Annotated Bibliography of Research Related to Academic Advising

Allsopp, D. H., Minskoff, E. H., & Bolt, L. (2005). Individualized Course-Specific Strategy Instruction for College Students with Learning Disabilities and ADHD: Lessons Learned From a Model Demonstration Project. *Learning Disabilities Research & Practice, 20*(2), 103–18.

Allsopp, Minskoff, and Bolt reported on the implementation and assessment of a 5-semester project in which college students with learning disabilities or attention deficit/hyperactivity disorder (AD/HD) at three separate campuses (a community college as well as a 4-year public and 4-year private institution) were provided with individualized, course-specific, learning-strategy training. Matriculation of students with learning disabilities in postsecondary education is increasing, yet this group is less likely to persist than are other students. One reason may be that students with learning disabilities are less academically prepared than peers who do not have learning disabilities. Existing accommodations may be insufficient for those who do not make use of effective learning strategies to meet the challenges of postsecondary education. In response, three universities collaborated to field test a project in which individualized learning-strategy instruction was provided to students with learning disabilities.

Students with learning disabilities or AD/HD who were experiencing academic difficulties were invited by the Director of Disability Services at each institution to participate in the project, which involved one-on-one learning-strategy training. Of the 46 who agreed to participate, 32 received intervention for 1 semester, while 14 elected to continue receiving strategy training for a second semester. The number (typically one to three per week) and length (1 to 2 hours) of sessions were based on the needs of each participant as well as on the schedules of the participants and their instructors.

Instructors were master's students in special education at James Madison University. All took a course in transition taught by one of the project staff, in which a major topic was strategy instruction. The model for the project was based on the application of best practices from research in special education. Instructors were provided with literature on strategy instruction. They met with project staff weekly to plan individualized instruction, review participants' progress, and solve problems.

Individual student needs were identified initially through examination of their academic records, disability documentation, a learning-needs questionnaire, and informal interviews. Through the questionnaire, students were asked to evaluate their learning needs with respect to organization, test taking, study skills, note taking, computer competency, reading, and writing. Specific questions were tied to student performance in their classes. Instructors and participants examined course syllabi and assignment descriptions together to select learning strategies that would be appropriate for meeting the academic demands of the targeted courses. Needs were continuously reassessed during the intervention through strategy-instruction session logs that were completed by the instructors.

According to the literature, learning-strategy training is most effective when it is explicit and systematic. Instructors used advanced organizers to provide a context for employing a strategy. They provided written descriptions of the strategy's purpose and components, and then modeled use of the strategy within the context of the targeted course. Students were encouraged to engage in a metacognitive analysis of the strategy. They were then provided with guided practice and ultimately expected to engage in independent application of the strategy. In fact, independent use of strategies was one of the primary criteria used to evaluate the effectiveness of the strategy training.

Both quantitative and qualitative measures were used to assess the results of the intervention. Quantitative measures included statistical analysis of participants' pre- and postintervention overall grade-point averages (GPAs) and GPA for the semester of intervention. To evaluate sustainability of results, overall GPA a semester after intervention was also analyzed.

All measures showed significant improvement as a result of the intervention with small to medium effects. Those who received 2 semesters of intervention demonstrated even greater improvement than those who discontinued the program after 1 semester. Participants in the project included those who were academically in good standing and those who were on probation or suspension at the start of their intervention. Individual *t* tests, used to compare pre- and posttreatment as well as semester-of-intervention GPAs revealed that both groups demonstrated improved academic performance, although the group on probation or suspension exhibited statistically greater improvements.

The researchers also explored the effectiveness of the interventions in specific course content areas. Comparisons were made between pre- and postin-

tervention measures of participants' GPAs in the content courses (e.g., history, math, etc.) for which strategy training was targeted. Mean GPA in the targeted content courses increased from 1.68 to 2.26. A Cohen's *d* value of 1.01 suggested a large effect for this comparison.

Because statistical analysis of changes in GPAs was focused only on group performance, the researchers used qualitative analysis (i.e., examination of strategy instruction session logs, instructor evaluation forms, participant evaluation forms, and work samples) to obtain information regarding individual performance and to gain insights about reasons participants did or did not demonstrate improvement. Case summaries for each participant were prepared. These included information on the participant's disability, areas of learning difficulty, test scores, areas of learning and courses targeted for intervention, strategies taught, participant and instructor perceptions, grades, as well as semester and overall GPA. If a participant's GPA improved and it could be verified, through work samples or consistencies in student and instructor reports that the participant applied the strategies learned, then the participant's improvement was judged to be associated with individualized strategy instruction. If the student was unable to provide a work sample evidencing use of a particular strategy and if the instructor reported that the student had not mastered the targeted strategy, the participant was not considered to have independently applied the strategy.

