

QUESTION #9: HOW CAN TECHNOLOGY ENHANCE THE PROGRAMS AND SERVICES OF THE LEARNING ASSISTANCE CENTER?

A conversation with Rick Sheets

Let me start by defining technology as more than computers, though most recent advances in technology usually incorporate computers or computer chips. Technology involves the application of science as a tool. Technology can include the use of videotape players, calculators, computers, data projectors, video or audio enhancing devices, or other types of equipment. Using the definition of technology

as a tool, appropriate technology can thus enhance many aspects of a program or service. Some of the major technology areas that typically enhance our LAC programs and services include office and program management, instructional support, presentations and communication. Technology also provides new options for remote access to programs and services locally and globally.

Can you give some examples?

Yes. Office and program management aspects include using databases to schedule students with tutors, maintain staff and tutoring records, track training, and monitor time worked; using word processing for handouts, brochures, reports, and forms; and using spreadsheets or online systems to approve, track, and record budget transactions and also to maintain charts and long-term trend data for reports, use statistics, and program evaluation.

Instructional support for students can be enhanced with supplemental course software in the form of additional readings, practice exercises, homework, demonstrations, simulations, and sample tests. Other technology options might include web boards, listservs, class forums, remote access to tutors or the instructor via pagers, telephone, video, or the web, and additional and related web sites.

Presentation programs for giving demonstrations, showing charts, and explaining concepts have improved dramatically. Learning style inventories can be taken and scored on computers during a presentation. Any kind of workshop or presentation can include new and current information via the web and instant communication is possible with any telephone or internet accessible resource available anywhere in the world. Tutor training sessions or related activities can be available to tutors 24 hours/day, 7 days/week and can incorporate lectures, video segments, text documents, web

sites, activities, chat rooms or other electronic forums, and assignments.

Communication options have exploded and now it is very easy via the web for students to find out about tutoring options without having to find the physical location or phone number. Providing information about study skill workshops, tutoring options, support for classes, advisement and testing options, or any other service provided is easy and inexpensive compared to past marketing strategies.

What about students with special needs?

Thanks for asking. The LSC or Learning Support Center on my campus is not the area that is responsible for providing accommodations for students with special needs, however, the LSC works with Special Services to support students' needs. Technology has provided these students with appropriate options to give them equitable access and support for learning. Some examples include listening enhance-

ment devices, larger screen monitors or hardware or software which magnifies text, speech generating programs to provide audio feedback of on-screen or scanned text, voice recognition programs, spell checkers and language masters, and keyboard options for those who can not use both hands to type. Improved screen controls for fonts, colors, and size provide students with better options.

I am not sure I caught all the options you have mentioned, but it sounds great. What are some of the drawbacks with using technology?

The biggest drawback is the cost factor. Technology can quickly become the largest initial cost for beginning or expanding programs. Other key considerations include program needs, training in new technology, benefits and impact on program, access, space, maintenance

of technology, and upgrades to replace obsolete technology. Too often LACs purchase software and equipment simply because it is new and innovative and the sales rep promised a panacea.

Without proper planning and strategies for implementation, new technology can become a two-edged sword. It may be cutting edge technology, but who is getting cut. New technology may have glitches that won't show up initially. Some of the new computer hardware and software companies release new products before exhaustive testing and bug clean-up. As problems occur, additional hardware or software "patches" are released to solve the problem—they may solve one problem and create another. Another major problem is that often

users are not included in decisions regarding purchases of new technology or may not be aware of options available.

New technology can also require time from campus technical staff to be trained in new options, and time to set-up, test, and maintain new technology. Many users do not have a sense of time and staffing implications of adding new technology to an existing network or infrastructure in adding a new network.

Interesting, I had no idea that purchasing and using technology could be so complex. What are some things I could do to stay out of the technology traps you have described?

I would start with a needs assessment for technology. Get a group together to identify what is it you want to do. Check with other center directors to see what they do. Ask your technology savvy campus people for ideas. Gather information at conferences, via web sites or listservs, and from vendors. Be sure to have information on existing equipment and networks or have quick access to someone from your campus who knows. Before buying you may be able to have the sales folks visit your site and even provide a demonstration on your equipment or network. I have heard many horror stories of expensive technology that does

not perform to expectations or needs and thus is not used.

The real key to the successful use of technology is in the planning. This includes: strategies for implementing, maintaining, and upgrading hardware and software; training all in the use of the new technology; and providing the support needed for users of the new technology. If the planning is done well, technology can be seen as an invaluable tool for program and service enhancement and effective use of limited resources.

ADDITIONAL REFERENCES

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Rick Sheets was born in Indiana and has lived in Phoenix, AZ since 1960. In 1971, he became an Eagle Scout. He has worked in the Maricopa Community Colleges since 1982; worked in Learning Assistance from 1982-1998; has taught mathematics, reading, study skills, BASIC computer programming, Computer Applications, and Web Page Design, and is currently the Director of the Microcomputer Commons Lab at Paradise Valley Community College (about 500 computers including an Open lab and 11 computer classrooms). Rick earned a certificate as a Developmental Education Specialist from Appalachian State University (Kellogg Institute, 1985), became 4MAT ATS certified in Learning Styles (Excel, 1987) and completed his Ed.D. in Curriculum & Instruction at Arizona State University in 1994 (Dissertation: "The Effects of Training and Experience on Adult Peer Tutors in Community Colleges," ASU, 1994). Rick has been awarded the League of Innovation's PVCC Innovator of the Year award twice. First, with Sally Rings in the development of a comprehensive tutor training program (which is CRLA ITCP certified) and second, as a team leader in the development of formal technology training options for campus staff and faculty. He has co-authored with Sally Krueger Rings two articles in the "Journal of Developmental Education" (content-related study skills and theoretical foundations for tutor training). Along with Frank Christ and Sylvia Mioduski, he also co-directs the annual Winter Institute and is the webster of the new Learning Support Center in Higher Education website. Rick is team-oriented, enjoys games, and is an active reader, computer addict, camper, music lover, and poet. His wife, partner, and friend is Barbara. His personal mission statement includes ". . . I want to continue to learn, grow, enjoy, and create; to integrate a part of me into all that I do . . ."