, on the very first page of the 1971–1973 *Bulletin*, under “The Mission,” an explicit statement was made referring to the University policy that “there shall be no discrimination in the treatment of persons because of race, creed, color, sex, or national origin” (p. 1). In more recent decades the HELP Center took on a pivotal role in working with women receiving Aid to Families with Dependent Children (AFDC) as part of its community outreach. However, the work of the early HELP Center and the personnel who came into the college to staff the center has also had a profound effect on the eventual development of a distinctive GC student services mission and approach.

Through the early 1970s, the HELP Center existed as an alternative advising and counseling home for students in the community programs and for other “by-passed” students, the term used first in the 1971–1973 *Bulletin* (p. 8), meaning specifically students from low-income backgrounds and students of color. The 1971–1973 *Bulletin* first mentioned the academic skills centers in association with the HELP Center population. The 1973–1975 *Bulletin* listed 10 staff members associated with the HELP Center and listed the academic skills centers as a resource for all students. The staff level remained at this number for the next two *Bulletins*, and, beginning with the 1977–1979 *Bulletin*, the HELP Center was listed in the Student Affairs section of the *Bulletin*, alongside the advising and counseling services. The counseling staff during the 1970s had diminished to 4 or 5, contrasted to 9 or 10 in the 1960s. This speaks as well to a shifting of resources away from the needs of the prior GC population of underperforming students, who needed assistance in exploring interests and possible vocations, toward the personal and academic needs of “by-passed” populations. One such population, that of immigrant and refugee students who needed English as a Second Language support to be ready for college success, was served by a program first showing up in the 1981–1983 *Bulletin*, the Commanding English program (for further information refer to Chapter 9). At that point the HELP Center was at an all-time high with 12 staff members.

In the 1983–1985 *Bulletin*, the Upward Bound and Day Community programs were included in the general Student Services section for the first time, and with the 1985–1987 *Bulletin*, they were joined by the newly-initiated TRIO Student Support Services (SSS), a federally-funded program serving eligible General College students, “first-year students who have been habitually under-



represented in higher education” (p. 15), meeting at least one of the eligibility requirements of being first generation, low income, or having a physical or learning disability. These changes all speak to the college’s investment in a new direction, that of reaching out to serve previously underrepresented populations. As a result of this investment, the current population includes a fairly high proportion of students of color, first-generation, and low-income students, as the college continues to reach out to an urban population.

*The Mid-1980s Through Mid-1990s:  
Consolidation and Reconfiguration of Services*

In January, 1986, the University of Minnesota discontinued the General College baccalaureate degree begun in 1977 and the associate in arts degree, prompting a refocus onto the mission of preparing students for transfer and completion of degrees in other colleges of the University. Major changes were underway in student services at this time, as the counseling unit was gradually disbanded and a professional advising staff was added to the advising being done by HELP Center personnel and the TRIO Student Support Services personnel. Additionally, a separate academic progress unit was established to monitor students’ progress and intervene when students did not maintain the requisite grade point average of 1.6 for a year or two, then 2.0, as well as providing advising to students who went on academic probation or sought return from academic suspension.

For the next several years, advising services were splintered among these different program offices, with an ongoing group of students continuing to be advised by the faculty, especially those students still in the pipeline to earn General College degrees. However, the academic progress, professional advising, HELP Center, and TRIO Student Support Services personnel were all generally under the Student Services umbrella, all reporting to the Assistant Dean of Student Services and Development, Marjorie Cowmeadow. For this reason, there was a great deal of cross-training and shared provision of services. One of the long-term HELP Center staff members, Beverly Stewart, took on the role of coordinating advising services for some time in the later 1980s. It was during this period that the title “counselor advocate” came into play for advisors, including those in the HELP Center, the TRIO Student Support Services program, and the professional advising program, along with the development of a three-step ranking system (assistant, associate, and full) and criteria for hiring and promotion.

In the early 1990s, following the recommendations of a series of task groups made up of faculty and advising staff who examined the college’s advising model, the college accepted a proposal to move completely away from faculty advising to a model in which all assigned advising would be

done by professional advisors in one or another of the sectors of student services. In fact, not very many students were still being assigned to faculty advisors at that point: all first-year students had been assigned to student services advisors, all students on probation were moved to specialized advisors in the academic progress unit, and many other students qualified for specialized advising in the HELP Center and Student Support Services programs. An argument for this transition to have all advising done by professional advisors was that as the mission of the college moved away from offering degrees to preparing students for transfer, advisors needed to be well trained and have advising at the core of their job functions to guide students effectively through transferring successfully into the wide range of degree programs at the University. The transition to an all-professional advising model utilizing full-time professionals with the support of graduate student and undergraduate student peer advisors was finalized in the spring of 1994. During this same period of transition, the old HELP Center disappeared, with some of its staff moving to the growing ranks of the professional advising staff. The service to student parents continued, however, resurfacing in the 1991–1993 *Bulletin* under the name of the Student Parent Support Unit, and then under the name it continues to have today of the Student Parent HELP Center in the 1993–1995 *Bulletin*. This center, in its early years, was staffed in part by two long-term counselor advocates who had been involved with the original HELP Center.

Even when faculty members moved out of direct advising, they remained committed to the goals of student development that had long been in place in the college. Several faculty members have involved themselves, along with representatives from student services, on the GC Admissions and Advancement Committee, the committee charged with policies and procedures regarding student admissions, advising, and academic progress. It was out of this committee, as well as out of the college's Curriculum Committee, that measures were put into place that assisted faculty and student services staff in working closely together in supporting students.

The Base Curriculum, first showing up in the 1993–1995 *Bulletin*, was a core effort that supported this collaboration between faculty and student services staff. In this program, a broad array of selected introductory courses were required for incoming first-year students. Participating faculty were expected to enrich these courses with a variety of learning experiences and provide students with frequent feedback—all designed to assist students in their acculturation to college learning. Faculty within the Base Curriculum were also expected to provide a mid-quarter academic progress assessment to each student, copied to the student's advisor. In addition, all faculty members in the college were asked to send "Academic Alert" forms out to students and

to the students' advisors whenever any student in the college showed evidence of academic difficulty (e.g., poor attendance, poor performance on papers or exams, etc.). This reporting cycle, first begun with only Base Curriculum courses, was expanded at the time the college transitioned into semesters in the fall of 1999 to include the entire college curriculum and a requirement of two reports each semester; it has remained a cornerstone of communication and collaboration between faculty and student services personnel. No other unit in the University of Minnesota has such an extensive communication cycle related to student progress, though the University has recently adopted a system providing a one-time warning for students in 1000-level classes who are not performing well. Within General College, the frequent communication through this password-protected, Web-based system leads to additional telephone and e-mail correspondence between the advisor and instructor as well as frequently resulting in meetings with the student in need of support.

The first half of the 1990s in student services saw a good deal of reorganization and experimentation in the structure of service delivery. For a short time, there was a completely separate unit within student services providing advising to first-year students, who were then transferred to new advisors for their subsequent year. An exception to this split advising model was made for students served by the TRIO Student Support Services program, which maintained a continuous advising assignment for their students.

### *Mid-1990s to Present: Responding to Challenge*

General College experienced a crisis in 1995–1996 when the University administration of that time proposed to close the college. After weathering the storm through an outpouring of support by alumni, current students, GC allies from around the University of Minnesota, and community supporters, the college gathered energy together to improve programs in every area. Student services accelerated the process of reorganization, and by the spring of 1996 it brought all the pieces of student services effectively and productively together. Most of the services and programs now in place were strengthened or established in some form during that time. The next section of this chapter will give an overview of the key components of student services, highlighting the ways that current practice reflects long-time commitments and values in the college, and also highlighting the development over the past decade and a half of work on multicultural awareness.