Overall, 25 of the 46 students were judged to have demonstrated improvement after the intervention. Of the remaining 21 students, 10 demonstrated increased GPAs, but the qualitative analysis did not verify that these participants made use of the learning strategies they had been taught. Thus, the researchers did not attribute the increased GPAs to individualized strategy instruction.

Two factors, independent strategy use and the supportive relationship between the participant and the instructor, seem to have had the most impact on the students who demonstrated improvement. On the participant evaluation form, over one half of the students mentioned that their relationship with their strategy instructor was related to their success. They appreciated being valued by their strategy instructor as "individuals who had learning needs that were unique to them" (p. 113). The comments of successful students, as well as the improved GPAs, suggest the project was effective.

Factors related to nonimprovement included the failure to apply strategies independently. Some students were unable to master the strategies or had academic skill deficits, such as reading difficulties or limited vocabulary, that limited their ability to use the strategies. Others had emotional difficulties or problems with their medications that seemed to interfere with their ability to benefit from the intervention. The question remains about the ways to address the variables that contribute to lack of improvement so that all students can benefit from individualized strategy instruction.

The findings reported by Allsopp et al. were based on a quasi-experimental design developed to field test the strategy intervention model and were not specifically intended to be generalizable. The authors recommended replication studies with larger, randomized comparison groups. They acknowledged that, although they consider the project successful, attempts to integrate the approach within existing support services may be difficult. At all three institutions, project leaders encountered barriers due to limited resources and the lack of emphasis on individualized instruction within the existing systems. If projects such as the one reported by Allsopp et al. are to be established, resources and trained personnel will be needed, and dialogue must exist between student advising and support services, disability services, and experts in special education.

Byrd, K. L. & MacDonald, G. (2005). Defining College Readiness from the Inside Out: First-Generation College Student Perspectives. *Community College Review, 33*(1), 22–37.

College readiness is among the nation's top educational priorities (U.S. Department of Education, 2000). The concept of readiness relates to the prediction of student success, which is often measured by placement tests and other standardized instruments. Byrd and MacDonald believe that these instruments used alone do not present a complete picture of readiness, particularly in the case of nontraditional students with work and life experiences. To understand better the college readiness of this population, the authors interviewed eight first-generation, nontraditional students, aged over 25 years, who were enrolled in junior- and senior-level classes in a liberal arts program at a small urban university. All had earned an associate of arts degree from a community college prior to enrolling at their current university.

Interviews lasted between 30 and 60 minutes, and the same protocol was used with all participants. Immediately following an interview, the interviewer wrote a reflective journal entry (p. 25) to record

emerging themes and highlights. All interviews were audio taped and fully transcribed. To increase consistency and accuracy, field notes and transcripts were compared and participants were invited back to critique both.

Ten themes were identified and placed into one of three categories as follows: a) skills and abilities perceived as important for college readiness, b) background factors and life experiences that contribute to readiness, and c) nontraditional student self-concept. In the skills and abilities category, participants identified academic skills, time management, goal focus, and self-advocacy as being important.

Reading and writing were the most mentioned academic skills. Four participants indicated that they felt underprepared for reading college-level material. While many indicated that writing was important for readiness, only one participant indicated feeling underprepared in this area. Time management was mentioned by every participant. While two reported difficulties prioritizing time for study, family, and work, the other six described time management as a strength they had acquired as a result of being older and having had work and life experience.

Age and experience also impacted goal focus. Six participants compared their present circumstances with their first college experience in which they reported having had little focus. The final theme in the skills and readiness category was the ability to self-advocate, which tended to emerge indirectly through narratives in which participants described seeking and receiving help from faculty members and other university personnel.

Themes in the background factors and life experiences category were mentioned consistently more than skills and abilities. In fact, out of the 300 coded responses, family factors were mentioned 40 times. Among the mentioned topics were the following: putting off college due to family responsibilities, the desire to be a role model to one's children, the desire to do better than one's parents, and positive parental influence.

The second theme in this category, career influences, was closely associated with having college goals. Two participants mentioned wanting to leave a dead-end job (p. 30), and five wanted to have better career opportunities than their parents had experienced. In addition, several mentioned being able to transfer skills learned at work to the college setting.

With regard to financial concerns, the third theme in this category, many mentioned not knowing about financial aid resources when they had first attended college. Participants also insisted that lack of finances should not prevent someone from attending college. As far as preparation, the last theme in this category, all participants discussed high school and previous college experiences. Seven of them indicated that they had initially felt underprepared for college.

Nontraditional student self-concept is the final category of themes discussed in this article. Although only two themes emerged in this category, 92 responses (almost one third of all) related in some way to the participants' identity as nontraditional students. Six indicated that they had not been ready for college when they were younger or just out of high school and that being older contributed to their current readiness. Five expressed surprise at their success, and some noted the continued struggle to "recognize their own work as 'good enough' for college" (p. 21).

Lack of familiarity with the college system related to self-concept as a first-generation college student. The majority of participants mentioned that while their parents encouraged them to attend college, their parents did not have the experience to help them understand the system.

