

PART III. THE ROLE OF ACADEMIC STAKEHOLDERS

This part includes chapters that respectively address how academic support, faculty development, academic administration, and discipline associations are vital components of gateway-course improvement efforts.

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This chapter describes how peer learning support programs can be used to improve learning and success in gateway courses. It provides examples from two institutions to further illustrate how this promising approach can improve student outcomes.

The Case for Intentionally Interwoven Peer Learning Supports in Gateway-Course Improvement Efforts

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Tutoring has been a mainstay of college academic support for much of the history of U.S. higher education (Arendale, 2010). While tutoring began as a service for the elite, it took on a remedial connotation as a result of mass education. Beginning in the 1970s and 1980s, however, learning centers and writing centers began to reject the remedial label (Arendale, 2010; Harris, 1988/2006; North, 1984), and today there is high interest in normalizing the use of academic support as successful student behavior (Louis, 2015). To that end, more intentional academic-support services are being offered on college campuses. The programs may be designed by a learning center or developed as a collaboration of stakeholders. Advisors, instructors, and faculty can encourage, incentivize, or require participation in cooperation with the support service.

What Is Intentionally Interwoven Peer Learning Support?

As we define it, intentionally interwoven peer learning support formally involves peers (other students) in the delivery of support. Peer support has a special role in gateway courses, since peer support leaders are usually embedded in the courses. But peer support may also connect to other settings that involve the faculty, curriculum, and pedagogy. These range from collaborations between faculty and writing or tutoring centers on a single course project to sustained linking to a course via workshops or class visits, to embedded tutoring, and to unique connections that fit local needs. Certainly, the ways these links evolve vary widely. The two most widely used models are supplemental instruction and writing fellows.

Supplemental Instruction. Supplemental instruction (SI), which began in 1973 at the University of Missouri–Kansas City (UMKC), is the most established of these intentional approaches (University of Missouri–Kansas City, 2017). The focus on specific “historically difficult courses” differentiates SI from tutoring models. Rather than targeting high-risk students, SI supervisors target high-risk courses. Most of these are high-enrollment large lecture courses, many of which are gateway courses to a major. These courses generally enroll significant numbers of first- and second-year students. The peer SI leader, who has previously taken the course and has usually earned an A, attends the lectures and leads three to four weekly group reviews to discuss course content and incorporate college-study strategies. SI leaders work closely with faculty, read class assignments, take notes in class, and serve as role models (Arendale, 1994; University of Missouri–Kansas City, 2017).

Because SI participants generally outperform their peers, those who oversee variations of the SI model and other embedded learning-assistance initiatives are working to increase attendance in the initiatives themselves. The National Science Foundation has supported one model, peer-led team learning (PLTL). In this model, groups of eight students, led by peer leaders, are required to meet an additional hour beyond the lecture to solve assigned problems as a group (City College of New York, Center for Peer-Led Team Learning, 2017). Peer-assisted learning (PAL) at the University of Minnesota follows the SI model closely but has modified it to incorporate PLTL and other learning-assistance models (Arendale, 2014, University of Minnesota, 2017). In Structured Learning Assistance (SLA) (Ferris State University, n.d.), students are required to attend additional peer-led group review sessions. Finally, tutoring services have also become more intentional in including in-class tutoring for “flipped” or active learning classrooms. In the Emporium model, for example, lab tutors are assigned to assist students individually as they work on individualized computer math programs (National Center for Academic Transformation, n.d.).

Writing Fellows. Rather than building knowledge of material that will be demonstrated on an exam, students in writing-instructive or writing-intensive courses build skills to express themselves effectively on topics and for audiences relevant to the course. Practically speaking, this difference means that peer tutors may work with students on the same assignment for weeks and need different strategies from those used in SI.

Writing fellows programs trace their history to Brown University and Carleton College in the late 1970s and early 1980s; in these programs, the directors articulated efforts to provide embedded peer support for writing across the curriculum (Haring-Smith, 1992/2000). Programs inspired by Brown’s or Carleton’s models may be referred to as writing fellows, curriculum-based peer tutoring, or embedded writing tutoring. Writing fellows are writing tutors who are attached to or embedded in a specific course and provide feedback on student drafts to emphasize the process of

conversation, drafting, feedback, and revision. While writing fellows may be students who have previously succeeded in the course, many programs embed trained writing tutors who have not taken the course they will support, and the original concept at Brown intentionally placed fellows in courses they had *not* taken to avoid having fellows confused with graders or teaching assistants (Haring-Smith, 1992/2000). Support for writing may be attached to writing-instructive courses, such as first-year composition classes, where learning to write is a significant course objective. Support for writing may instead, or also, be attached to writing-intensive courses, where writing to learn is a significant aspect of course instruction (Colorado State University, WAC Clearinghouse, 2017).

