

## **Evaluating Software in Counseling**

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Pea (1985) wrote that we can think of technology in two ways: as a set of tools that amplify or extend what we currently do (make it better, faster and stronger), or as something with the potential to radically change what we do and how we do it. For example, the technology of a better saddle allowed riders to travel further and longer, but the technology of a car completely revolutionized the way we even conceive of travel. Similarly, we can think of how high-tech tools influence our work in counseling by extending what we currently do or changing the landscape of how we practice. Chances are good that when thinking of how technology assists us in our work, you envision various types of software that you use, or would like to use more. You may think of software such as word processors, spreadsheets, data bases, desktop publishing, email clients, internet browsers, or your favorite MP3 player. Thinking further, you think about how your software applications help you to manage, organize, collect information, or possibly deliver counseling services to your clients and other stake holders. Although it is computer hardware (e.g., central processing units, memory, and storage devices) that has become exponentially more powerful and massive over a short time, it is the software that brings the machine and all of its parts to life.

Software programs are a series of written computer instructions that determine how numerous electronic switches and calculations are performed. It is the sophistication and quality of the software that allows people to operate machines in useful ways – everything from a counselor who uses a personal information management system to keep him/herself on track to an ophthalmologist who uses a computer guided laser to perform surgery on someone's eyes. Every time you tap a key, click the mouse, talk into a computer microphone, or otherwise input data, it is the software that determines what happens next, if anything. Some software is designed to interact with the computer at a very basic level, often times in the background unknown to the user, such as in the case of operating systems, networks, utilities, and compilers. Applications software (also called end-user programs) is said to "sit on top" of systems software because they are unable to run without the operating system and system

utilities (Webopedia, 2001). The combination of systems and application software make possible the electronic tools that help us collaborate, communicate, make decisions based on real-time data, share resources, and much more.

The number of systems software to choose from is small and is usually not a problem because computers come with such software already installed. On the other hand, the legion of differing applications software available to counselors in today's market is truly amazing. Not understanding one's options can make navigating the labyrinth of software selection a consternating task. The remainder of this article intends to advance the counselor's knowledge and considerations about the various aspects of application software.

## **What Kind of Software Do You Want?**

To best decide what kind of software you want, you should have an idea of how you want to use technology in your work. In counseling, software applications typically helps us to (a) manage our work (computer managed counselor or CMC); (b) assist us in our work (computer assisted counseling; CAC); or (c) actually do our work (cybercounseling). Bleuer and Walz (1983) noted that CMC is when software applications help counselors with the clerical and administrative tasks associated with their work, tasks that frequently inhibit their ability to undertake meaningful counselor interactions. Practical applications of CMC include, for example, software to help manage client-student records, counseling activity logs, scheduling of individuals and groups, correspondence with families and agencies; resource files for the counselor's personal use, and general word processing. Examples of computer assisted counseling includes using a software program to help administer a career development inventory, draw a picture, go through a "virtual" learning experience, or create an activity sheet by using a desktop publisher. The last category of software applications in counseling is new and quite controversial. It is intended to supplant the counseling office or dassroom and allow the counselor to work with his or her clients over the internet. Software that supports cybercounseling allows counselors to access the internet, send and receive email, design a website, conduct chats, video conference, engage in instant messaging, administer

tests, and edit video, all over the internet. Some software packages contain a suite of various programs which provide support for conducting two or more kinds of counseling applications.

With what kinds of management or assistive types of tasks do you want software to help you? Do you want a program that will help you collect and organize student data: Do you want a program that will help you make decisions about who is a good candidate for small group counseling? Or do you want software that will help you to manage several groups of peer helpers to effectively assist in a comprehensive conflict resolution program? Maybe you want software that will help you design a website that helps you to overcome barriers of time and space to better reach out to your stake holders. Your first step in effectively evaluating software is to determine what you would like your software to help you accomplish.