The results suggest that college readiness may be a more complex phenomenon than is often recognized. Placement tests alone may not be an adequate measure. Nonacademic skills, such as time management, goal focus, and self-advocacy, may be important predictors of student success. Moreover, if advisors rely solely on placement tests to assess the readiness of nontraditional students, they may overlook key strengths these students bring to college as a result of their work and life experiences.

Byrd and MacDonald acknowledged the limited generalizability of their findings and recommended that similar studies with other comparative groups be conducted. For example, traditional and nontraditional students might be compared, or first- and second- or third-generation students could be studied. The authors also noted that all of the participants in their study were from the same liberal arts program and all were upper division students. Different readiness themes might be supplied by students in other majors or who are at other points in their programs.

Chen, S., Jing-Ping, F., & Macredie, R. D. (2006). Navigation in Hypermedia Learning Systems: Experts vs. Novices. *Computers in Human Behavior, 22*(2), 251–66.

Hypermedia learning systems, which present course content in nonsequential formats, are becoming increasingly more commonplace in education. The nonsequential formats require students to

develop their own learning paths. Yet research shows that not all students are equally successful in navigating hypermedia systems. In particular, learners with little prior subject-matter knowledge, dubbed "novice learners" by Chen, Jing-Ping, and Macredie, seem to have difficulty with hypermedia and may require different forms of content structure, different navigation tools, and more navigational support than expert learners (i.e., those with prior subject-matter knowledge). On the basis of several studies that compare novices' and experts' use of hypermedia, the authors proposed a framework for integrating prior knowledge into the design of hypermedia learning systems.

Borrowing from Simmons and Lunetta's (1993) conceptualization, Chen et al. (p. 252) defined experts as "individuals with formal training and experience in the area under investigation." Novices have no such formal training or expertise. Experts bring to the learning task an existing mental representation or structural conceptualization of the subject matter, while novices' preexisting knowledge is more chaotic and disorganized. Experts and novices exhibit different learning characteristics and behaviors. Experts tend to use directed searches, whereas novices tend to use trial-and-error methods. When looking for specific details, experts use *depth-first* strategies; that is, they start with a link on the initial site then move from site to site until an appropriate one is found. Novices, by contrast, tend to use *breadth-first* strategies, following the links on the main site sequentially without exploring any in depth. Experts process holistically, adding and integrating details to an existing conceptual structure; novices focus on pieces but fail to integrate them into the whole.

Research shows that novices can easily become disoriented when navigating hypermedia systems. They have trouble keeping track of the links that they have already visited and have difficulty locating the information they need. As a result, supports that provide a structural organization for the content, such as advanced organizers and graphic overviews, as well as a structured sequencing for accessing the content benefit novice users. Experts, by contrast, seem to profit more from flexible paths. Research also suggests that novices and experts have different needs and preferences with respect to navigation tools. Experts may find it more efficient to use search engines or alphabetical indexes, while novices seem to benefit most from hierarchical maps, perhaps as the authors have suggested, because hierarchical maps not only reveal the document structures but also reflect the relationships between the various concepts to be learned.

Implications for system design include careful consideration of user interfaces and provision of appropriate navigational support. By *user interface*, the authors indicated the help given to users to keep track of where they have been, currently are, and should go in the hypermedia system. The user's current location can be shown at two different levels: one relative to the whole learning system and the other relative to specific topics. The location may be shown by an indicator of the topic and subtopics of the page currently being visited or by a sitemap that highlights the user's current location. To help the learner keep track of paths already followed, visited links can appear in different colors or be marked with a check mark or annotated with comments. Hidden links to pages that the user will not yet be able to understand, making them available only when the learner is ready to advance, may be one technique to help the novice. In another technique, pages can be labeled with clear explanations about how the page fits into the overall knowledge structure.

A diverse set of navigation options should be provided to accommodate users with different levels of prior knowledge. Tools that allow experts free navigation and the ability to find specific information, such as indexes, content lists, and search options should be provided. For novices, maps and menu tools that complement the conceptual structure of the content should be provided. Guided tours may also be useful for novices, as might visual landmarks such as diagrams or figures to prevent disorientation. To accommodate different learning styles, the authors recommended using both text-based and graphic formats.

Chen et al. concluded with a few cautionary remarks, noting that prior knowledge, or the novice-expert distinction, is but one of many variables to consider when designing hypermedia systems. Gender differences, cultural backgrounds, and cognitive styles should be considered as well.

Henningsen, S. (2005). Brother to Brother: Success for African American Males. *Community College Journal, 76*(1), 44–45.

This article reminds readers that although access to higher education has created opportunities for underrepresented students to pursue postsecondary degrees, the gap in degree completion between Blacks and Whites persists. In fact, "Forty-five percent of white students attend college compared to 40% of African Americans and 34% of Hispanics" as reported in the American Council on

Education's report (2003-2004). However, this report also states that African American women have earned twice the number of associate degrees as have their male counterparts.