One aspect these programs have in common is training. Since Boylan, Bliss, and Bonham (1997) found that “tutoring with training” was the variable that made the difference for students’ academic success, training has become an integral part of learning-support programs.

Two Cases of Integrated Interventions

University of Wisconsin–Milwaukee. The University of Wisconsin–Milwaukee (UWM), an urban research university of 26,000 students, is located just north of downtown Milwaukee along Lake Michigan. Most of its 4,000 first-year students live in UWM residence halls while 6,000 students live in the surrounding neighborhood. Only 60 years old, the campus is part of the University of Wisconsin system and is designated as a Research I Institution. Because of its access mission, serving underprepared students is a strong focus. The campus is the most diverse in the state, with multicultural students constituting 33% of its enrollment. Thirty-nine percent of undergraduates are first-generation students. Over 95% of the incoming first-year students are traditional age, but many of them already are juggling school, work, and parenting (University of Wisconsin–Milwaukee, 2016).

UWM’s Panther Academic Support Services (PASS) has taken a proactive approach to supporting college students in their first 2 years. Its SI program expanded from four SI sections in 1995 to 50 SI sections each semester in 2004 when the University of Wisconsin–Milwaukee’s Access to Success (A2S) initiative began funding the SI program. Seventy-five PASS tutors also hold weekly group tutoring sessions. Walk-in and online tutoring is also available, as well as a virtual learning center with study strategies and course-related online resources in four PASS virtual learning management system (LMS) course sites (University of Wisconsin–Milwaukee, 2017).

SI leaders at UWM are juniors, seniors, or graduate students who have excelled in the course, earned at least a 3.0 grade point average (GPA), and have a professor’s recommendation and excellent communication skills. Most SI leaders have earned a 3.5 GPA and an A in the course, often with the same professor. The UMKC certified PASS staff trains its SI leaders

and tutors together; tutors often become SI leaders as they gain experience (University of Wisconsin–Milwaukee, 2017). PASS SI leaders and tutors are certified through the College Reading and Learning Association's (CRLA) International Tutor Training Certification Program (College Reading and Learning Association, 2017). SI leaders complete additional training following the UMKC SI Supervisor/Leader Training model (University of Wisconsin–Milwaukee, 2017). The PASS SI program is also certified by the National Association for Developmental Education (NADE) for course-based learning assistance programs (National Association for Developmental Education, 2017).

While face-to-face academic support is still the most popular service, PASS has intentionally increased access for UWM students to online learning support. PASS has been a leader in providing online academic-support services using its own tutors and SI leaders since 2002. Students enrolled in on-campus gateway courses are making strong use of the PASS online or blended sessions for SI. Using the synchronous web-conferencing platform, Blackboard Collaborate, participants can communicate virtually using two-way video, audio, or chat tools, draw on whiteboards, browse the Internet, or share documents. SI leaders conduct weekly blended sessions or online exam reviews. Students can review session archives in one of the PASS online course sites (Dvorak, 2017).

On-campus marketing has been successful in making PASS a welcome environment for all students. The PASS website and LMS course sites, direct emails, and social media market directly to students. While services are not mandatory, faculty members support PASS by recommending SI leaders, meeting regularly with SI leaders, and promoting SI to their students. Some give extra credit for SI participation.

Nevada State College. Nevada State College (NSC) is a teaching college founded in 2002 to create a middle tier in Nevada's public higher education system between the 2-year colleges and the two research universities, University of Nevada Reno and University of Nevada Las Vegas. NSC is located in Henderson, about a 25-minute drive from downtown Las Vegas. The campus has grown steadily, enrolling 3,700 commuter and online students in fall 2016. NSC's access mission is reflected in the student body: 62% are the first generation in their family to attend college, 75% are women, 53% identify as ethnic minority, 55% are nontraditional age with 17% of incoming first-year students aged 25 and up, and 76% are eligible to participate in the Federal TRIO Student Support Services program (Nevada State College, 2017). Students navigate work, family, health concerns, poverty, and the challenges of valuing their long-term goals over their immediate needs.

