In this article I will attempt to address the topic of technology, broadly defined, and how it fits into the work we do in our college and university counseling centers. While drafting this article I decided to approach it as an opportunity to raise some topics that I have been thinking about, rather than make an attempt to develop an exhaustive review of this field.

So, let me first begin with some caveats:

This is a hodgepodge of reflections, I’ll be the first to admit.

- I am not going to attempt a balanced presentation of the pros and cons of technology. I wore rose-colored glasses when I wrote this.
- I will focus on possibilities and maybe even a few predictions if you will allow me.
- I will forget to mention important things.

Initially I had thought about writing this using the voice recognition system on my office computer, thereby illustrating the use of technology, but I couldn't get it to work well enough to make it worth the effort. So there is your first lesson regarding technology: lots of promise; doesn't always work the way you hoped. On the other hand, I did write this article using a computer running the latest word processing software. So, the other lesson is, sometimes it works wonderfully.

History

Technology is not new in the work we do.

The Beginning:

- Audio: Carl Rogers, Fritz Perls, B.F. Skinner...used to record sessions with students
- Video: Rogers, Perls, Skinner, Satir...used to film demonstrations of therapeutic techniques
- Microcomputers: Began in the 1980s
  - Santa Clara California, County Office of Education, began publishing annual directory of counseling software
  - 1989, the first Counseling Software Festival in Boston, Mass.
- Use of Networks: Caught on during mid-1990s
  (from: James E. Merryman, Counseling and Technology)

The frequency with which we use technology and the variety of ways we use it has, however, increased exponentially over the past two decades.

What do your clients know?
Do you assess internet and other technology use with your clients? Our clients are very tech savvy, and this can have a direct impact on their lives as well as their experience of counseling. For example, they have access via the internet to information about mental health diagnoses, treatment approaches and protocols, research, and even information about you. This is a access to a breadth and depth of information unimaginable a few years ago. This is also information that is easily available, and that has no guarantee of accuracy. Without bringing into our interactions with clients discussions about the information they are accessing and believing in, we may be missing a significant factor impacting (interfering with?) the work we do. And then there are the newly developing social technologies, such as the cell phone, instant messaging, and websites such as facebook.com. College students spend increasing amounts of time with these technologies; these technologies are becoming integral parts of their social world; but to what extent are we aware in our clinical work of the impact these technologies are having on our clients? CNN.com has an interesting article on how technology is changing people’s lives.

What do you believe?

I have noticed among clinicians a subtle (sometimes not so subtle) bias that these technologies, by definition, are incompatible, or at least interfere, with truly healthy social relationships, personal development, and overall mental health. Interestingly, most of the students I meet with express the entirely opposite view. As clinicians, what do we truly know about these technologies, versus what are we assuming? A recent and very interesting study conducted by the Pew Charitable Trusts (2006) suggests our students may be the ones who are right: “The internet helps maintain people’s social networks, and connects them to members of their social network when they need help.” The text of the entire study is available here. Concern about technology’s impact on our lives is certainly not new. Nor is the fact that such concerns are often more emotional than warranted. In the 1880’s, when the telephone was in its early days of development, concerns were common about its widespread use. Here are some of the concerns that were raised. They sound familiar:

- Modern inventions such as the telephone could harm character and health.
- The telephone might break up home life and destroy the old practice of visiting friends.
- The phone was considered an intrusion in people’s lives.
- The phone was a threat to young people’s morals.
- People of the time couldn’t imagine communications not being visual.

(Source: Luker, 2000)

Web design

In the early days of counseling center web design everything was coded by hand, and done between appointments and when a client no-showed. Things are a lot more complex today when it comes to web page design. Thankfully there now exist relatively easy-to-use web authoring software to make web design more akin to word processing than to learning a foreign language.

It is really no longer an option whether or not a counseling center is going to have a web site, it is only a matter of when. Students expect it. Parents expect it. Interns expect it. And our colleagues and administrators expect it. A place to start exploring the issues of counseling center web design can be found at the Counseling Center Village. There is also a listserv that provides a forum for discussion about counseling center web resources: SCC-Web.

Interconnection

I have long been interested in the use of technology in the world of mental health, and, in particular, of finding ways to more effectively collaborate as professionals. Some of my early thoughts about this can be found on the web in an article I wrote in 1999. What particularly motivated me in those earlier years was finding ways to capitalize on the internet so that we could more effectively share our resources and collective wisdom, and reduce the duplicated efforts we so often engaged in. Several important internet projects emerged during the 90’s, such as the Virtual Pamphlet Collection, the Counseling Center Directory, and the Counseling Center Village. These resources, and others, have connected the counseling center world in ways not possible a few years prior.

Insularity

Although the internet landscape has changed dramatically since the 90’s, it is still interesting that about one third of the centers listed in the Counseling Center Directory website remain isolated, providing no links to other resources at other schools or elsewhere on the internet.

