Technology as a Management Tool in the Community College Classroom: Challenges and Benefits

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Abstract

In this paper the challenges and benefits of utilizing technology as a tool in classroom management are examined from the perspectives of both students and educators. Special focus is given to community colleges and their unique student population. Further, the author of this paper reflects on perceptions of these challenges commonly encountered during the introduction of computers in the classroom in the 1980s, and explores the progress, or lack thereof, in the succeeding twenty years in dealing with these issues. Finally, this paper discusses how technology can benefit both students and teachers in modern "traditional" classroom settings, often borrowing from ideas and techniques pioneered in online and hybrid courses.

Keywords: Technological fluency, workforce development, adult learners, non-traditional students, digital divide, technophobia, technological resistance, online source evaluation, learning styles

Introduction

A great deal of the current literature on classroom management focuses on its preventive nature. For example, Iverson explains classroom management as "the act of supervising relationships, behaviors, and instructional settings and lessons for communities of learners. Classroom management typically is preventive and results in decreased incidences of discipline problems" (2003, p. 4). This position is generally supported by Arends' observations that "classroom management and instruction are highly interrelated" and "preventive management is the perspective that many classroom problems can be solved through good planning, interesting and relevant lessons, and effective teaching" (2007, p. 173). It should be pointed out that in addition to a general focus on the preventive nature of classroom management in much of the current literature, there is also a great deal of focus on the behavioral and disciplinary aspects of classroom management. This should be of no great surprise when one is considering the classroom environments found in primary and secondary education. However, this focus seems less appropriate when considering adult learners. Although disciplinary problems are certainly not unknown at the collegiate level, it seems reasonable to assume that when one is dealing with adult learners, the disciplinary aspect of classroom management may be an inappropriate focus. This may be especially true in the community college classroom, where it may be assumed that the vast majority of students are adult learners who are there by choice, and desire to succeed. In such an environment, the disciplinary nature of classroom management becomes secondary at best. It may be argued that, when dealing with adult learners, one should view the preventive nature of classroom management as focused on those actions of the instructor designed to provide effective lessons, reaching the widest audience possible. Such an approach may reduce student failure and drop-out by addressing particular student needs. This is in contrast to the disciplinary focus when dealing with younger students found at the elementary and secondary levels.

Adult Learners

In order to achieve this goal, the community college instructor should understand who his or her students are in order to better gauge their needs. In this context, it seems a reasonable argument to pose that, "educators ought to gain a working familiarity with the evolving characteristics of adult learners and be sensitive to their diverse needs in order to better facilitate their academic journey to success and personal growth" (Semmar, 2006, p. 2). While any community college classroom in the United States is likely to reflect the general racial and cultural diversity of the American people, it is also necessary to recognize that a good many of these learners also reflect another aspect of student diversity in that they are *non-traditional students*. Non-traditional students generally have one or more of the following seven characteristic factors:

- Delayed enrollment in postsecondary education beyond the first year after high school graduation
- Part-time attendance
- Financial independence from parents
- Full-time work
- Having dependents (other than a spouse)
- Being a single parent
- No high school diploma (or GED) (Kazis, et al., 2007, p. 7-8).

According to Kazis, et al (2007):

> Although not all non-traditional students are adults (many 18-21 year olds meet at least one of the seven criteria), all adult college students are by definition non-traditional. Financially independent, working full time, with dependents and family responsibilities to juggle, and back in school after an extended time out- adult learners are at great risk of not achieving their postsecondary education goals (p. 8).

Indeed, an increasing number of students in postsecondary institutions of all types fall into this category. "The new demographics of colleges and universities identify part-time adult learners as the new majority, with non-traditional working adults over age 26 now comprising over 50% of the American post-secondary student population" (Ausburn, 2004, pp. 327 - 336). According to Kazis et al "community colleges serve (the) largest portion of adult learners" and "the more non-traditional the student, the more likely that he or she will attend a community college" (2007, p. 11). They go on to explain that community colleges have traditionally been far more responsive to the needs of older learners. This would seem logical when one considers the typical missions of community colleges. For example, one recent survey of 102 community college mission statements revealed accessibility, or "open door" policies to be the leading mission objective, with workforce and economic development a close second (Ayers, 2002, pp. 11 - 30). Simply put, many non-traditional students are attracted to community colleges first and foremost because they know they will be accepted, although there is a likelihood of at least some remedial work as a condition of enrollment. Secondly, non-traditional students, who face any one or more of the seven factors listed by Kazis et al, are seeking to better their position in life through improving job skills, thus responding to the workforce and economic development function of community colleges.