Henningsen's article spotlights a program designed to recruit, retain, and graduate African American males at St. Petersburg College. The program is entitled "Brother to Brother" and has been in existence for 7 years. By including a textbook and equipment lending library, tutoring, career planning, assistance in locating campus resources, visits to 4-year colleges and universities, and early advising and registration, the program is designed to help at-risk African American male students become successful. The program is funded through the college's Minority Activity Fund while administrative costs are covered through the Office of Special Programs. Although the author did not report extensive data about the success rate, 44 students have graduated through this retention effort.

This article reflects the need for specialized retention programs that include intrusive advising when working with at-risk students. Also, taking a holistic approach to recruitment by addressing academic and financial barriers may be the best practice for ensuring academic success. Traditional approaches to recruitment and retention have not served underrepresented students with nontraditional barriers. This program can serve as a model for implementing effective programs.

Nunez, A-M. (2005). Negotiating Ties: A Qualitative Study of First-Generation Female Students' Transitions to College. *Journal of the First-Year Experience, 17*(2), 87–118.

Nunez's introduction underscores a gap in the literature with respect to women and people of color as first-generation students. She notes that quantitative research on this subject focuses on tangible indexes such as financial aid and academic preparedness. Previous qualitative research was conducted to explain differences in academic outcomes as social distance was considered a barrier for these groups. Moreover, little research has focused on the resources these marginalized students use to be successful. Therefore, Nunez addressed the ways first-generation female students use various resources, described as *cultural* and *social capital*, to navigate the university environment.

Tinto's transition theory and Bourdieu's theory of cultural and social capital inform the conceptual framework of this study. Transition theory describes three stages students undergo when they enter college. These stages are separation (distancing from previous life), transition (entering the college environment), and incorporation (becoming a full member) into their new surroundings. Bourdieu's theory describes cultural and social capital as information and behaviors that socioeconomically privileged parents pass to their children to maintain or advance their children's economic standing.

Using these two theories, Nunez developed the following two research questions: "How do the transitions of female first generation students, including students of color, at a large university involve separation, transition, and incorporation?" and "What forms of cultural and social capital affect these students' transitions, and why?"

The sample consisted of nine females from Western University. These women represent diverse backgrounds. Six were Asian American, two were Mexican American, and one was Caucasian. All students were recruited from an undergraduate course entitled Academic Success in Undergraduate Experience and had indicated an undeclared major on their admissions application. They were all first-generation students, but they may have had a relative with some higher education experience, and they all lived on campus. Data were obtained through semistructured one-on-one interviews and analysis of student journal assignments.

Data analysis yielded similar results among the respondents. With respect to transition, students were asked to compare their expectations with the reality of their college experience. They all mentioned expecting the university to be large and impersonal. Indeed, they tended to describe their professors as distant and reported feeling self-doubt. For the first time in their academic careers, they faced the possibility of failure. Social challenges included making friends, living with roommates, managing time, and handling their course loads.

Contrary to past research that suggests a lack of parental support for first-generation college students, the women in Nunez's study reported that their parents held very positive feelings and had expressed pride about their daughters furthering their educations. However, these young women also expressed feeling a great deal of pressure to succeed and were very aware of the sacrifices their parents made to support their educations.

These female students reported connecting with the university in various ways. Some reported feeling like being at a second home while others felt they were still in a transient state. Getting involved in activities was the key function that helped students feel incorporated into the campus.

The key cultural-capital component that helped

with the transition process seemed to be having someone with whom to talk about academic issues such as selecting classes, utilizing study skills, and choosing a major. For these students, peer advisors provided this support. The advising staff also helped the students navigate a large and impersonal environment.

Social capital was reflected by students who sought assistance from staff with whom they were comfortable. These staff members tended to be those who were more knowledgeable and offered emotional and moral support. This enabled the student to develop confidence in her abilities. Another key factor in development of social capital was enrollment in the tutoring program: It allowed the students to interact with other students with similar difficulties and form a type of support group.

Nunez concluded that these students did not experience a succinct break away from their families, but they renegotiated their familial ties. By offering emotional support, family was also a strong source of social capital. Also, institutional resources for cultural and social capital were important in helping students navigate the university.

This study was based on a small sample that did not include any African American females, a large underrepresented segment of American society. The author does not identify a particular interview tool used in the semistructured conferences. However, the results offer anecdotal support regarding the importance of sound advising programming for first-generation students. Nunez suggested that campuses should offer an array of support options for first-generation students. Due to the strong familial ties experienced by this cohort, she suggested developing family orientation programs.

Pardini, E. A., Domizi, D. P., Forbes, D. A., & Pettis, G. V. (2005). Parallel Notetaking: A Strategy for Effective Use of Webnotes. *Journal of College Reading and Learning, 35*(2), 38–55.