## Overview of Student Services Structure and Programs

The broad outline of the structure of current student services in General College is that all students are assigned to a full-time professional in the counselor advocate ranks or a trained graduate teaching assistant (GTA), usually from the University's Counseling and Student Personnel Psychology program. This advisor remains assigned to the student throughout his or her time in the college, which was the same model that was used during the early decades of the college when faculty members were the primary advisors and remained the advisors of record through the student's tenure in the college. Current advising is supported by the Student Information Center, which functions as both a college office and as a quick, stop-in advising service for students.

### *Multicultural Awareness and the Role of the Counselor Advocate*

It is important to highlight the role of the counselor advocate in student services. The role of the counselor advocate, with earlier ranks of "assistant" and "associate" created to parallel faculty ranks, was developed initially in the transitional time when the old HELP Center was being disbanded in favor of an expanding professional advising program and specialized TRIO SSS program. The title, however, reflects much of the approach of the staff who worked in the HELP Center during its years of being challenged by and challenging the more mainstream academic culture of the University on behalf of underrepresented student populations. A primary attribute of this approach is advocacy on behalf of students' needs within the wider institution, requiring the successful counselor advocate to take a stand and take initiative to foster change within the wider institution on students' behalf. The legacy of the early HELP Center to the developing counselor advocate role included a holistic understanding of the student, one which has continued to expand as our staff has developed greater familiarity with and understanding of cultural differences among students as our student population has changed over the years. Several members of the student services staff have taken leadership in the increasing centrality of multicultural awareness within the college for more than a decade. This multicultural emphasis, too, has contributed to the everyday work of the counselor advocate, as staff members are challenged each year to reflect about ways their work with students has been informed by multicultural awareness, as well as about which new multicultural issues have arisen during that year in their work with students. Staff members receive ongoing staff development in multicultural issues and are supported in individual professional development or contributions in this area.

### *Professional Development of Advising Staff*

General College expects and receives a high level of professionalism from its counselor advocate personnel. Advising staff members are supported in doing professional development activities and in contributing to the profession of advising, as well as providing leadership and service within the college and the wider University community. Several members of the advising staff have held offices in the National Academic Advising Association; more than one of our staff members have been on the board of the University of Minnesota Academic Advising Network; and several members have been on University Senate committees as well. Many staff members serve on General College committees such as Policy and Planning, Curriculum, Admissions and Advancement, Multicultural Concerns, and the Student Scholastic Standing Committee. Within the University, contacts made with other colleges' advising staff members have been beneficial in creating strong connections with those colleges to support our students' entry into majors across the campus. Nationally, involvement in professional organizations has paid off as advisors bring back information about best practices in programs around the country. Additionally, a number of staff members have been active graduate students, many pursuing Ph.D. programs in higher education fields, taking advantage of the University's tuition benefit for professional and academic staff. The research and course work done by colleagues in those programs helps inform best practices in our advising program.

### *Program Components of Student Services*

There are several separate programs within the current student services unit, all working closely together. The federally-funded TRIO Student Support Services serves as the advising home for around 200 eligible students at any given time. There is an advising component of the Commanding English program, which is described in Chapter 9, involving two professional counselor advocates who work closely with the academic staff of this program. The current Student Parent HELP Center, which provides services to all undergraduate students who are parents at the University of Minnesota, also serves as the advising home for General College student parents who are not in the TRIO SSS program or in Commanding English. Finally, a programatically separate but also very centrally connected student services program is the Transfer and Career Center, discussed later in this chapter.

It is important to stress that all these component segments of the student services unit are united in reporting to the same Assistant Dean and Director of Student Services, they all include staff who serve as advisors of record to General College students, and staff members of these programs are part of the close-knit cadre of counselor advocates and Graduate Teaching Assis-

tant (GTA) staff who share in the same professional training, meet frequently, and function as members of the same team. As indicated in the previous description of the early history of General College student services, this unity of purpose and team membership was not always the case; we believe it is an important component of our successful provision of services to students. This model of an integrated team of staff members who also specialize in separate services, including career services, is unique in our experience of how other collegiate student services are organized.

### *The Student Information Center*

The Student Information Center, located centrally on the lower level of the building that houses GC, is the office responsible for official correspondence with students (e.g., admissions letters, academic standing letters), being available for student questions of all kinds during business hours, and handling student requests for advising appointments. Staffed by an experienced student personnel worker and undergraduate advising assistants reporting to her, the center is responsible for maintaining student records, although active student files are located in advisor offices; managing the flow of materials and the processes associated with admissions and assignment to orientation dates; and providing support for the advising function in the college. The Center also handles the registration of prospective students whose first language is not English and who need to take the Michigan English Language Assessment Battery (MELAB) exam as part of their admissions process to the University.

### *New Student Orientation*

During the months of June and early July, and for one catch-up session in August, all student services staff members in all positions join together in providing our new student orientation program. Incoming first-year students are on campus for a 2-day period, with the first day handled primarily by New Student Programs, a central University of Minnesota office. In the afternoon of the first day, General College staff members present a 1-hour, large-group information session called the College Meeting, introducing new students to General College and its services, as well as providing an overview of policies and expectations in the college. Subsequently, for a second hour, students are placed in advisor-run, small group sessions in broad vocational or programmatic groupings (i.e., sciences, liberal arts, professional studies, Commanding English, and potential TRIO SSS-eligible students). In these sessions, more detail is offered about registration and liberal education requirements, and students are invited to start the process of planning their fall class schedules.

In their second day of orientation, students come to Appleby Hall to continue their planning and to work with an individual counselor advocate or

GTA. Ideally, this individual will become the student's assigned advisor of record, although it does not always work out in terms of numbers attending any given orientation session. At this point, those students who are eligible and who are being invited to consider joining the TRIO SSS program are given more information about the special TRIO SSS course packages they are eligible for and application forms; most invited TRIO SSS students do choose to join the program. Commanding English students meet as a group and are introduced to the requirements and packaged curriculum of their special program. Other student groups with special needs, such as students jointly admitted to General College and the School of Music, student athletes, and students who are parents, meet with advisors who are specially trained to help these students balance school with their additional responsibilities.

### *First-Year Advising*

Contacts between advising staff and students in the first year are designed to bring students into the college experience. During their first year, students in all advising areas are invited into a relationship with their assigned advisor and encouraged to use that relationship as a springboard to engage in the process of making academic and life choices, explore the opportunities and possibilities of the University, and reflect on their academic experience. Advisors do traditional academic advising as is done in higher education throughout the U.S., assisting students with course selection and communicating the expectations and policies of higher education to students. It is important to recognize that as the profession of academic advising has matured over the past 20 years, academic advising has come to include attention to a wide set of students' developmental needs, as promoted by the National Academic Advising Association especially in its Statement of Core Values of Academic Advising. However, many advising programs lack the resources and institutional support to provide the level of outreach to students, advocacy on their behalf, and attention to their development as students and as maturing individuals, as the General College counselor advocates and GTA advising staff have been able to provide over the years.

During their first year, attention in advising is placed on assisting the students to come to know more clearly their educational aspirations and capacities, to engage in the beginning stages of career and major decision making, or to confirm the direction already chosen. If the student experiences academic difficulty during any semester, faculty members in General College classes will be communicating this information to the student and the advisor, giving the student ample time during the semester to seek out resources for academic support, or to modify the course load. Continued lack of progress leads to placement on academic probation, when students are



required to agree to academic interventions and to work closely with their advisor.