Electronic Data Collection
I see this as one of the fastest developing technologies in counseling centers over the next few years. We will increasingly reconsider the traditional paper-and-pencil assessment formats, and consider new technologies and products. A lot of this change is already occurring:

- Scheduling and Electronic record keeping: Here's a 2005 survey of CC directors listing the software (if any) their center uses. Of the 179 centers represented in this survey, approximately three fourths are using some form of electronic scheduling, and about one half are using electronic record keeping.
- National mental health screenings: Screening for Mental Health, Inc.
- Web based satisfaction surveys. For example, Penn State provides an anonymous and encrypted survey for their center.
- On-line assessments / Web-based paperwork. While most Centers still conduct their assessments in the office, and often still with paper and pencil, there is a growing trend to use web-based assessments or make paperwork forms available for download. Some counseling center examples: Abilene Christian University, Appalachian State University, California Polytechnic State University: San Luis Obispo.
- In-house Electronic Intake paperwork: There is a growing trend to have Intake paperwork conducted in the waiting room on computer workstations. A variation on this theme is to use a PDA or laptop/tablet PC provided to the client when s/he arrives for an intake, and handed back to the front desk so the data can be uploaded to the desktop computer for analysis and integration with the desktop client management software.
- The OQ45 outcome assessment inventory is an example of a traditionally paper-and-pencil format being translated to electronic forms. For example, a Palm OS PDA can be used to administer and score the OQ45. Counseling Centers have used this with “great results and good outcome data.” (National Survey of Counseling Center Directors, 2001). See also this document at Texas A&M for an example.
- Portable assessment: Web-based and in-office electronic instruments offer many advantages, but some clinicians are turning to PDAs for more immediate real-time assessments: A client can carry a PDA during the week and record emotions or other variables of interest as they occur. The PDA can then be returned to the clinician to upload the data to a desktop computer. Here are some examples.
- To simplify and expedite client check-in, some centers have employed systems that automatically process a student’s ID card that s/he swipes through a card reader. (e.g., Medicat is one such software product that provides this functionality).

**Clinical Applications**

- Online therapy: I suppose the technology development many of us are still the most concerned about (effectiveness, ethics, licensing, risk management, liability) yet also cautiously intrigued by is the idea of online therapy. This is a small term for a large and still ill-defined technology. A good place to start with understanding online therapy is the International Society for Mental Health Online. I’ve also tried to collect some information about online therapy on one of my own webpages. As technology develops, so too will the sophistication (and acceptance) of online therapy, whatever that ends up meaning.
- Adjunct services: Here there are many possibilities, usually easier to embrace by those of us raised before the world wide web burst on the scene. These approaches would not replace face-to-face therapy, but would assist it. Examples are the uses of technology in eating disorders treatment, smoking cessation, and obesity treatment (click here for examples). At the end of this article you will find a list of books that will explore this area in much greater depth.
- Examples of other areas where technology is only beginning to be tapped:
  - Disability services
  - Reaching underserved populations
  - Virtual Pamphlets
  - Web-based suicide education/prevention/intervention: e.g., Ulifeline
  - The use of campus radio and TV stations
  - Online Q/A forums

**Staff Resources, Office Management, & Training**

- PDA’s allow clinicians to carry with them Drug databases, Treatment Manuals, DSM diagnostic criteria, Client databases, and Schedules synced with desktop.
- Digital video recording can enhance supervision and treatment. Example at Penn State.
- Use of in-house “intranets” for staff to share confidential materials via their web browser (documents, forms, help files, manuals, reports, links)
Improving how we inform the campus community of local referrals by creating a web-based Private Practice Database that our local community could use and clinicians can refer to.

- Training can be enhanced in many ways with technology. See the Counseling Center Village Training section.
- Synchronizing scheduling software with MS Outlook and with PDA’s. Several software packages do this: e.g., Meeting Maker (now known as PeopleCube). Titanium is working on this and is in beta testing.
- Wireless networks allow access to electronic data when we are away from our desktop computers.

**Staying up to date**

In addition to the suggested readings at the end of this article, here are few websites that should be useful in staying up to date with technology in the world of counseling.

- Counseling Center Village Research Section
- Center for the Study of College Student Mental Health (CSCSMH)
- International Society for Mental Health Online (ISMHO)
- Telemedicine websites:
  - Association of Telehealth Service Providers
  - The American Telemedicine Association
- 2006 Center for the Study of College Student Mental Health Conference
- Journal of Technology in Counseling
- The Research Consortium of Counseling and Psychological Services in Higher Education

Just as we begin becoming comfortable with these new technologies, they will undoubtedly evolve and transform further. True “technological convergence” seems likely to be just around the corner, and then we'll have some more learning to do, as well as new opportunities. It should be fun.

**FURTHER READING**

**Web links:**

http://www.metanoia.org/imhs/history.htm

http://www.sciammind.com/article.cfm?articleID=00037A7F-71C0-136B-B1C083414B7F0101

http://www.apa.org/monitor/julaug05/wired.html

http://ccvillage.buffalo.edu/Village/Assist/assist.html

http://jtc.colstate.edu/Vol4_1/Lawson/Lawson.htm

http://jtc.colstate.edu/Vol4_1/Hall/Hall.htm

http://www.pewinternet.org/PPF/r/172/report_display.asp

http://jtc.colstate.edu/Vol4_1/Maddux/Maddux.htm

http://www.acponline.org/counseling/which_pda.htm
Books:


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