Webnotes, or instructor-supplied on-line lecture notes, are increasingly more commonplace. Yet students may not know how to best take advantage of this new "hybrid text" (p. 49), which serves as a written companion to the oral class lecture. In the authors' experience, students use Webnotes in varying and often ineffective ways. Some students print out Webnotes in lieu of taking their own notes during lectures; others use more traditional means of note taking, making little use of Webnotes; still others use Webnotes as a substitute for attending class. Instructors may not give adequate guidance about how on-line notes should be used. The authors introduced a strategy for using Webnotes and parallel note taking. They also presented findings from a survey on the use of Webnotes.

The parallel note-taking technique is based on two other learning strategies described in *College Rules!* (Nist & Holschuh, 2002), the split-page method and text annotation. The split-page method involves dividing paper used for taking notes into columns. In one column, lecture notes are recorded; in the other, questions, expansions, and other annotations are recorded. The text annotation strategy requires students to summarize the material they have read in the text margins, create lists of ideas, note examples, underline key words, predict possible test questions, mark concepts that are confusing, and organize information into graphs and charts when appropriate. Split-page note taking and text annotation are elaborative strategies (p. 45) that require meaningful manipulation of information. With these strategies, students actively process content and monitor their own understanding and learning.

Because some instructors post Webnotes prior to their lectures, while others post them after their lectures, parallel note taking for Webnotes may take two forms. In either scenario, Webnotes should be printed out and stored in a binder. When access is given before the lecture, students should bring the printed Webnotes to class and use the reverse side of these sheets to record lecture notes, via the split-page method, that parallel (p. 43) the Webnotes. Students who have access to Webnotes only after the corresponding lecture should take their own set of lecture notes and later use these as a reference for annotating printed Webnotes. Pardini et al. believe parallel note taking can help students overcome several difficulties mentioned in a survey on the use of Webnotes.

The 62 participants who completed the survey were concurrently enrolled in UNIV 1116 and one of three introductory lecture-based courses, Introduction to Human Geography (n = 10), Introduction to Organismal Biology (n = 39), or Introduction to Philosophy (n = 13). UNIV 1116 is a 1-hour, pass-fail elective, described as a "Learning to Learn Adjunct Seminar" (p. 41). Instruction on parallel note taking for Webnotes was provided in UNIV 1116 several weeks prior to administration of the survey. The survey consisted of three open-ended questions: "How do you use Webnotes?" "What do you like about your professor's Webnotes?" and "What do you find problematic about your professor's Webnotes?"

While students pointed out many benefits of

Webnotes, such as being able to listen more and write less, knowing where to focus attention, having access to visuals, being able to supplement lecture notes when information is missed, and having well-organized information, they also cited many difficulties. Forty percent of the respondents indicated that Webnotes contain either too little or too much information. Other complaints included the lack of space for annotations as well as poor organization and timing for posting Webnotes. In the geography and philosophy courses, the notes were posted prior to the lecture, but in the biology class, they were posted after the lecture. In addition, 12% of the respondents indicated that they either skipped class or did not focus during class as a result of having access to Webnotes.

While 67% of the respondents engaged in elaborative strategies when using Webnotes, a positive finding, 1% indicated that they previewed Webnotes before class, and 6% indicated that they followed along during the lecture. This may be due to the fact that 63% (*n* = 39) of the sample was enrolled in the biology class and did not have access to Webnotes until after the corresponding lecture. Only 26% of all respondents indicated that they used Webnotes as a study tool.

According to Pardini et al., instructors may view Webnotes simply as a convenient on-line alternative to photocopied handouts. They may not realize that students need instruction in using this new hybrid text because it functions not only as a supplement to other course textbooks but also as a guideline for or record of an oral resource, the class lecture. They recommended that instructors present and offer opportunities for students to practice using parallel note taking. This active and elaborative approach to using Webnotes, the authors argued, can help students engage in strategies that enhance encoding and retention of lecture material and encourages students to rehearse material and monitor their own comprehension and learning.

Ropers-Huilman, B., Carwile, L., & Barnett, K. (2005). Student Activists' Characterizations of Administrators in Higher Education: Perceptions of Power in "the System." *The Review of Higher Education, 28*(3), 295–312.

Student development, part of which includes learning to be participants in society through leadership activities and involvement in organizations and communities, is one of the core missions of higher education. According to the authors, student activism can serve as training for broader civic development. Moreover, it can potentially benefit universities by improving the campus climate as well as increase connections to wider communities. Student activism may also assist universities in achieving diversity and inclusiveness.

Effective student activism requires communication and collaboration between students and university administrators. Previous studies have shown interaction and communication between these two groups to be problematic. Through interviews with 26 student activists at a large, southern, research institution, Ropers-Huilman, Carwile, and Barnett contributed to the research on student activism by examining student activists' perceptions of their relationships with administrators within the university system.