Students in their first semester are invited to register for GC 1086, “The First-Year Experience,” a course designed to assist new students in making a successful transition into college. This course has been taught for a number of years by student services personnel and is similar to first-year success courses taught elsewhere. However, beginning with fall 2004, a new model was piloted in delivering this course, through which students attended a lecture taught by a senior General College faculty member once a week and met for a second session with a General College advising staff member, who also served as the student’s assigned advisor. This new model was a development intended to allow for expansion of the course offering to include more students, and an enhancement of the course based on the experience of prior instructors, who discovered that students in the course formed a strong bond with the instructor. Emphasis within the course continues to include learning about resources and expectations of college life, engaging in self-exploration and reflection, and addressing affective issues as well as the development of skills in areas like time management.

### *Second Year in the College*

Advising during the second year supports students through their transition into degree programs elsewhere in the University. During the second year and any subsequent registration, students are supported in continuing their academic development, as well as in making their decisions about majors and beginning to move toward entry into their new academic home. The timing for this transition depends on the goal the student has chosen; many students move within three semesters into bachelor of arts majors in the College of Liberal Arts, while students choosing a professional major such as education or engineering generally take 2 years of preparation before they can transfer. Advising for students in their second year or beyond focuses on the process of testing out options and making good decisions about majors and subsequent career possibilities. Because our students have the opportunity to go into any program at the University if they can meet the admissions requirements, General College advisors must become aware of all the undergraduate majors and requirements available to University of Minnesota students, whereas advisors in other colleges are specialists in their own college’s offerings. This broad knowledge base about the degree options at the University that advisors have is of benefit to our students, as many college students change their major one or more times during their first 2 years. General College students have an advantage over students in the other colleges of being provided with information about the widest possible array of choices when they begin the



decision-making process or find their first choice impractical or no longer of interest.

During their second year, many students are encouraged to take a career planning course provided through student services. For several years, student services advising staff members have been the instructors of GC 1076, “Career Planning,” a two-credit course intended primarily for second-year students to help them explore interests or confirm degree choices and begin to make the link to the world of work. Instructors in the course have received career development training or have been trained to teach the course through mentoring by senior instructors. This course guides students through self-exploration and assessment instruments such as the Strong Interest Inventory (CPP, 2004b) and the Myers-Briggs Type Indicator (CPP, 2004a), facilitates student reflection and discussion of different major options, guides students in exploring career options and employment trends, and introduces students to some of the activities in which they will need to engage when they are ready to enter the world of work.

### *Role of TRIO Student Support Services*

General College student services programs have been shaped, in part, by the presence within the college of programs targeted to low-income and underrepresented student populations. The history discussed earlier in this chapter includes mention of the HELP Center, originally titled “Higher Education for Low-Income People,” which was an early program housed in General College charged with supporting underrepresented students. The HELP Center shifted its focus in the middle 1980s to serving students who are parents; it is now the Student Parent HELP Center and serves undergraduate students who are parents from throughout the University. At that time, the mission of providing targeted services to General College low-income and first-generation students was taken up by TRIO Student Support Services, one of three federally-funded TRIO programs hosted by General College. The other two are McNair Scholars Program, which prepares undergraduates from around the United States for graduate study through a summer program and faculty-sponsored research project, and Upward Bound, a program that works with high school students in several inner-city high schools and prepares them for college admission and successful college study.

TRIO Student Support Services (SSS) provides advising and academic support to qualified General College students, those who are first generation and meet federal income guidelines, or those who have a disability. In reality, many more General College students could qualify for TRIO SSS than the 120 who are admitted each year as first-year students; for that reason, TRIO SSS staff do careful screening of admitted students prior to General College

orientation to invite those students who seem best suited to take advantage of the program. Students invited often include past participants of other TRIO programs oriented to helping high school students prepare to enter into college, such as Talent Search and Upward Bound.

TRIO Student Support Services is currently staffed with a director, two full-time advisors, and two part-time graduate student advisors. In addition, the program hires teaching staff for the one-credit Supplemental Instruction courses attached to several of General College's most challenging courses, especially the sciences. Given the additional needs of the students admitted into the TRIO SSS program, advising loads are kept lower than the advising loads of GC advisors not associated with the program.

Beyond the intrusive and accessible advising that is part of the TRIO SSS model, the core of the program involves offering students learning communities and supplementary skills-building courses. Learning communities involve two or even three General College courses that a group of students take in common, usually in their first or second college semester, and often including a freshman writing course. In these learning communities the participating faculty generally work together to make connections between the courses. The one-credit Supplemental Instruction courses attached to challenging courses replaced the earlier model used in TRIO SSS of Supplemental Instruction involving voluntary study groups led by a trained undergraduate tutor meeting outside of the target large class. However, when the program moved to having a credit-bearing course associated with the target course, student participation and success were greatly enhanced. These one-credit support courses carry graduation credit, as they present additional material not covered in the target course. They are taught by experienced graduate student instructors or by teaching specialists with advanced degrees.

The TRIO SSS program is fully integrated into General College student services. Advising staff in TRIO SSS are part of the larger GC advising staff, participating in all training and staff meetings of the larger student services unit. The TRIO SSS director is a member of the planning group advisory to the Assistant Dean and Director of Student Services and also reports to him. At the same time, TRIO SSS is actively connected to similar programs around the nation, which helps the program stay fresh and innovative. In addition, the program is required to provide documentation of its effectiveness as part of the periodic grant renewal and report cycles to maintain its federal funding, which contributes to the motivation for innovation. For these reasons, as well as because a high quality of staff is attracted to the mission of the TRIO SSS program, a variety of innovations have been initiated within TRIO SSS that have led to enhancements in the larger General College student services program. Examples include the use of mid-term academic reporting, which

was done in TRIO SSS before it became an expectation that all GC course instructors provide reports during the semester for all GC students. TRIO SSS started tracking student contacts as part of its grant reporting, which led to the same student contact tracking system being incorporated into the larger student services, and eventually the creation of the current electronic student data base that keeps track of student contacts and also houses electronic file notes. TRIO SSS has also influenced the development of the intrusive approach to advising that is common practice in General College. In these and other ways, TRIO SSS has served as a laboratory for developing new approaches to helping students overcome barriers and experience success, and has provided leadership within General College.

### *Transfer and Career Center*

A core resource for advisors and students in assisting students through their first 2 years of exploration and major decision making is the Transfer and Career Center (TCC). This center, originally called the Career Resource Room (CRR), was established in 1988 when General College moved from Nicholson Hall to Appleby Hall. The CRR was located in the basement of Appleby Hall and was open on a walk-in basis. A limited amount of career resource books, college catalogues, and the American College Testing (ACT; 2004) program's computerized career guidance program, *DISCOVER Career Guidance and Information System*, were the available resources. The CRR primarily functioned as a place for students to come to discuss their interests and educational options. The coordinator also tracked transfer applicants and when appropriate advocated for individuals whose transfers to other colleges of the University were rejected.

During the summer of 1996 the CRR moved and became the Transfer and Career Center (TCC). The new room is a sunny, centrally-located former classroom on the first floor of the building, close to the main entryway. This move provided the opportunity for an increase of resources, staff, and visibility within General College and the greater University of Minnesota.

The TCC now has two missions: one short-range, which is helping students prepare for transfer, and one longer-range, which is helping students begin their career planning. The need for this expanded service was underscored when, for 2 years after the TCC's move to its new location, incoming first-year students were asked to take the College Student Inventory (CSI), a Noel-Levitz (2004) instrument, to assess their needs. One striking finding in the CSI aggregate results was that many incoming General College students felt the need for career planning services, which gave the administration of the college reason to allocate even more resources to the newly-expanded TCC.

Currently the TCC offers a number of resources and programs. An important resource produced and maintained by the TCC is the set of transfer guides to all undergraduate programs at the University, available for both students and staff to use. It would be impossible for any single advisor to maintain this knowledge completely and always keep it up-to-date, as programs and requirements are constantly changing. The TCC staff has the responsibility of regularly revising and updating these guides.