The course assistant program at NSC began as an outgrowth of the college's participation in the John N. Gardner Institute's Gateways to Completion (G2C) project. The program weaves together peer mentoring, peer tutoring, and SI strategies, using undergraduate peers to support student

academic learning while addressing other risk factors associated with high rates of Ds, Fs, and withdrawals. Like SI leaders, course assistants (CAs) are attached to a course and, despite the similarity of their title to teaching assistants, are there to support but not teach students. CAs attend the course, offer office hours and individual appointments, design and provide at least two collaborative learning workshops per week, meet with faculty, meet with a program mentor, participate in weekly ongoing professional development, and do outreach to students in their courses, usually working a minimum of 15 hours per week. The program training encourages CAs to look for opportunities to connect with their students, so their work happens during both formal interactions and informal conversations.

Course assistants have at least 1 year's experience at NSC, have maintained at least a 3.0 GPA during the previous year, and have earned a B+ or better in the course in which they will assist.

They participate in 20 hours of presemester training and complete an additional 8 or more hours of program-specific training. During the semester, they meet weekly for ongoing training. Training topics include mind-set (Dweck, 2006), understanding and addressing risk factors in the experiences of first-generation and nontraditional students, data-supported successful study strategies, bridging to campus resources, and building self-efficacy.

Students' interaction with their CAs is entirely voluntary outside of class. Most faculty teaching CA-enhanced courses include the CA in activities during class, ranging from asking the CA to model a problem or provide support during lab to dedicating class time for a CA-designed and faculty-approved collaborative workshop. CAs report better attendance at their workshops outside class when faculty include them during class, making close collaboration between CAs and faculty essential. Because course assistants collaborate so closely with faculty, it was determined the program needed leadership from current teaching faculty, and the course assistant program director must maintain a record of excellence in the classroom.

Successes and Challenges

The research on the success of college learning-assistance efforts has been hindered by the variation and duplication of academic support initiatives, numerous names of services, and lack of consistent research methods. Nonetheless, efforts have been made to compile extensive bibliographies of research on peer learning programs (Arendale, 2016; Learning Support Centers in Higher Education [LSCHE], 2017) and writing fellows programs (Lauckner, Hughes, Hall, Reglin, & Zawacki, 2011). SI has withstood the test of time since 1973; regular student participants earn one half grade to one full grade higher and have better retention rates than nonparticipants (University of Missouri–Kansas City, 2017). While a review of research of SI programs from 2001 to 2010 (Dawson, Van der Meer, Skalicky, & Cowley,

2014) found these claims justified, researchers recommended (1) more controls in studying SI outcomes to account for variations in SI programs and research methods and (2) compulsory SI to improve student participation.

Writing fellows programs similarly show positive outcomes. Song and Richter (1997) found that students with in-class tutors experienced significantly higher pass rates and higher apparent rates of persistence and skill transfer than those without in-class tutoring. Qualitative results on writing fellows programs include stronger connections between faculty and student services (Masiello & Hayward, 1991); increased use of student services (Severino & Knight, 2007); more positive attitudes about writing from students and faculty (Haring-Smith, 1992/2000; Kinkead, 1993); higher rates of faculty satisfaction with student writing (Haring-Smith, 1992/2000; Kinkead, 1993); and broader institutional change (Condon & Rutz, 2012; Corroy, 2003).

Results for SI participants at UWM mirror national data of higher participant-course grades. SI has been one of the most successful retention interventions at UVM, with 80% to 90% persistence rates for first-year SI cohorts over the past 12 years. Only honors and undergraduate research programs, which selected top students, maintained the same retention rates. Due to SI's consistent effectiveness, UWM is intentional about using SI as a support strategy for student learning and success strategies. A collaboration between PASS, faculty, and the UWM faculty Center for Excellence in Teaching and Learning (CETL) is making an effort to reduce the DFW rates for gateway courses by 20% (Reddy, 2016). Faculty members are taking a larger stake in the process to increase student success by making SI a more integral part of gateway courses.