For the purposes of this study, student activists were defined as those who are "both involved in and committed to social change" (p. 300), not as a single, one-time effort, but as part of their identity. "The system" to which the authors have referred is the processes and functions "associated with the university that represent a political, social, and hierarchical structure" and which, to some extent, "dictate participation and behaviors" (p. 300). Neither the term *the system* nor the term *the administration* were defined for interviewees during the research protocol, but students referred to these concepts in their responses.

For students, the "administration" often referred to any nonfaculty member within the university who had the power to enable or prevent students from achieving their goals. Frequently, participants' understanding of the administration primarily regarded upper level administrators, including the provost and chancellor, while other interviewees included facility services personnel, student organization advisors, and other administrative staff in their conceptualization of administrators.

Interviews with student activists lasted between 30 minutes and 2 hours and were tape recorded and transcribed verbatim. Additionally, participants provided demographic information on a questionnaire. The first group of participants was identified through the school newspaper and personal contacts. Additional participants were identified during the interviews themselves in a snowball sampling technique that allowed the researchers to gain access to student activists who worked in networks with which the researchers were unfamiliar or whose efforts were not made public (p. 298). Twenty females and six males, aged 19 to 25 years, from a wide variety of organizational affiliations were interviewed. The interviewees represented 20 different academic majors and 5 political affiliations.

Eighteen identified themselves as White, two as Black, two as Hispanic, and one as multiracial; three others either created their own racial category or left this item blank.

Characterizations of administrators tended to cluster around four categories labeled by the researchers as gatekeepers, antagonists and enemies, supporters, and absentee leaders. Gatekeepers are concerned with maintaining stability and consistency in university processes and functions. They wield a great deal of power over students. Gatekeepers, as preservers of the system, and student activists, as agents of change, often have competing objectives. Several interviewees believed that administrators maintain the current system by withholding information, resources, and expertise. Although participants acknowledged that administrators seem to be constrained by the system, they nevertheless expressed frustration at administrators' tendency to maintain the status quo rather than work toward improvement.

When gatekeeping becomes extreme, administrators may be perceived as antagonists or enemies. Interviewees often interpreted opposition from administrators as attempts to disempower students. Some felt that administrators ignore student activists or keep crucial information from them. A few respondents even indicated that administrators deliberately gave them false or misleading information. A repeated theme was administrators' apparent unwillingness to meet with students, listen carefully, or consider students' views.

Although less frequent, some student activists' contacts with administrators were positive. In these instances, administrators can be characterized as supporters. Communication and resources were the most common forms of support. Additional support from administrators included advertising, serving as liaison with other administrators and faculty members, and attending events sponsored by student organizations. Interviewees valued the time and attention they received from university administrators.

The final characterization of administrators presented in this study is that of absentee leader. Although interviewees were certain that administrators' work is important, they did not have a clear understanding of what that work entails. The roles and functions of university administrators were unclear to several participants. Some mentioned their inability to identify the important on-campus decision makers. For some, administrator support seemed illusory. In the words of one student, "They are there and then they are not. There is this illusion of access" (p. 308).

The authors concluded from the findings that participants would like more support from administrators so that student activists can participate more readily in improving the university environment as well as participate in the university's contributions to society. Among the characterizations of administrators provided by students (p. 309), markedly absent from the data was the description of collaborator. Whether participants' views of the administration were positive or negative, their depictions showed that they were acutely aware of the differentiated roles of students and administrators. Students seemed to desire more joint efforts toward positive change. They want to be actively engaged in campus communities but need clearer guidance from administrators.

The authors feel that increased collaborative efforts would benefit not only the university and the larger society it serves, but would also contribute to students' civic development. Such collaborations could take place in student leadership workshops, in classes that teach students about the structures and functions of universities, and in classes that employ student leadership as a form of service learning. Further research at different types of institutions in different geographic locations is needed. Moreover, information on administrators' views of student activism might yield useful, if not potentially conflicting, findings.

Tracy, E. M., Freimark, S., Boss, M. I., & Longergan, P. (2005). Knowledge for Practice: A Training Program for College Access Advisors. *NACAC Journal, 186*(8), 1–14.

This article opens with two vignettes describing obstacles faced by a young African American male and a young female immigrant with respect to pursuing postsecondary education. Although their circumstances are widely divergent, the common denominator seems to be a lack of familial support and lack of knowledge of the college application process. The authors suggested that developmental intervention by college access advisors, who act as support system and guide, can help mediate the familial barriers and help to fill the college knowledge gap.

The authors define college access programs as providing college and financial aid counseling, academic support, and family guidance to enable students to complete the admissions process. They are usually found through high school guidance programs. This article highlights a particular program, The Cleveland Scholarship Program (CSP), as a

model. CSP was founded in 1967 and has a mission to "provide educational workforce development for Greater Cleveland through a broad range of financial aid and advisory services." The program serves 31,000 students in 65 schools in Cuyahoga County. Many of the students come from low income, single parent, underrepresented families. Some of the participating school districts have low attendance and graduation rates. However, many of the CSP recipients who attend college have higher than average freshman-to-sophomore retention rates.

