The Use of Technology in Academic Advising

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In recent years, academic advising (like all of higher education) has increasingly been affected by technological changes and developments. Attitudes towards these changes vary: some advisors bemoan the loss of personal interaction that can accompany online advising, while others feel that online tools and relationships allow them to help more advisees or to do so more efficiently (e.g., Leonard & Kelly 1996; Lipschultz & Leonard, 2007). The tension between these viewpoints may play out in real-life settings, forcing universities and advising offices to ask how they might integrate technological advances while maintaining or increasing the quality of advising. In this issues paper, we explore that question from multiple viewpoints. First, we describe the necessity of rethinking advising for changing technological situations. Next, we offer an overview of the most commonly used technological advising tools, as well as analysis of their potential usefulness. Finally, we examine how universities that exist online or mostly online conduct academic advising. Ultimately, through our research into the literature on academic advising, as well as analysis of existing technological advising services, we demonstrate the complexity of using technology in advising and issues advisors ought to consider.

Technology and Advising Theories

Before selecting specific technologies to use in the advising process, it is important to consider the impact that such technologies may have on existing theories of advising. Using different technologies may subtly or drastically change some of the assumptions that are built into older theories of advising, which often assume a traditional, face-to-face advising relationship where students and advisors met in person. As George E. Steele and
Karen C. Thurmond (2009) assert, "We need a new conceptual model for describing the relationship between the advisor and students, as mitigated through technology" (85). Technology changes advising, and being aware of those changes is the first step towards developing a plan to use technology to help reach advising goals.

A number of authors have offered such “new conceptual models” of how technology and advising might work together. Many of the models focus on increasing student investment and participation in advising, long a goal of the advising process and one that may be better achieved through the use of technology. In a study of first-year advising students, Margaret C. King and Thomas J. Kerr (1995) conclude that information technology can make advising “more student-centered.” As the authors observe, “information technology gives convenient and timely access to critical academic planning information, immediate feedback, and a sense of control in the advising process” (50). While these hopes may be somewhat over-optimistic, they demonstrate how models of advising that center on student access to information can be well-served by integrating technology.

A similar, but much more recent, article builds on King and Kerr (1995) by pointing out that with increased access to information, students may be better able to move to higher levels of cognition during the advising process (Steele & Thurmond, 2009). By overcoming restrictions or inconveniences that may face students as they access information, technologies can increase the flow of information, possibly allowing advisors to develop deeper relationships with students. They may be able to discuss learning goals and needs rather than the minutiae of course audits and scheduling.
In order for technological services to be helpful to students, and to facilitate deeper student/advisor relationships, they must provide adequate information in easily-accessible formats. Steele and Thurmond (2009) argue that a few characteristics may help ensure this: online resources should be addressed to the student (not in an institutional tone), portals should be protected by a student login and password, and calculators or portal services should integrate information that may come from different segments of the university. E. Vance Wilson (2004) also offers guidelines for the types of information that ought to be available online for a university developing an “academic e-advising service”—Vance’s list ranges from contact details (such as advising center hours) to downloadable forms, email applications, interactive online questionnaires. When guided by standards set by authors such as Steele and Thurmond and Vance, online advising should be able to maintain its theoretical focus on offering easy access to information, and encouraging students to engage in deeper consideration of their learning goals.

Online Tools for Advising

The ideal that technology could make advising more student-centered is attractive, but in our analysis of existing advising technologies at a variety of institutions we found mixed results for how different services helped students. The issue is further complicated by the sheer number of technologies that can be used in the advising process. This section will outline a few of those technologies and comment on the usefulness of each, as well as how they've been applied in the institutions we studied.

Probably the most basic computer technology used to replace or augment face-to-face advising is email. Despite the possibilities for misinterpretation, email has advantages
over some of the other online methods available. It gives advisees the opportunity to explain their concerns in written form at a time that is convenient for them. They can also edit and modify their messages before sending them and ask questions that they might be otherwise embarrassed or afraid to ask while speaking face-to-face or over the telephone with an advisor. Because of these benefits, email is discussed in most articles on advising and technology (e.g., Lipschultz & Leonard, 2007; Leonard, 2008; Steele & Thurmond, 2009) and remains in use in all of the institutions we analyzed.

Discussion boards, message boards, and chat rooms are also frequently utilized through institutions' advising websites. Students simply type their questions into a text box and then await a reply from an on-duty counselor. Commonly asked questions are often compiled into lists of online FAQs for students to access to see if their question might be answered there before they type their specific questions onto the message board. Some institutions, such as Bunker Hill Community College and Hancock College, delineate precisely what kinds of questions can and cannot be answered using this method of communication, a useful explanation for students who want to find answers (CITE). Inquiries that can be answered include degree requirements, help with choosing and scheduling courses, and information about policies and procedures. Those that cannot be addressed include personal counseling, grades, and students' personal records. Thus these technologies may directly help students overcome a lack of information, but are not likely to lead to the deeper relationship and discussion of educational goals that characterize excellent advising (CITE?).

Synchronous communication, by chat or by video, may be particularly helpful in advising because it allows for real-time communication. Instant messaging is a common
method of online synchronous communication used by many advisors and advisees. It is, however, not appropriate for all kinds of advising according to Richard Brungard, a Penn State World Campus advisor, whom Karen interviewed (personal communication, February 12, 2010). He made it clear that instant messaging should be used only to give simple instructions or directions to students rather than for a great deal of interaction.