Changing Needs of Adult Learners

Interestingly, the skills needed to survive in the modern job market are changing at a faster rate than ever before in human history. In a now-famous quote from the foreword of the book *Rethinking the Future*, futurist Alvin Toffler said "The illiterate of the 21st century will not be those who cannot read and write, but rather those who cannot learn, unlearn, and relearn" (1997). By this he was not implying that the worker or student of the future would not have to possess literacy skills, but rather that one would have to become a lifelong learner in order to survive in the newly emerging job market. This is reflected in a recent report prepared for the U.S. Department of Labor, which states: "Today's adults need higher levels of academic and technical knowledge to remain employable in an information and service economy characterized by frequent job and career change" (Kazis, et al., 2007, p. 2). The high levels of technological proficiency needed to survive in the modern workplace are hardly limited to jobs commonly

perceived as high-tech or highly skilled. Even jobs seen as low-skill such as retail sales today require the use of computers and numerous other electronic devices. David Thornburg notes:

> Technological fluency is required in over 80 percent of the jobs I looked at: the skill was a virtual given for most of the position descriptions I studied, and I didn't focus on high-tech jobs. Simply stated, technological fluency is the capacity to use computers and the Internet as naturally as you would books, pens, or paper (2002, p. 58).

Given the degree to which rapidly-changing technologies are pervading the workplace, it is the position of the author of this paper that if one accepts the workforce development mission of community colleges as a given, classes that do not integrate technology as a management/instructional tool, regardless of the subject matter, are doing the students a disservice. This is especially true when one considers the high number of non-traditional students in the community college classroom who are seeking education and skills as a means of attaining a better job or reentering the job market. This becomes all the more relevant when it is considered that many such non-traditional students seeking retraining may have lost jobs because of obsolete skills. It shall be demonstrated that technology can assist the traditional, or face to face classroom instructor in implementing and utilizing covenant, conduct, and content management while using a humanistic approach suitable for adult learners. Instructors of "traditional" classrooms can take advantage of technologies and techniques developed for use in online and hybrid courses. Moreover, this use of technology will better prepare the student for the challenges of the modern workplace.

Technology as a Classroom Tool

It would be misleading at best to pose that the introduction of technology into the traditional community college classroom is a panacea for the many problems faced by students and most especially by non-traditional students. It can, however, become a powerful tool, and some instructors have already found it to be such. Li (2007) notes that nearly all involved in education "are exploring the best ways to integrate technology in classrooms to enhance teaching and learning" (p. 277 - 297). Nevertheless, technology also presents a number of challenges that should be addressed before examining how it can best be utilized as a classroom management tool or educational aid. For example, the views or misconceptions held by anyone involved in the educational process may impact how effectively technology may be utilized. "Students' and teachers' beliefs about technology may affect their adoption of the tools which directly contributes to the establishment of a technology-enhanced environment" (Li, 2007, p. 377 - 397). Beliefs, regardless of how ill-informed, can have such a tremendous impact on the performance of both students and teachers. Therefore an examination of such beliefs and perceptions about educational technology is necessary.

Student Perceptions

Naturally, the perceptions of technology that the student brings to the classroom will play a role in how effective that technology will be in enhancing the individual student's learning. It may be of little surprise that younger students are often at a tremendous advantage over their older peers in this respect. "On the whole, young people who have grown up with computers, mobile phones, and other devices for virtual communication are not frightened by the technology and are open to experimentation and exploration" (Mason, 2006, p. 121-133). This seems to be supported by Thornburg (2002) who notes:

> 73 percent of U.S. youth between the ages of 12 and 17 use the Internet. While 94 percent of these teens report using the Web for research on school projects, and 71 percent report that the Internet was a major source of information for their most recent school project, only 5 percent said that they learned how to use the Internet in school; 40 percent were self taught, and the remainder learned from parents, friends, and siblings (p. 64 - 65).

Evaluating Information as a Skill

While the above observation seems to underscore the technology-savvy aspect of younger students, it also raises another likely challenge in implementing the use of technology in the classroom. Because so

many young people are self or peer-taught in utilizing information technology, it seems logical to suppose that they may have difficulty in evaluating the information they find. Simply put, while younger students know how to use the Internet, they don't necessarily know how to differentiate "good" sources from "bad" when doing online research. It does not seem unreasonable to suppose that older nontraditional learners, particularly those who did not feel compelled to learn computer and Internet skills before returning to college may be equally as challenged in evaluating material found online. In fact, Li (2007, p. 277 – 297) reports that "the difficulties of finding good Web site information" is a major disadvantage reported by some high school students. Other challenges reported by younger learners and listed by Li (2007, p. 277 – 297) include:

- Time consuming;
- Substantial assistance needed;
- Technical glitches.

Again, there is no reason to suppose that older learners will not share these complaints, particularly in light of the lower level of computer and Internet proficiency many of them suffer. This supposition seems to be borne out by the observations of the staff of Empire State College regarding their first online course offerings:

> It was the college's belief that adult students were less savvy computer users than traditional-aged students. This belief was confirmed by the number of initial help-desk reports that described instances where callers summoned their child to the phone to carry out the help-desk's instructions (Lefor, Benke & Ting, 2003, p. 35 – 42).