The TCC coordinator is currently the key liaison person reaching out to transfer colleges, keeping staff updated on collegiate programs and requirements, but also facilitating the acceptance of the General College curriculum as fulfilling major prerequisites and college requirements where appropriate in other colleges. As part of this liaison role, the TCC coordinator invites representatives of other colleges to be part of the Visiting Advisor Program, through which advisors from other colleges make themselves available to General College students to discuss their programs and the students' particular interests and preparation. Each spring semester the TCC hosts a program for first-year students, who are all required to attend a session in the TCC as part of their early preparation for transfer. Many of these sessions are co-hosted by advisors from other colleges as a way of helping students get the most current information about collegiate and major requirements and also helping them make a connection with a person in their prospective college.

The TCC has long offered some important self-exploration resources for students: access to the Strong Interest Inventory through the Web as well as trained interpretations of the results; *Do What You Are* (Human eSources, 2000–2004); access to computers to do Web browsing for career information; the online Minnesota Career Information System (MCIS; Minnesota Department of Children, Family, and Learning, 2004); and, in previous years, the online *DISCOVER Career Guidance and Information System* program. The TCC also has its own Web site, [http://www.gen.umn.edu/transfer\\_career\\_ctr/](http://www.gen.umn.edu/transfer_career_ctr/), which hosts online versions of all the current transfer guides, as well as many links to useful resources for students.

Current staffing of the TCC includes the coordinator, who also does advising; two undergraduate peer advisors, who provide a significant number of hours of staffing; and two or three graduate students from the Counseling and Student Personnel Psychology program at the University, who contribute a couple hours each week as part of their training and development as GTA advisors. Having these CSPP graduate students as advisors and contributors to the TCC allows for a fruitful connection between General College and the CSPP program and gives these students a good foundation in the profession of academic advising along with career counseling skills. Over the years a number of these graduate students have gone on to become professional

advisors, several of them being hired in General College as full-time counselor advocate staff members.

In many, if not most, colleges and universities that have career centers, the career center is physically and administratively separate from the advising services. This is not the case in General College, where the transfer and career services are an integral part of advising and are staffed by individuals who are part of the advising staff as well. There are a number of ways that the TCC is integrated into the advising model in the college. Because having students successfully transfer within the University is central to the mission of the college, all advisors need to be aware of transfer requirements and college programs around the University. The TCC is the hub for maintaining that information.

The TCC has been utilized over recent years by instructional staff in General College in a variety of ways, with TCC staff offering group interpretations of student self-assessment instruments for several classes, including GC 1421: Basic Writing, which is the first-semester composition class; GC 1511: Business in Modern Society; GC 1086: The First-Year Experience; GC 1281: Psychology in Modern Society; and GC 1280: Psychology of Personal Development. Some instructors give students an assignment to visit the TCC and write a report about the information they find there about their prospective major or career. The GC 1076 Career Planning course uses TCC resources extensively.

In looking at future challenges, it will be important for the TCC and for the college advising staff in general to keep up with changes in the nature of our student population as well as changes in the world of work. An example is the growing student interest in health science careers, which often results in students entering the University with unrealistic expectations of entering these professions. It is challenging to serve these students who sometimes enter into the University quite unprepared for the rigorous academic challenges their vocational interests will pose for them.

In summary, the TCC continues a long tradition of providing General College students with support for career and major exploration, a continuation of the long tradition of career and vocational counseling that was offered for so many of its earlier years by the counseling unit in the college, as was discussed in the section of this chapter on the history of student services. With the current TCC model, however, functioning as it does as a hub coordinating and informing advisors in their work with students around these issues of career and major exploration, the TCC is integrated into and strengthens the academic advising in the college in many ways, rather than being separate from it, as was the case with the earlier counseling model and is still the case in many other higher education settings.

### *Monitoring Student Progress*

Throughout their time in General College, students' progress is monitored closely, and advisors are proactive and "intrusive" in responding when students are not doing well. Being intrusive means that advisors reach out by making phone calls, sending e-mail messages, and catching students in the hall when Academic Alerts or poor mid-semester reports are received. Our electronic Student Data Base makes it easy for advisors to download electronic data on their advisees in a form that facilitates group e-mail correspondence and also makes it easy to maintain good electronic file notes that keep advisors on top of students' situations.

Each semester advisors review the grades of their own advisees as part of the probation review. Letters are sent out with the signature of the Assistant Dean and Director of Student Services, but individual advisors have the information about their students' progress within 2 to 3 days of grades being submitted at the end of each semester, and they do individual follow-up with students who are not doing well. Students on probation are required to come in to meet with their advisor in the first 2 weeks of the semester to do an academic contract, making explicit plans to pursue interventions or changes to improve their situation. During their probationary semester, students are expected to meet with their advisor on a regular basis. If students fail to meet their probation requirements, they will need their advisor's support in petitioning the General College Student Scholastic Standing Committee to be able to return to school.

### **Summary Remarks and Future Directions**

This has been a necessarily broad overview of the activities, programs, and approaches utilized in the General College student services area. In doing the historical review of changes in student services programs over the decades, it has been striking to realize how much has remained constant in the college. This can be accounted for by reflecting on the sorts of individuals who have been attracted to working in the General College, many of whom remain here throughout their professional lives, and the institutional culture that has been handed down from one institutional generation to the next. There are also many ways, subtle and direct, that the program has benefited from research and dissemination of best practice information in the advising profession, but the legacy of the past and the inspiration of the college's mission and student populations have been especially strong determinants in our creation of a remarkably rich and responsive student services program.

In the future, however, we are aware of the need to do more formal research on our students, recognizing that we will serve students most ably when we understand more about their backgrounds, experiences, and capaci-

ities. In addition, we are committed to finding better ways of systematically collecting information about our students as they move through their first 2 years of adjustment to college and decision making about their future directions. Working with the General College Office of Research and Evaluation, we are redesigning our Student Data Base to provide both support for individual advisors in their work—involving such resources as a paper-free student file system and on-demand electronic reports of advisees—and also aggregate information about our students' academic progress and their progress toward transfer and graduation. In recent years, the paper files kept by advisors have been examined by college researchers to find patterns explaining student attrition; in the future, we hope to keep more complete electronic information about students who stop out or drop out that will help inform both advising and admission decisions in the college.

Another important area for ongoing research and assessment is the relationship between students' academic goals upon entry into the General College, their academic preparation from high school in preparing for their goals, and their success in transferring into and completing their goals. In particular as mentioned in the Transfer and Career Center section, we have grown concerned about the numbers of students entering as first-year students with a goal of moving into health science careers or engineering careers but who have inadequate preparation for these competitive programs.

Assessment of students' advising needs prior to entering into the advising system is currently limited to the brief self-assessment they do as part of their preparation for coming to orientation. Students fill out the General College Student Inventory (GCSI) online at the same time that they take a math test online. The GCSI asks students to self-report on their academic goals and also indicate special circumstances or needs that they have. Students who have children are asked to report this, and students are asked about their parents' educational attainments. From the GCSI, programs such as the TRIO Student Support Services and the Student Parent HELP Center choose the students they will invite into their programs during orientation. In the future, we may investigate the use of other assessments for all or some incoming students designed to evaluate their preparation to be successful in the tasks of college learning.

In assessing our student services program, we have done brief questionnaires following orientation sessions and other programs, as well as a more comprehensive yearly online questionnaire evaluating individual advisors and the advising program more broadly. This questionnaire is administered through our first-year writing courses, which are held in computer labs. The leadership of the student services area continues to explore other means of program-wide assessment to ascertain if the structures we have in place are the most effective in helping students become successful.