## Researching your Prospective Program

After determining your software needs, you are ready to begin researching and comparing numerous software titles and their respective features. Following are three sources of information that will help you review a software product and make the best possible purchasing decision:

1. **Asking others who already use the software.** Find others, especially counselors who have experience using the software, and interview them about the nature of their experience. Ask them about how effective the software has been for its intended purpose (i.e., managing, assisting, and/or cybercounseling). To best find others using a certain kind of software application, you might post a message on a counseling listserv or online community such as the International Counselor Network ([listserv.utk.edu/archives/icn.html](http://listserv.utk.edu/archives/icn.html)).
2. **Consult online product reviews.** Many magazine publishers conduct comprehensive and sophisticated laboratory testing of new software and maintain an archive of the results on their websites (e.g., find the “product reviews” link on sites such as [www.zdnet.com](http://www.zdnet.com), [cnet.com](http://cnet.com), [www.familypc.co](http://www.familypc.co), and [www.superkids.com](http://www.superkids.com)).

3. **“Kick the tires.”** Software manufacturers usually allow you to try a software program by allowing you to access an evaluation or trial version. These versions may offer the full functionality of a purchased copy of the software although may expire and become inaccessible after a set time period. Some trial versions do not expire although only provide the user with a sample of the capabilities of the full version. Yet others, mostly individuals and smaller companies, make available shareware versions of their programs (see the section on Cost below for more about shareware).

As you research the available software for your particular application needs, you will want to be aware of several features for effective comparison. Consider the following:

### **Cost**

One of the first things you should know about the cost of software is that it typically includes more than just the sticker price on the package. One must also account for the cost of any extra hardware that would be needed (e.g., extra memory) to efficiently operate the program. Also, you need to consider the cost of updating or upgrading the program. For instance, antivirus programs need to be updated quite frequently, perhaps every day. Many manufacturers of antivirus programs include in the price of purchase one year of updates which allows the program to detect and delete new viruses as they are recognized. After a year, you would need to subscribe to an updating service for a fee. Other programs such as word processors may not need such critical updates. In this case, updates to the program in the form of “fixes” or “patches” (actual pieces of code inserted into a program’s file that serve to fix a detected problem or security vulnerability) are provided for free over the internet. Some programs can be set up to check for newly available fixes or patches every time the program is launched.

Different than updating, all software needs to be upgraded from time to time. Upgrades are actually newer versions of a software (or hardware) product designed to replace an older version of the same product. Typically, software companies sell upgrades at a discount to prevent users from switching to a competitor’s product. In most cases, you must prove you own an older version of the product to qualify for the upgrade price. In addition, the installation routines for upgrades often check to make sure

that an older version is already installed on your computer; if not, you cannot install the upgrade.

Recently, some software companies began offering competitive upgrades, which means that you can buy a program at a discount if you can prove that you own a competing program (Webopedia, 2001).

Purchasing an upgrade solely because the product is newer is not a good reason to spend the money to replace a product that works well. Counselors should be convinced that the cost of an upgrade is worth the new or advanced features that the upgrade makes available.

Another cost factor includes the cost of human resources and training. Will installing and maintaining the software necessitate technology experts who will bill for their services? Most programs today are highly automated and sometimes use technology that intuitively detects and automatically corrects any problems. At the very least, many software programs include a step-by-step guide for correcting problems that may be detected. Oftentimes, software manufacturers maintain sophisticated help databases, usually referred to as a Knowledge Base, on their web sites which can help with frequently asked questions (FAQ). Access to these help features should be included in the price of the software. Also, a human resource cost may present itself in the form of needed training which facilitates the effective use of the software. Will the user need to purchase training manuals to supplement an inadequate product manual? Or worse, is the software so difficult to use and/or so poorly documented that a user needs to attend a costly workshop? Product reviews or your own review of a program should help determine that a program is "user-friendly."

Another factor to consider is that there may be available an alternative brand of a software product at a much lower cost. You will want to research whether there is available a free (freeware) or low-cost (shareware) software program that performs adequately as compared to a more well-known version. For instance, StarOffice 5.2, available from Sun Microsystems ([www.sun.com/staroffice](http://www.sun.com/staroffice)) is a free productivity suite which includes word processing, spreadsheet, and presentation applications. It is reported to be interoperable with other desktop productivity suites, including Microsoft Office, the most comparable and pervasive productivity software suite currently in use. Shareware is software distributed on the basis of an honor system. Most shareware is delivered free of charge, but the author usually