The first 3 years of the course assistant program at Nevada State College have shown significant promise, primarily in the areas of retention, connection with other academic services, and influence on campus culture. All data were retrieved from the Nevada State College Profile (Nevada State College, 2017). One-year retention rates are over 8% higher for students who have taken a CA-enhanced course than for the general student population. Students in CA-enhanced courses also pass at higher rates and engage in successful student behaviors, such as using other academic services at a rate that is 16% higher than those who have not had a CA-enhanced course. NSC students who use academic services average a GPA over 3.0, compared with an average GPA below 2.5 for students who do not use services. Finally, the CA program has drawn attention campus-wide, inspiring a similar program in the School of Nursing and collaborations with the School of Education, and generating faculty and student requests for more CA-enhanced courses, as well as for other types of peer support. The presemester training to prepare CAs now includes peer support staff from more than 10 programs and departments, encouraging collaboration and collegiality across campus. Students have noticed the impact of CA-enhanced courses as well. In end-of-semester surveys, students in CA-enhanced courses convey their

increased sense of belonging and self-efficacy, noting that the college's clear commitment to their success helped them feel confident they could, in fact, succeed.

Peer academic support benefits peer leaders as well. Peer tutors solidify their own knowledge and develop their leadership skills (Dvorak, 2001). Arendale's bibliography (2017) delineates effects of peer cooperative-learning groups on facilitators in the areas of increased confidence, academic achievement, personal and professional development, and leadership development. These include a wide array of peer-led academic-support interventions as well as more intentional models of peer-leader development. For example, Arendale and Hanes (2016) describe how peer-assisted learning (PAL) leaders at the University of Minnesota developed their leadership and group facilitation skills from their training and experience. The Peer Writing Tutor Alumni Research Project provides a survey and methods for anyone seeking to learn more about how their own tutors have learned from their work (Hughes, Gillespie, & Kail, 2017). Sample results such as those from the University of Wisconsin–Madison offer rich description and reflective narratives (“From UW-Madison Writing Fellows Alumni”) showcasing critical thinking skills and reporting the alumni's abilities to draw on their time as tutors in their personal and professional lives (University of Wisconsin–Madison, 2017).

The positive outcomes for program participants have led to calls for mandatory attendance in learning-support programs. While mandatory attendance would make research easier and has shown many of the same positive outcomes as voluntary attendance (Mas, 2014), several complications should be considered. For some campuses, mandatory attendance for learning supports is cost prohibitive. While funding for integrated support usually comes from student-success fees or tuition, it may, however, be possible to secure external donations or grants for initial phases of new programs. These programs are more likely to be supported internally once local data demonstrate program effects. Mandatory attendance may also pose challenges for students. Adding required time on campus, particularly at institutions with a large commuter population or high numbers of nontraditional students, can cause intense stress. Transparent scheduling during course registration and making mandatory sessions available online allow students more agency and flexibility; online models, however, require additional technology and training.

Staffing itself can be a challenge, with or without mandatory attendance. Staff members face low pay rates, student turnover, high GPA requirements, short hiring time frames, schedule conflicts, and lack of space. Although online-learning supports may resolve the space issue, these require specialized training. Supervisors themselves may need additional training to provide effective support for staff who are, first and foremost, students. Staff members must also encourage faculty collaboration, communication, and trust between faculty members and their peer leaders. Roles

and responsibilities must be clearly defined, and reporting structures should be reasonable and transparent.

Conclusion

Intentionally interwoven learning supports show great promise in increasing student engagement, persistence, and graduation. They may be considered high-impact interventions, improving outcomes not only for students in targeted courses but also for peer leaders providing services, faculty teaching the courses, and the broader campus culture. While interwoven services can be resource-intensive, their impact beyond the single course can justify their cost. In designing intentional support, institutions should consider local variables, such as student population, budget, space, and training needs to select or adapt the versions that will best fit their needs. Intentional learning-support interventions can help to erase the deficit model of academic support and engage many more students in a successful college academic experience. This cannot be accomplished by learning-center and writing-center professionals alone. Faculty and higher-level administration backing is crucial to promoting and funding these services. With students, their peer leaders, academic support personnel, faculty, and administration working together, an investment in intentional academic support is capable of increasing college student success and creating future leaders.

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