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# Collaborative Learning Beyond the Classroom: The Academic Resource Center

*Donald L. Opitz and Debra A. Hartley*

## ABSTRACT

In curricular reform in developmental education, learning spaces outside of classrooms are critical sites for student development. In curricular planning when collaborative learning strategies are emphasized, learning centers should have central roles. Peer tutoring philosophies embrace collaborative education ideals, and cooperative study groups often gather in tutoring centers. This chapter thus presents a theoretical rationale for learning centers within frameworks adopting the principles of collaborative learning and practical ways in which theoretical strategies may be implemented, using General College's Academic Resource Center as a model. We conclude by proposing measures for building and strengthening a "model" learning center.

Over the past couple of decades, postsecondary developmental educators have embraced curricular reforms that emphasize the principles of constructivism and cooperative learning—a trend also reflected in General College courses (Jehangir, 2001; Koch, 1996). In developmental mathematics, the reform standards of the American Mathematical Association for Two-Year Colleges (AMATYC; 1995) have also impacted our curriculum (Kinney, 2001; see Chapters 14 and 15). Moreover, writing-across-the-curriculum, learning communities, and first-year experience initiatives like the freshman seminar have reflected pedagogical innovations designed to enhance student learning through collaborative approaches (Bridwell-Bowles, 2003; Bruch, 2002; Koch & Anderson, 2004). Yet students spend only part of their educational lives within the classroom, and learning often occurs *outside* of it in spaces like the lounge, corridor, residence hall room, or learning center (Chism & Bickford, 2002, p. 94). Therefore, if we are to impact student learning, we must also consider spaces *beyond* the classroom within our curricular reforms. In this chapter, we point to the collaborative nature of learning center work and consider the centrality of this work in curricular initiatives.

This chapter begins by considering a theoretical rationale for the institutional role and learning assistance work of learning centers within a framework adopting the principles of collaborative learning. We then focus on practical ways in which theoretical strategies may be implemented within learning centers devoted to writing and mathematics, as illustrated by General College's Academic Resource Center (ARC). A key point in our discussion is the importance of flexibility in responding to the changing needs of students and the institution (Arendale, 2004). We will thus conclude by describing future directions in which the ARC is moving and identify the kinds of measures that should be considered for building, strengthening, and maintaining a "model" learning center.

### **Connecting With the Curriculum: The Role of Collaboration**

At the heart of recent developmental education reform, particularly in writing and mathematics, are principles of collaboration between instructors and students to achieve learning goals. The pedagogy of cooperative learning, while having deep historical roots, owes much to the work of the Cooperative Learning Center at the University of Minnesota in the 1980s (Johnson & Johnson, 1984). Since that time, educators have elaborated and expanded on essentially the same principles, summarized by Johnson and Johnson as (a) positive interdependence, that is, each individual depends on and is accountable to the others; (b) individual accountability, by which each person in the group is responsible for learning the material; (c) promotive interaction, by which group members help one another; (d) social skills, including leadership and communication; and (5) group processing to assess how effectively group members work with one another. Proponents of these and related principles have offered a variety of models under such rubrics as "active learning," "interactive learning" "small-group learning," "team learning," and "collaborative learning" (e.g., Bonwell & Eison, 1991; Goodsell, Maher, & Tinto, 1992; Lyman & Foyle, 1990; Michaelsen, 1992; Reid, Forrestal, & Cook, 1990). To implement cooperative learning principles, reform educators have generally focused on structuring classroom activities within small groups. By the early 1990s, learning communities offered a broader approach to collaborative learning by emphasizing links between disciplines and building greater coherence within students' academic lives (Gabelnick, MacGregor, Matthews, & Smith, 1990; MacGregor, Cooper, Smith, & Robinson, 2000). As a rule, learning community models do not explicitly include learning centers; the exceptions are Writing Across the Curriculum programs that partner with writing centers (Barnett & Blumner, 1999).

Collaboration is a key concept in peer tutoring (Gillam, 1994). Although

writing and mathematics skills exhibit inherent disciplinary differences, the ideal peer interaction in either subject is guided by the same principles. Topping (1996) defined peer tutors as “people from similar social groupings who are not professional teachers helping each other to learn and learning themselves by teaching” (p. 6). Consistently, Ender and Newton (2000, pp. 1–21) emphasized the paraprofessional (as opposed to professional) role models that effective peer educators assume. Individual tutoring may promote different dynamics from cooperative learning groups (Kail, 1983), but when guided through training and approached as a collaboration, the tutoring interaction can positively impact students’ academic success as well as benefit the academic development of tutors themselves (Boylan, Bliss, & Bonham, 1997; Maxwell, 1994).

As we have observed in General College’s Math and Writing Centers, many students work with peer tutors in groupings that often return throughout the academic term, creating small learning communities that closely resemble base groups in cooperative-learning classrooms (Johnson & Johnson, 1984). It is important that we connect the work of learning centers to curricular reform. The emphasis on collaborative learning in teaching writing and mathematics, as well as in peer tutoring services, provides an opportune means for making the connection.

### *Writing*

Writing center theory has paralleled developmental writing theory in stressing the student-centered, collaborative, and multicultural nature of writing as a process (Mullin & Wallace, 1994). Writing pedagogy has shifted from a focus on the final writing product to the writer who is learning and practicing the many stages of writing—from generating ideas, to conducting research, to obtaining feedback and, finally, to proofreading. In the mid-1980s, North (1984) observed in this pedagogical transition “the marriage of what are arguably the two most powerful contemporary perspectives on teaching writing: first, that writing is most usefully viewed as a process; and second, that writing curricula need to be student-centered” (p. 438).

Writing center practice embraced this paradigmatic shift. Directors have found that student writers benefit from peer tutors who are knowledgeable about the writing process but, unlike the instructor, do not evaluate students’ papers. Being semi-autonomous from the classroom has allowed writing tutors to support the student rather than serve as extensions of the instructors. As North (1984) put it, the “new writing center . . . defines its province not in terms of some curriculum, but in terms of the writers it serves” (p. 438). In a parallel shift, writing center staff emphasized the need to move away from images of remedial grammar “fix-it shops” and “skills centers” to

locations for student-centered, collaborative conferences based on talking about writing. North's ideas about the writing curriculum and writing centers provided important cues for their interrelationship. The semi-autonomy of writing centers allows them to focus on students' needs rather than instructors' agendas, but in doing so they also support and supplement the aims of the writing curriculum (North, 1994).

Although most writing center theorists agree on the importance of collaborative learning, they debate over how collaboration should proceed. Lunsford (1991), who promoted a constructivist view of learning, distinguished among three types of writing centers. The first is based on the notion that "knowledge [is] exterior to us and . . . directly accessible" (p. 4). This writing center is a storehouse of knowledge that is handed out to students, perhaps through learning "modules." The second, the "Garret Center," is a space in which tutors help writers express what is in themselves, acting as listeners and encouragers; this assumes that "knowledge [is] interiorized, solitary, individually derived, individually held" (p. 5). The third, the "Burkean Parlor Center," is based on the "notion of knowledge as always contextually bound, as always socially constructed" (p. 8). The collaborative Burkean model provides a useful focus, but at times it is important to adjust to students' individual needs for knowledge about form or grammar, without compromising their own ideas and rights to self-expression.

Adopting a tutoring philosophy that allows one to be both sensitive and flexible to the needs of students is especially important when working with non-native English writers, whose language challenges may also include inexperience with academic writing standards. DiPardo (1992) stressed the need for tutors to listen for clues that give insight into the students' concerns and experiences, and to be willing to learn themselves—in other words, to engage in collaborative, peer learning. But Powers (1993) questioned traditional views of collaborative tutoring by arguing that non-native English writers often benefit from tutors who act as informants about academic writing, addressing issues like paper formats, use of evidence, and audience expectations.