requests that you pay a small fee if you like the program and use it regularly. By sending the small fee, you become registered with the author so that you can legally use the software, receive service assistance, and be notified of updates. You can copy shareware and pass it along to friends and colleagues, but they too are expected to pay a fee if they use the product. Shareware is inexpensive because it is usually produced by a single programmer and is offered directly to customers. Thus, there are practically no packaging or advertising expenses. Of course, because shareware is copyrighted, you cannot sell a shareware product as your own (Webopedia, 2001). Both freeware and shareware warehouses that allow you to search for, briefly review, and download different programs can be found on the internet (e.g., [www.hotfiles.com](http://www.hotfiles.com), [www.shareware.com](http://www.shareware.com), [www.jumbo.com](http://www.jumbo.com), and [www.tucows.com](http://www.tucows.com) to name a very few). Note that you should always be careful about downloading programs by first making sure that they have been checked for viruses.

Lastly, counselors should consider that they (or their children or students) may qualify for steep educational discounts when purchasing software. You might check with the software's manufacturer or contact a distributor that specializes in serving educators (e.g., [www.journeyed.com](http://www.journeyed.com), [www.schoolworld.com](http://www.schoolworld.com), [www.creationengine.com](http://www.creationengine.com), and [www.edtech-cps.com](http://www.edtech-cps.com)). Typically, the distributor will ask that you provide one or two pieces of evidence that you are staff, student, or faculty with an educational institution.

## **Hardware Requirements**

Hardware refers to objects that you can actually touch, such as disks, disk drives, display screens, keyboards, printers, boards, and chips. Minimum hardware requirements necessary for a software program are usually specified on the box and include specifications for storage capacity, memory, processing speed, and any needed special devices (e.g., joystick, speakers, camera). Using software with only minimum hardware requirements may, however, lead to a frustrating experience because operations may be slow. Also, using the program while running other programs may result in your computer freezing or crashing. Having more than the minimum requirements (sometimes indicated as the recommended requirements) will allow you to use a given software program with desirable speed

and while simultaneously using other applications. The good news is that software manufacturers typically design software that only requires hardware specifications which can be easily handled by computers (or other peripherals) made in the last couple of years.

## **Compatibility**

Two areas of compatibility need to be considered – compatibility with one’s operating system software and other applications software. The operating system performs basic tasks, such as recognizing input from the keyboard, sending output to the display screen, keeping track of files and directories on the disk, and controlling peripheral devices such as disk drives and printers. Microsoft Corporation is responsible for the operating system that resides in the majority of today’s computers and currently includes Windows 95, 98, 2000, ME, NT, and XP. Other prevalent operating systems include DOS, OS/2, Linux, Unix, and Mac OS X (for Macintosh computers). Compatibility with your operating system is critical and will determine whether you will probably be able to even install your new software or not.

When two or more counselors need to collaborate on a project or share in important decision making, it is important that the data they use be shared in a manner that maintains the data’s integrity. For instance, if I wanted to collect and analyze a set of outcome data with other counselors across the hall (or across the country for that matter), it is important that we input, view, manipulate, and process the data with tools that treat the data in the same or at least very similar ways. Before purchasing a particular software, you will want to know how compatible the software is with the software of your colleagues or others with whom you will need to share data. If your software is not 100% compatible, and you still wish to consider it, you should ask yourself, “How well will the program convert the files of a competitor’s software and will this be sufficient for effective file sharing (i.e. importing data)?” Relatedly, you will want to know how well your program can save a file in another format (i.e., export data) in such a way that it can be used by a different software application. An application that can effectively export data can create a file in a format that another application understands, enabling the two programs to share the same data. The two programs might be different brands of the same application

such as two kinds of word processors. Or, the two programs might be two very different programs such as a word processor and a database management system.

## **Customization**

When you get into your car, you sit in the same exact type of seat that are fitted in the thousands of other cars of the same model and year. However, you can adjust the seat's position, headrest, temperature, or other aspects of the seat to maximize comfort. In the same way, a good software program should allow you to adjust many aspects of how it operates to meet your individual needs of comfort, familiarity, and performance requirements. You should be able to include or delete certain buttons on the various tool bars and otherwise change the software's settings. A software program might also allow you to customize your keyboard settings so that you can set a certain key or keystroke combination to perform a particular operation. For example, because I write my email address so often, I have my word processor's keyboard settings adjusted so that when I press CTRL-E, my email address is automatically typed in my document.