At minimum, CSP advisors have a bachelor's degree, and their fields vary. They have strong communication and computer skills. They also have experience working with students and parents. It is interesting that many of the CSP advisors were also CSP recipients.

The initial goal of the program was to professionalize advising and use social work techniques in working with students. Therefore, a training program was implemented for all incoming advisors. After considering an array of potential topic areas, nine modules were developed for the training process: Understanding and Appreciative Inquiry and Learning Styles Inventory; Social Networks and Social Support; Communication; Working Effectively within School Systems; Developmental Issues in Middle and High School Students; Diversity; Conflict Resolution; Advising; Transition to College; and College Persistence. The program was awarded state approval from the counselor and social worker boards to offer continuing education credits for professional development. The advisors require skills in diversity, parent involvement, networking in schools, implementing the curriculum, and learning styles.

After rigorous training using case studies and panel discussions, 73% of the advisors reported that the information presented was relevant to their work. Seventy-five percent reported the information as useful. The group identified key lessons learned with respect to implementing this type of advisor training. They recommended providing orientation and a mission statement for trainers, being mindful of advisor workflow, providing just-in-time training at appropriate times of the year, providing time for advisors to share information, remaining flexible to emergent issues, providing solutions regarding issues that must be addressed when the advisor is not the decision maker, being clear about session expectations, and enforcing the rationale to stay on track.

The authors provided some implications for future training programs, which include focusing on training and advising outcomes. Additional training modules, such as those on teen pregnancy, alcohol and drug addiction, grief, suicide and general crisis intervention, can be included.

Although this model focuses on advisors for a college access program, a wider application is viable. This model could easily serve as a training format for advisor graduate assistants and new advisors, and it could focus on issues other than curricula and university policy and procedures.

Watson, J. C. (2005). College Student-Athletes' Attitudes Toward Help-Seeking Behavior and Expectations of Counseling Services. *Journal of College Student Development, 46*(4), 442–49.

To identify means for improving the marketing and delivery of counseling services to student-athletes, Watson investigated athletes' expectations for counseling services and their attitudes toward help-seeking behaviors. Citing previous research by Hinkle (1994) and Murray (1997), Watson pointed out that conservative estimates indicate that 10 to 15% of student athletes "suffer from distress that warrants clinical attention" (p. 442). Yet many student athletes seem reluctant to seek help due to their skeptical view of counseling services. Worse still, they may avoid seeking counseling for fear of being stigmatized by coaches, teammates, student peers, and fans. Nationwide, college student athletes are underrepresented in counseling service settings. Current services are underutilized by this population and may not adequately meet their needs.

In general, research has shown that individuals who expect counseling to be a positive experience will have more positive attitudes toward help-seeking behaviors than their counterparts who expect counseling to be a negative experience. Attitudes toward seeking help, in turn, have been linked to the likelihood of counseling services being sought. Watson cited two studies in which student athletes' expectations were negative. Manier, Curry, Sommers-Flanagan, and Walsh (2001) found that student athletes expected counseling to focus on pathological issues, while Linder, Brewer, Van Raalte, and De Lange (1991) found that athletes perceived counselors and psychologists as having a "shrink image" (Watson, 2005, p. 444). However, some researchers (e.g., Miller & Moore, 1993) have found no differences between student athletes' and nonathletes' expectations. These disparities motivated Watson's present study.

Watson used the brief version of Tinsley's (1982) *Expectations about Counseling* (EAC-B) instrument from which four factors, personal com-

mitment, facilitative conditions, counselor expertise, and nurturance, were extracted to measure expectations about counseling services. Attitudes toward help seeking were measured with a slightly reworded version ("Counseling center" replaced "mental hospital" and "college counselor" replaced "psychologist" and "psychiatrist") of Fisher and Turner's (1970) *Attitudes Toward Seeking Professional Psychological Help Scale*. Two groups of students, 135 athletes and 132 nonathletes participated in the study. The sample populations included males and females, Caucasians, African Americans, Asians, and Hispanics. Freshmen, sophomores, juniors, and seniors were included in both groups. To determine the influence of expectations on attitudes toward help-seeking behavior, a multiple regression was performed between the dependent variable, attitudes, and the four independent expectation factors that were extracted from the EAC-B. A multivariate analysis of variance (MANOVA) was used to identify significant differences between the athletes and nonathletes on all five variables.

The regression analysis confirmed earlier research findings that expectations regarding counseling account for a significant amount of variance in attitudes toward seeking help. Furthermore, results of the MANOVA showed significant differences between the athletes and nonathletes with regard to attitudes toward seeking help, supporting prior findings that student athletes have less positive attitudes toward counseling than do their nonathlete peers. Significant differences were found between groups with regard to expectations about counselor expertise, personal commitment, and facilitative conditions. No significant differences were found between groups for the fourth expectation factor, nurturance.