Where writing instruction is viewed as participatory "literacy work, grounded in a theoretical understanding of writing as a social practice" (Reynolds & Bruch, 2002, p. 12), it is important to allow students opportunities to reflect on the effects of writing on themselves and others. Within this model, writing center tutors can assume the position of an audience affected by students' writing and reacting openly when moved by an example, informed by an analysis, or confused by a sentence. Peer writing tutors can participate in literacy work by reacting to students' writing in ways that raise questions and offer feedback rather than "expert" advice, thereby promoting students' development as writers in a collaborative way.

In light of the debates, a collaborative tutoring model must allow for flexibility in how little or how much direction is given, particularly for students who may never have received formal instruction on academic styles. The model should readily adapt to the individual needs of students, in some cases liberally providing information on the formal elements of academic style and audience expectations. In those cases, even when assuming the role of informant, the tutor preserves a student-centered model by responding to the student's immediate needs.

### *Mathematics*

Cooperative learning became a trend in mathematics education reform (Walmsley, 2003; Wilson, 2003), particularly after the Treisman (1985) study that showed the differential success of students working individually and in study groups. The National Council of Teachers of Mathematics (NCTM; 1989, 2000) has recommended small groups in conjunction with other instructional methods to accomplish curriculum standards: mathematics as problem-solving, mathematics as reasoning, mathematics as communication, and making mathematical connections. Programs developed at a variety of institutions using cooperative learning models at times include computer or calculator laboratory components (Davidson, Reynolds, & Rogers, 2001, pp. 3, 7–10). Supplemental Instruction (SI) models also connect peer learning assistance with curriculum by offering structured sessions led by trained, “model” students who also attend lectures; SI sessions emphasize collaborative learning and academic skill development for mastering course content (Kenney & Kallison, 1994). Although practitioners often implement formal and informal ties between mathematics tutoring centers and mathematics courses, few have disseminated theoretical rationales and descriptions of practice in publication (Abel, 1977; Opitz, 2004; Testone, 1999).

A very clear justification for mathematics learning centers within curricular paradigms embracing the principles of cooperative learning appears in the work of Treisman (1985, 1992). Collaborative study sessions (or “study gangs”) require space and benefit from peer facilitators who can promote effective group dynamics. The increasing emphasis placed on using technology in curriculum also requires access to computers. To effectively support student learning in courses, the mathematics learning center must thus move beyond traditional, individual tutoring and offer access to computers with mathematics software and Web sites, graphing calculators, and peer facilitation of cooperative learning groups working on projects. Tutors who work with small groups in classrooms and provide tutoring in the mathematics learning center are bridges between these two learning sites. Directors are increasingly wearing hats as SI coordinators, extending the role of peer

education beyond the spaces of learning centers (Wright, Wright, & Lamb, 2002).

As with writing, a collaborative approach is critical in the tutoring interaction. Particularly in mathematics, students often carry the burden of prior negative experiences in their exposure to mathematical concepts and skills, creating attitudes that are usually summarized as “math anxiety” in the mathematics education literature (Tobias, 1993). Moving students beyond misconceptions and negative attitudes requires a dialogue within the tutoring interaction that empowers students to explore actively, learn independently, and develop conceptual versus procedural understanding of mathematics. Gourgey (1992) identified this approach as a “collaborative process” that tutors can accomplish by “listening to students to understand their thinking and approaches to math and by asking questions that encourage students to think through the material to find their own solutions rather than to passively imitate procedures demonstrated by others” (p. 12). To avoid premature correction of students’ errors, thereby aborting the discovery process, Gourgey advocated a questioning method:

Often tutors can prompt students with questions that encourage them to consider the implications of a false idea, until its falsity becomes inescapable. This can help students to move beyond an external standard of “correctness” as determined by an outside authority to an internal standard determined by whether the strategy they are using makes sense. (p. 12)

Increasingly, teachers and tutoring coordinators are promoting mathematical understanding within the context of students’ histories and social experiences, thus emphasizing the multicultural nature of mathematical knowledge and learning styles (Opitz, 2003; see Chapters 10 and 23). Here we see much synergy with writing center theory.

Theoretically, learning centers need strong relationships with developmental curricular programs and should play vital roles within reform initiatives emphasizing collaborative learning. Peer tutoring should be guided by the ideals of collaborative learning, as well as by flexible peer instructional strategies that respond to the diversity of students’ backgrounds and needs. But these ideals are also the key challenges felt among learning center directors who strive to build and maintain strong relationships with academic departments and train tutors to adopt good practices. In our next section, we will describe strategies implemented at the General College’s Academic Resource Center to close the gap between theory and practice.

## Theory Into Practice: The Academic Resource Center

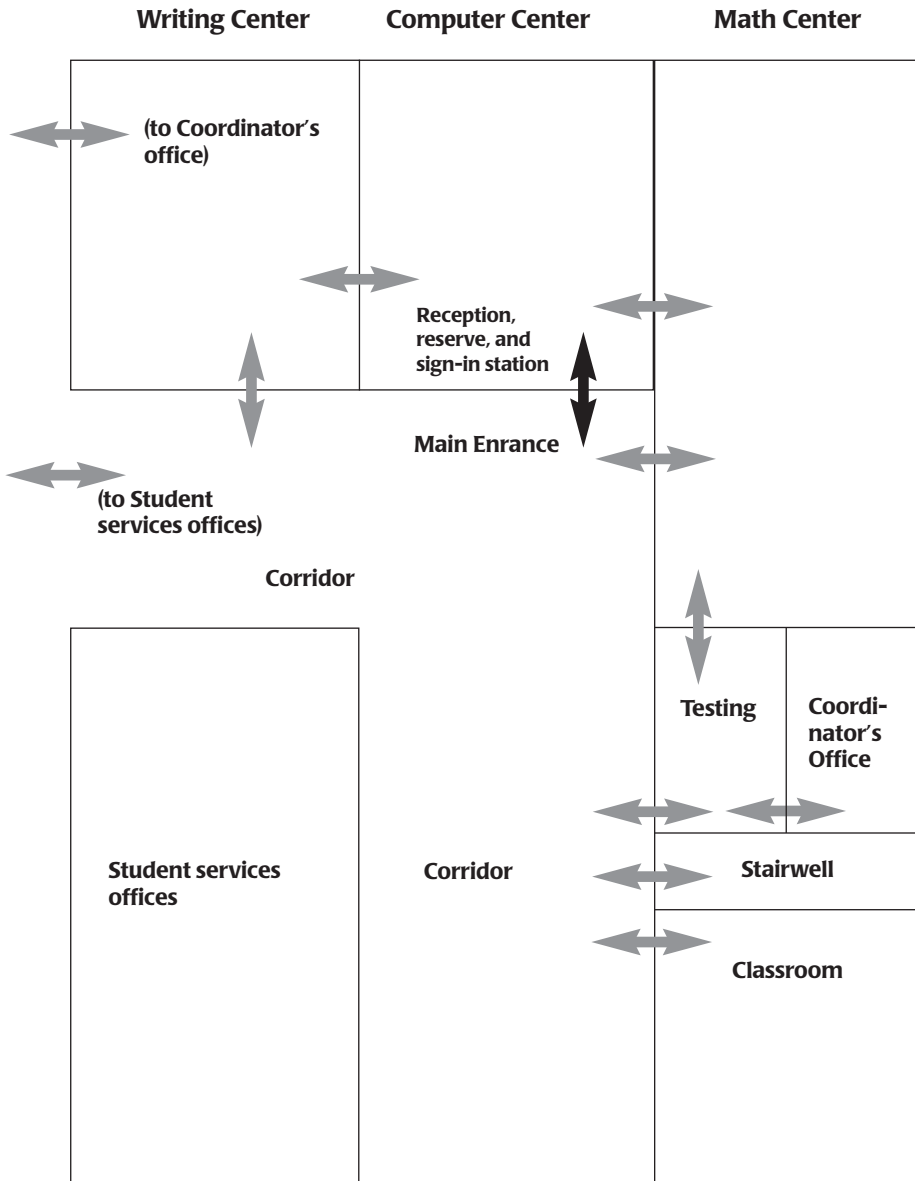
Consistent with General College's developmental education mission, which emphasizes the holistic academic development of its students, the ARC exists to support student learning within and beyond the classroom. A distinction of General College is the centralization of its faculty and staff offices, classrooms, and learning resources within a single building on an expansive urban campus, which is a feature of effective developmental education (Boylan, Bliss, & Bonham, 1997, p. 3). By providing learning space only a corridor-length or flight of stairs away from classrooms, learning resources are readily accessible to students and instructors (White, 2004, p. 19). It should be noted that other colleges and departments at the University of Minnesota also offer tutoring locally: the College of Liberal Arts' Center for Writing, the Taylor Undergraduate Academic Center of the Institute of Technology, the Learning and Tutorial Center of Intercollegiate Athletics, and the Instructional Center of the Office for Multicultural and Academic Affairs. These centers vary in their student audience; hired staff (i.e., professional, graduate, and undergraduate); range of subject areas, from a focus on writing to multiple disciplines including chemistry, physics, and business; and hours of service (e.g., daytime versus evening). What makes General College's ARC unique is its direct support of the college's developmental education mission through centralized resources, staff trained in developmental education principles, and close partnerships with the college's curricular programs.