Another synchronous technology that contributes to more in-depth interactions with students is Skype. Skype is a web-based software application that allows calls and video to be exchanged over the internet. This technology offers the paramount advantage of face-to-face interaction, a benefit forfeited by most other online advising technologies. Richard said that Skype is used by the World Campus primarily to communicate with military personnel and international students. Similarly, George Steele, director for educational access at The Ohio Learning Network, discussed the use of Elluminate for academic advising (personal communication, February 11, 2010). Elluminate is a live virtual classroom software used for meetings, training, and tutoring using 2-way voice, whiteboard, and chat (CITE). It can use camera and video components so that non-verbal behavior can be included as part of the advising session, offering a very promising approximation of a face-to-face advising meeting. While such technologies allow synchronous interaction, there are financial costs involved (such as the fast internet connections necessary to run the programs) that need to be considered before using these online options.

In addition to real-time services like instant messaging and Skype, asynchronous Web 2.0 tools (in which participants do not interact in real time) such as Facebook, Blogger, and Twitter are used by advisors. Advisors use these to post announcements only
and nothing private, according to Dr. Steele. Other forms of electronic communication include podcasts, blogs, wikis, and texting, all being technologies with which most students of today are familiar. Second Life, a 3-dimensional virtual world using avatars, voice, and text chat for connecting and socializing is being used among distance learners. For example, Penn State’s World Campus has an “island” in Second Life, a virtual location where students and their advisors can meet to talk and also to access other materials available through Penn State’s portal. Finally, smart phones, map mashups, early alert systems, and productivity software are examples of tools and technologies that are being watched for their impact on the advising field of the future.

We found a particularly innovative use of technology and academic advising at McGill University in Montreal, Canada. McGill has an enrollment of more than 34,000 students and a “decentralized” academic advising structure, according to Jane Everett, dean of students (J. Everett, telephone interview, February 10, 2010). Students have access to many types of advisors including faculty advisors, departmental/school advisors, professors and lecturers (who serve as unofficial academic advisors), and peer advisors, who are student volunteers. Because of the complex advising network at the school, Everett said it is not always clear to students where to turn to first for help.

To address this problem, the university unveiled an online tool in June 2009 called “Ask an advisor!” Originally launched as a two-month pilot project, the tool was so successful that it still remains available today on McGill’s advising Web site (http://www.mcgill.ca/students/advising/). The tool is a web form that students use to ask their questions. Within 48 business hours, a staff member in the Dean of Students Office will respond by e-mail or refer the student to the appropriate person for assistance.
According to Everett, the tool is not a replacement for a face-to-face meeting with a professional academic advisor, but it has helped students and advisors use their time more productively because students can get their question answered by a more appropriate resource (a person or Web site) before they meet. The tool has also cut down the chance that students will get referred to the wrong person for help. Everett explained:

McGill had a reputation for awhile for being a sink-or-swim place where students felt like they had to figure everything out for themselves. So we’re trying to turn that around and this is one of the ways we’re trying to do that. We don’t want our bureaucracy to get in the way of student success.

McGill has seen online academic advising as a way of increasing student success by easing the transition into college and by making information more readily accessible.

Approaches to online advising differ by school based on financial resources, institutional support, and the institution’s mission. More schools are exploring online advising tools to augment or replace traditional advising approaches, and we expect that new tools will continue to be developed.

For-Profit Universities and Advising

When we began to research technology and advising, we made the assumption that online universities would be the leaders in utilizing online advising services, and we decided to research their advising services as part of our analysis. For-profit colleges and universities are a burgeoning sector of higher education and now educate about 7 percent of the roughly 19 million students who enroll at degree-granting institutions each fall (Wilson, 2010). For-profit institutions are also more likely to enroll students older than the
age of 25; working adults or parents; those in need of developmental support, such as English as a Second Language or remedial math or reading classes; and minority students, including blacks and Hispanics (Bailey, T., Badway, N., & Gumport, P. J., 2001).

Because of the diverse pool of students that for-profit institutions attract, these schools also need to provide a greater array of support services to meet students’ needs. The University of Phoenix, which enrolls 455,600 students, making it the second largest higher-education system in the country (Wilson, 2010), employs “graduation teams” as a form of advising. These teams consist of an enrollment advisor who assists with the enrollment process, an academic advisor who helps with degree requirements and scheduling, and a finance advisor who assists with financial aid questions (University of Phoenix, 2009). Other schools appear to have a similar approach. Kaplan University, a for-profit institution that enrolls nearly 104,000 students in online and on-site degree programs, assigns an academic advisor to a student when he or she enrolls. The academic advisor works with the student to register for classes, and the student generally works with the same advisor throughout his or her academic career, according to a Kaplan representative who communicated through an online chat session on Kaplan’s Web site. Both Kaplan and the University of Phoenix appear to use several technologies outlined in Advising Delivery: Using Technology (Leonard, 2008) including computer-based career guidance tools and some version of transfer articulation systems.

For-profit institutions have lower graduation and retention rates as compared to public and private two- and four-year institutions. These are also institutions that may be serving a greater amount of ethnically and racially underrepresented groups, first-generation college students, and students from low-income families—all of which are
populations in danger of graduating at lower rates than their peers (Hawkins, 2007). This means that although each institution approaches academic advising differently, online institutions and their advisors, staff and faculty members must be particularly cognizant of the diversity of student needs at their institution. No matter how they communicate with their advisees, advisors should avoid simple prescriptive advising approaches, be aware that this nontraditional population may need more support and encouragement than other students, and not be afraid to make referrals to financial aid officers, counselors, or other professionals as necessary.

Conclusion

As with most technological changes, we believe that the involvement of technology in academic advising is more complex than it may seem at first. Our research led to many interesting questions, but few answers about the “right” way to integrate technology into advising. One of the few definite conclusions we reached is that advisors and institutions that make technology a part of the advising process should do so thoughtfully, considering how the technology may affect access, ease of use, and effectiveness of advising for both advisors and advisees. Such thoughtful attention can encourage uses of technology that deepen advising relationships and ultimately help students succeed.
References


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