Student athletes had greater expectations than their peers that counselors would be knowledgeable and well trained. According to Watson, student athletes expect counselors to understand the unique challenges and demands placed upon student athletes. Because counselors and student affairs professionals are positioned to provide outreach and counseling services to student athletes, Watson recommended that these professionals become familiar with the special needs of this population. He also recommended a "team approach toward developing effective service delivery heuristics" (p. 447), calling for partnerships between counselors, student affairs professionals, and athletic department staff. Attention needs to be given to academic, athletic, social, and personal needs, moving beyond the limited, traditional concerns of academic eligibility and graduation rates. These steps may help bridge the gap between student athletes and nonathletes and enable the former to see the personal benefits of counseling and support services.

Williams, M. L., Leppel, K., & Waldauer, C. (2005). Socioeconomic Status and College Major: A Reexamination of the Empirical Evidence. *Journal of the First-Year Experience, 17*(2), 49–72.

Williams, Leppel, and Waldauer built upon the previous work of Davies and Guppy (1997) in examining the effects of socioeconomic status (SES) on major selection. The literature on this topic focuses on the impact of gender, SES, and earning potential on major selection. Their research adds to the literature by separating Asian students as a group.

Williams et al. used the *Survey of Beginning Postsecondary Students* (BPS), which was collected by the National Center for Educational Statistics of the U.S. Department of Education (1996, 1997), to substantiate previous findings by Davies and Guppy (1997). Davies and Guppy examined the *National Longitudinal Survey of Youth* (NLSY) and concluded that students from lower SES are more likely to choose higher paying fields than are those with higher SES.

Instead of developing a design that may have allowed for new inferences about major selection, Williams et al. used a nonexperimental design to make comparisons with published literature. The BPS had been used to measure the SES of students in their first academic year of college in 1989–90. The NLSY had collected data from people between the ages of 28 and 35 years, most of whom had earned their degrees by 1993. Therefore, the two surveys offered data from respondents at different stages in their lives. The BPS allows for parental influence and familial background to be considered. The dependent variable was based on student expectations of associated earning potential with certain majors. As with the Davies and Guppy research, Williams et al. used Department of Education data to assign dollar values to 15 similar areas of study. The subsequent data represented the mean monthly income for each category.

Williams et al. articulated seven hypotheses:

1. The direction and significance of the coefficient on SES will be similar to data from NLSY and BPS.
2. The signs and significances will be similar for

the control variables that are analyzed across databases.
3. The inclusion of an ability variable will have the same effect on the coefficient of SES across databases.
4. Having a parent in a professional or executive occupation affects the student's selection of a major.
5. The influence of the mother having a professional or executive occupation is more significant than the influence of the father having a professional or executive occupation.
6. Whether a student feels it is very important to be very well-off financially will have a significant positive impact on the student's selection of higher paying majors.
7. Being Asian, rather than non-Asian, will positively affect the student's choice of the higher paying majors.

When comparing the two databases, the researchers found that demographic characteristics yielded no difference in significance or direction on the impact of choosing a major. Thus, the current research supports the Davies and Guppy findings.

In one important finding, SES data keep the same signs and increase in significance when other variables are considered. With respect to cultural resources, Williams et al. found a significant impact where Davies and Guppy had not. The Williams et al. findings also suggested that family background has a stronger impact on first-year students than on older students. Also, different than the NLSY data, the BPS information indicates that older students are more likely than their younger peers to choose higher paying fields. The ability variable led the authors to conclude that males are more likely to choose higher paying fields than are females. However, students from higher SES families and those with high levels of cultural resources are more likely to choose lower paying fields.

Race and ethnicity were not found to have a significant relationship with respect to African American and Hispanic students' choices of major. This may be due to controls on SES and attitudes toward financial rewards. Conversely, Asian students were more likely to choose higher paying jobs than were African American and Hispanic respondents.

The Williams et al. study supported the hypothesis that mother's occupation has a stronger effect on student major choice than father's occupation. However, children of professional mothers are more likely to opt for lower paying majors while children of professional fathers are more likely to choose higher paying fields. The authors offer no explanation for this divergent finding and note that this phenomenon warrants further study.

This article was focused on the need for university administrators to understand how students choose majors and the impact of their decisions on the collegial infrastructure. The findings also provide information for advisors to help students make informed decisions about majors and careers. With more students entering colleges and universities from a wider range of familial backgrounds, racial and ethnic diversity, and SES, educators and administrators need to understand how this information may influence student decisions. The authors talk about recruiting children of professional mothers to more altruistic majors, such as education. Using this information as one factor in helping students make decisions about majors is probably a more sound approach, especially because no explanation can be found for the trend toward mother's profession and degree.

The bibliography is compiled by Jessie Carduner and Barbara Miller.