A decision was made in the early 1990s to bring together the college's separate writing and mathematics learning centers into a single learning space (see Figure 1). Owing to the efforts of former coordinators Susan Anderson (mathematics) and Dave Healy (writing), the ARC opened in 1995 with three primary areas: the Computer Center, Writing Center, and Math Center. Students first enter the ARC through the Computer Center and enjoy easy access to the adjoining Writing and Math Centers. While the space occupies three distinct rooms, their interconnection promotes a single "one-stop shop" atmosphere for students seeking learning resources. The reception area serves as a check-in station as well as reserve desk for course readings.

### *The Computer Center*

The Computer Center consists of 18 computer workstations, including scanning, typing-tutorial, and disability-accessible workstations. About 1,300 users visit the center per week, a statistic that includes returning users. Users print, on average, 12 pages per computer per hour each day. In addition, two workstations provide access to VCRs and video monitors. The undergraduate desk receptionists help students move through the sign-in system and queue





**Figure 1.** The General College Academic Resource Center occupies three adjoining rooms adjacent to a classroom and student services offices.

for available workstations. They also check out reserve items to students and provide computer users basic software and hardware support.

### *The Writing Center*

The Writing Center has six tables that seat up to four students apiece. Lining the walls are bookshelves and document racks that hold writing reference books and handouts. Its mission statement stresses a commitment to student-centered peer consulting through collaboration:

Our mission is to work collaboratively with students to build skills and confidence to improve their writing. Peer consultants facilitate the writing process by listening to writers, helping them clarify and articulate their ideas, and affirming the experiences and abilities students bring to writing. (Hartley, 2003, p. 2)

Peer consulting aids students' developmental learning by equalizing the balance of power in a writing conference. Peer tutors are called writing "consultants" to emphasize their training to approach writing as a collaborative process that makes the students' development central. The staff is comprised of up to 10 undergraduate writing consultants and two academic professionals, one of whom is a specialist in English as a Second Language. The staff participates in a 2-day training workshop in late summer and ongoing training meetings during the academic year.

The number of consultations per week varies with the semester cycle, from a few during the first week to over 200 later in the term. On average, a consultation with a student lasts 24 minutes. The students who visit the Writing Center are culturally and linguistically diverse; in fall 2002 and spring 2003, over 80% of students visiting the center self-identified as non-native English speakers. This high proportion reflects the close relationship the Writing Center enjoys with General College's Commanding English (CE) program, in which a few writing consultants also work within CE classes (Fitzpatrick & Hartley, 2002; see Chapter 9). In spring 2002, the Writing Center staff critically assessed their views of University of Minnesota writing standards and how they translate academic literacy within writing consultations. Our self-examination was motivated by an awareness of the nature of academic writing standards within a "culture of power" (Delpit, 1995, p. 25). From staff conversations and student interviews, we realized the need to make multicultural issues in writing a central part of our training, to ensure we are supporting the development of students' writing voices rather than simply promoting institutional expectations (Barron & Grimm, 2002; Fitzpatrick, Hartley, Linde, & Rusch, 2002). Again, the principles of collaboration guide our endeavors.

### *The Math Center*

The Math Center occupies the largest room of the ARC, complete with nine tutoring tables that, combined, can seat 60 persons, and five computer workstations that support mathematics software and online resources. A quiet area for makeup testing exists in an adjoining office. Resources include a small library of mathematics texts and study guides, handouts, and calculators for temporary loan. Typically, two-dozen peer tutors are trained to promote a productive study environment in which both individuals and small groups may work. Consistent with the Writing Center's mission, we aim to work collaboratively with students to promote their independent learning.

Although individual peer tutoring has traditionally stood as our primary service, increasingly the Math Center staff has engaged in other forms of peer education that support curriculum and emphasize collaborative learning. For instance, peer tutors lead review sessions on evenings prior to examinations. In spring 2004, peer tutors served as leaders for SI sessions in intermediate algebra as part of a pilot program that continues in the 2004–2005 academic year. In the math center, peer tutors consistently work with small groups of students taking the same mathematics classes. The study groups are often student-formed, but some derive from cooperative-learning groups assigned in classes or, in the case of Multicultural Excellence Program scholars, arrangements made by program coordinators. Our interface with curriculum sometimes involves peer tutors serving as in-class teaching assistants or homework paper graders. These arrangements vary depending on the instructional modes used, reflecting the diversity of our curriculum.

Like the Writing Center, we have engaged in a process of self-analysis of our attitudes about mathematics learning and multiculturalism, and what multicultural issues might imply for our tutoring practices (Opitz, 2003). We emphasize in training that multiculturalism must infuse every aspect of our work with students. Taking a multicultural approach in mathematics education requires action beyond awareness; we must promote students' voices by listening and validating their needs, perspectives, and aspirations; and we must engage in ongoing self-assessment and growth.

### *Shared Practices*

Both the Math Center and Writing Center enjoy strong relationships with academic departments and programs at the University of Minnesota. Building and maintaining these relationships requires active collaboration, however. Within General College, both coordinators teach courses in their respective subject areas of Basic Writing, Communicating in Society, Introductory and Intermediate Algebra, and Statistics. In Fall 2004, the coordinators team-taught a freshman seminar on urban literacy with a service-learning compo-

ment (see next section). As instructors, we attend departmental meetings held by the writing and mathematics programs, participating in conversations on teaching and classroom management issues. In these meetings we also inform instructors of ARC initiatives and resources and invite colleagues to assign class activities that require use of ARC resources. Our collaboration with teaching faculty includes jointly-led tutor-training workshops, design of promotional literature and Web sites, coordination of supplementary learning opportunities (e.g., SI and review sessions), and provisions for in-class support (e.g., CE classroom assistance). Like many of our colleagues in academic support services, we collaborate in faculty and professional staff research, whether by offering collegial assistance in data collection or writing, or co-authoring research articles. Our service on college and campus committees has also nurtured partnerships.