## **Interface**

A program's interface is the bridge between you and the machine. A program that uses a graphical user interface (GUI) takes advantage of the computer's graphics capabilities to make the program easier to use. Well-designed GUIs can free users from learning complex command languages and allow them to simply point and click on symbols (icons) that represent common objects. When programs share common GUI's such as in a program suite, they can easily share data by simply dragging and dropping the data from one application to the next. An interface should be laid out in a way that makes sense so that a program is simple to use, easy to navigate, and aesthetically pleasing.

## **Support**

Besides cost, support for a software program is generally the most valued aspect among consumers. It is the level of software literacy that will usually make the difference between not using the software at all, using a very small percentage of a program's capabilities, or conversely, pushing the

software's capability to perform in areas outside its intended purpose. Counselors will want to know if the software comes with a toll-free telephone number for talking to a support expert and what the average wait time is to speak with him or her. Also, does the software manufacturer maintain a web site with support material? Does the site have helpful tutorials and extra downloads to help the user best take advantage of the software's capabilities? In the case of software designed to help you conduct counseling, especially large group guidance and small group counseling, does the software manufacturer make available supplemental learning materials that go with the program?

### **Networkability**

Some programs are meant to be used by more than one person at the same time. They are written to specifically operate on a network, perhaps over a school or district, so that multiple users can access the program and all of its parts. Some programs are designed to run only on a network while others can run on a single computer, a network, or both. The advantage of using networked software is that (a) it is often cheaper to purchase one networkable program and make it accessible to multiple people as compared to purchasing many copies of the same program for each individual; (b) a single networked program may be easier to troubleshoot than doing the same for multiple copies across different computers; (c) similar to troubleshooting, updating and/or upgrading the program is easier over a network; (d) having individuals use the same program over a network insures 100% compatibility; and (e) schools can more easily manage the hardware requirements of various users knowing that they are using the same software. Disadvantages include that (a) software running over a network is often times visibly slower than running the same software on an individual computer; (b) some users may not prefer to use the networked software; and (c) if the network is temporarily inoperable, multiple people will not have access to the needed software (as is sometimes the case with email, for instance).

### **Security and Safety**

Because counselors often deal with highly sensitive and confidential information, another software concern should be how well it protects or secures information from others. Does the software

allow for password protection of individual files? How robust are the encryption methods for securing the data? If the data resides over a network, can the files be hidden from other users? What happens if I forget a password? The answers to these questions are important to know for how it is we assure confidentiality and resulting trust in our counseling relationships.

## **Become the Resident Expert**

Everyone can use a hammer although it takes time and effort to become a good carpenter. Professionals in any given field are experts at using the tools of their trades. Software applications are a counselor's newest tools that require experience, training, and practice. Once you decide on a specific application, it is up to you to advance your level of expertise by engaging in both informal and formal training opportunities. Informally, review the software's tutorials, manuals, and online help topics. Second, you might join an online user group which is a type of support group for users of a particular software program. Via email, electronic bulletin boards, web content, and electronic newsletters, online user groups such as those located at [groups.yahoo.com](http://groups.yahoo.com) and [www.topica.com](http://www.topica.com) help members to exchange tips and tricks, troubleshoot problems, and recommend helpful resources. Third, you will learn the finer points of your software application with consistent and persistent use. In spite of feeling awkward, practice using your new high-tech tools by continually experimenting with all the features. Formally, you should incorporate technology training, both live and online, as part of your professional development plan and continuing education efforts.

After gaining significant expertise using your program, you might go beyond the software's capabilities by using third party plug-ins. A plug-in is a software module that adds or enhances a specific feature or service to a software program. For instance, there exist various plug-ins for internet browsers designed to augment the navigating experience such as by adding the ability to see sophisticated animation or sound. Numerous plug-ins exist for adding new levels of manipulation for graphics and video editing software. The greater a software application's popularity, the more numerous the available plug-ins for it that become available.

The tools of our trade influence, in large part, the value and quality of our work. Investing in one's own software literacy will help to ensure legal and ethical practice by remaining competent in a high-tech world. With careful planning, the tools of the new millennium will also assist counselors in staying productive and focused in a seemingly chaotic world that competes for more time and resources than we have to offer. Carefully choosing and learning appropriate software applications will better help us more effectively reach larger numbers of people, provide more targeted interventions, and focus energy where it is most required.

## References

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