Our commitment to multicultural education is reflected in our shared hiring strategies. When hiring, we employ the standard means for posting positions at the University's Job Center. However, many first-generation students from immigrant families are unfamiliar with job search protocols and learn about opportunities by word-of-mouth. To ensure we attract a strongly diverse pool of applicants, we actively invite referrals from General College instructors who often recommend highly-qualified students from their classes. We also seek referrals from our current ARC staff members and multicultural programs on campus, especially CE and the student programs of the Office of Multicultural and Academic Affairs. Our preferred qualifications state prior experience working with culturally-diverse populations.

As a tripartite unit, the ARC offers a full range of services in writing, mathematics, and computer technology assistance, summarized in Figure 2. A collaborative, peer-education philosophy, strong partnerships with academic departments and programs, and a centralized location are key ways in which we contribute to General College's developmental education mission.

### **Future Directions**

The ARC, while possessing a rich historical background (ARC, 2003), is nevertheless only a decade old in its present configuration. Current and former staff have devoted much of this time to developing its infrastructure, practices, and policies, paralleling many of the growing pains experienced by new learning centers (Christ, Sheets, & Smith, 2000). We recognize that ours is a developing program. In this section we describe future directions of the ARC and identify criteria that guide us in our strategic planning and that also offer signposts for building a model program.

**Computer Center**

- ▶ Reception desk with Web-based sign-in
- ▶ Undergraduate student receptionists
- ▶ Serves students taking GC classes only
- ▶ 18 computer workstations
- ▶ Disability accommodation workstation
- ▶ Typing-tutorial computer station
- ▶ Image scanner
- ▶ Free printing (paid by GC student technology fees)
- ▶ 2 VCR/video monitors
- ▶ Windows Office software, online access
- ▶ Course reserve service
- ▶ Web site (linked to ARC home page)

**Writing Center**

- ▶ 6 tutoring tables, total seating capacity of 24
- ▶ 3 notebook computers
- ▶ Undergraduate student writing consultants
- ▶ Professional ESL consultant
- ▶ Peer, collaborative tutoring philosophy
- ▶ Serves GC students, other University of Minnesota undergraduate and graduate student writers
- ▶ Information sheets and handouts
- ▶ Small library of reference books
- ▶ Filing system for course syllabi and assignment sheets
- ▶ Consultant log sheets for data collection
- ▶ Commanding English classroom assistance
- ▶ Freshman Seminar on literacy (with Math)
- ▶ Web site (linked to ARC home page)

**Math Center**

- ▶ 9 tutoring tables, total seating capacity of 60
- ▶ 5 computers with math software, online access
- ▶ Undergraduate student math tutors
- ▶ Peer, collaborative tutoring philosophy
- ▶ Serves GC students, other University of Minnesota mathematics students
- ▶ Information sheets and handouts
- ▶ Small library of math textbooks and study skill references
- ▶ Filing system for course syllabi and assignment sheets
- ▶ Tutoring log sheets
- ▶ Makeup testing carrels
- ▶ SI instruction; math classroom assistance
- ▶ Freshman Seminar on literacy (with Writing)
- ▶ Web site (linked to ARC home page)

**Figure 2.** A summary of ARC resources in computing, writing, and mathematics assistance.

### *Assessment*

Determining usage, assessing services, and monitoring students' needs are critical to maintaining quality academic support systems in a developmental education setting (Boylan, 1997). Over the years we have collected usage statistics in a variety of ways and have conducted surveys to assess our services (e.g., Lindoo, 1998). In Spring 2004 we implemented a Web-based sign-in system, created in-house, which will soon provide us with more details on who we serve in each center. The system, modeled on the standard sign-in system used at other computer labs at the University of Minnesota, is tailored to serve our multiple needs. It provides a queue for students waiting to use a computer workstation; it captures essential information about a student's visit such as date, time, and service selected; it supports input of additional details about peer-tutoring consultations; and it provides the ability to link to student demographic and academic records based on identifiers unique to each student who signed in. This last feature enables us to study characteristics of student users and, potentially, the impact of our services on academic progress, retention, and graduation.

An important source of information about our services comes from surveys administered to students in their General College classes. Many writing, literature, CE, and mathematics instructors include questions on surveys given in their classes to solicit students' feedback on various aspects to the services provided by the ARC.

### *Course Offering in Community Service Learning*

To enrich the ARC's role within curriculum, we developed the idea of a credit-bearing course in tutor training. As we explored this option, we realized a need to move beyond strictly pedagogical issues and to embrace the social context of literacy, broadly defined to include reading, writing, and mathematics. We also desired to build community connections beyond campus while offering students opportunities that would promote their own career development. Making service-learning a central focus in the course seemed the natural solution. We wanted to attract undergraduates early in their academic careers and therefore chose the freshman seminar format. We offered the course, "Urban Literacy in Reading and Math," in fall 2004. The course requires weekly reading, volunteer tutoring in community centers, journal writing, seminar discussions, and a final course paper exploring a topic related to the course's themes. In addition to supporting the aims of the first-year experience, the course satisfies liberal education requirements in citizenship and public ethics and intensive writing. We find that in teaching the course, we embrace GC's social mission of building bridges between higher education and the broadest array of communities.

### *Strategic Planning*

Over time, changes in student demographics, curriculum, and institutional priorities require our academic resources also to adapt (Stewart & Hartman, 2001). Budget realities prompting reassessment and retrenchment make research on the impact of tutoring services all the more critical (Boylan, Bonham, & Bliss, 1995). Variations in something as simple as the scheduling of classes may require concomitant adjustments in tutoring center staffing and hours. Students approaching the learning center with new requests, like arranged tutoring on a satellite campus, urge us to be continually open to innovation. Keeping up-to-date with the standards of Universal Design (UD) and ergonomics (Higbee & Eaton, 2003) requires periodic review, upgrades, and improvements. As General College entered strategic planning in the 2004–2005 academic year, the ARC's physical design and inventory of resources were areas for reconsideration.

### *Becoming a "Model" Program*

In order to enhance the General College vision, we consider criteria defining a model program. For guiding our own strategic planning, we identify the following signposts. We believe these are appropriate for any learning center striving for excellence (Casazza & Silverman, 1996; White, 2004). This includes a clear mission reflecting both the interests of students and the institution; a philosophy of learning assistance, whether emphasizing cooperative education, multicultural education, or other pedagogical principles; accessible space, both in terms of its location on campus and its design, taking into consideration ergonomic and UD standards; and an environmental design that maximizes learning potential. It also requires a professional staff supported in teaching, research, and administrative roles; and peer tutors trained in the institution's missions and policies, good tutoring practice, and discipline-specific pedagogies. We also prioritize tutor accreditation; ongoing professional development of staff; good communications and publicity regarding the center within its immediate institutional context and in other strategic areas of the campus and community; Web site with links to resources; and annual reports. Also essential are computers with access to learning skills resources and disability accommodation software; supplementary curriculum or curriculum based in the center; and strong partnerships and collaborations with academic departments and programs. Finally, other signposts are ongoing assessment, strategic planning, and development; and membership in professional associations devoted to learning assistance, developmental education, or student development in particular disciplines. We find that the ARC meets most of these benchmarks; we are taking steps to ensure that we meet them all.

## Conclusion

During an era marked by pedagogical reform and a growing recognition of the importance of multicultural approaches in developmental education, learning centers occupy central places in curricular innovations. A strong synergy exists between cooperative learning pedagogies in a variety of curricular models and the collaborative practice that is the hallmark of peer tutoring. As we have shown, mathematics and writing centers interface with academic departments in ways that build coherence within students' educational lives. On the other hand, their semi-autonomy from courses provide students spaces where *they* set the agendas, explore *their* learning potential, and create *their* learning communities. Our challenge is to embrace the principles of developmental education while achieving the flexibility required for serving our students and institutions effectively. Becoming a model program may involve reaching certain signposts, but ultimately we achieve excellence by making the difference in promoting students' academic successes.

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