Lack of Skills Leads to Negative Self-Perception

It seems logical to assume that older students will be self-conscious of such deficiencies, and this may have a negative effect on their own self perception and confidence. "Upon their return to higher education, they may lack confidence, feel nervous, or doubt their abilities and competence to successfully engage in and cope with various learning tasks" (Semmar, 2006, p. 3). Of course, some adult learners do come to the classroom prepared to use information technology. "It would be wrong to characterize all adults as fearful of technology and unwilling to consider using it for learning" (Mason, 2006, p. 121-133). However, the community college instructor who wishes to utilize technology in the classroom will have to be prepared to provide scaffolding for those students who lack computer skills.

Digital Divide

Overall lack of computer skills, difficulty in evaluating online sources, technical glitches, fear of technology and/or a lack of confidence, and the need for scaffolding/assistance are just some of the challenges faced in implementing technology as a classroom management tool. There are certainly others that must be considered. While it is safe to suppose that the instructor who wishes to use it in the classroom will be able to do so, what of the instructor who wishes for his or her students to utilize technology outside the classroom? According to Mason "the question of access is paramount" (2006, p. 121-133). Indeed, access to computers and the Internet seems to be a greater problem for some segments of society than others. This is an aspect of diversity that cannot be ignored, and again, implies the need to provide such students with scaffolding. Mellander (2007, p. 19 – 23) explains:

> A division exists between those proficient using computers for information, communication, and other tasks and those not. Dubbed the "digital divide," its characteristics are palpable and precise. Hispanics lag behind Anglos; women behind men; and computer use among disabled and older persons is greatly outpaced by youngsters. In general, middle- and high-income families are technologically proficient. This is a direct correlation to income: rural areas and low-income urban regions lag behind suburbia.

The above would seem to indicate that use of technology may be more difficult for many of the very same groups that seek out community colleges as their route to a higher education and the increased level of employability commensurate with that education. This seems especially true when one considers that many community college students are those who cannot afford the tuition of universities and private

schools. Of course, community colleges are well aware of this. According to Ayers, many community colleges that stress accessibility in their mission statement "defined access, at least in part, in terms of affordability" (2002, p. 11 - 30). However, as Mellander indicates, the people that benefit most from such affordability are also more likely to be on the negative side of the digital divide.

Alienation

Finally, regarding the challenges faced by community college students in utilizing technology, attention should be drawn to the importance of communities in learning. Some critics argue that over-reliance on technology leads people to become more self-absorbed and less sensitive to the needs of others. Indeed, as long ago as 1987 there was concern that the increasing use of computers and other information technology in the classroom would lead to greater alienation. Some of this alienation is said to result from a "depersonalization of society (or) Big Brother syndrome" (Moon, 1987, p. 1 - 49). According to Thornburg, "when we allow our technologies to be used in ways that diminish the human spirit, we do our society a disservice" (2002, p. 61). In light of such arguments, it is not difficult to suppose that fostering learning communities among students might become more difficult in a learning environment that takes advantage of technology. In fact, if not used properly, such arguments are not without merit. Those who fear the use of technology in education seem to feel that over reliance on computers will not only keep students apart and unengaged, but it may also create a greater barrier between the student and the instructor. However, as will later be demonstrated, none of these situations need occur, and technology can in fact enhance community, not only between students, but also between the class as a whole and the instructor.

Instructors' Resistance

In addition to the various pitfalls and challenges that use of technology in the classroom might present to students, there are also a large number of challenges and fears to be faced by the instructors who would utilize technology. Not the least of these challenges is represented by the resistance of instructors themselves. "This is a natural characteristic of all individuals, and not just the 'over 40s'. The resistance is often greater when the individual has evaluated his/her previous methods as being successful" (Moon, 1987, p. 1 – 49). The degree of this resistance should be apparent when one considers that the previous remarks on the integration of technology in the classroom were made over twenty years ago.   Clearly, while some progress has been made, there is still much room for improvement in this arena.   That responding to and not resisting such changes are still an issue is evident in Ayers' remark: "Responding to educational needs that are unique to information-age learners presents an adaptive challenge to those who contribute to student success" (2002, p. 11 – 30). In this remark, Ayers is acknowledging the unique needs of today's students, and the challenge meeting these needs may present to educators, many of whom began their own careers before the information revolution.

Instructors' Fears

Resistance to and fear of change is not the only challenge faced by educators in implementing technology as a classroom management tool. According to Li (2007, p. 277-297), other fears expressed by seasoned educators include "fear that technology will take away 'real' learning" and fear of job loss. Nor are these fears new. Twenty years ago it was noted that some educators had a "fear of the machine taking over the mind and will" and felt a "threat of redundancy, where the teaching process is controlled by the machine" (Moon, 1987, p. 1 - 49). However, Thornburg rather effectively argues that such fears are not founded. He notes that "the consequences of trading people for technology are immediately apparent to anyone who has called an 800 help line for a major institution" (Thornburg, 2002, p. 60). Thornburg's argument seems valid in the community college learning environment when one realizes the degree to which community college offerings are driven by the needs of the population it serves. To put this another way, it seems unlikely that students will continue to enroll in courses that do not meet their needs, whether academic or human. Many students, particularly those who require greater scaffolding, such as non-traditional students, will gravitate toward classes that allow for human interaction. This is not, however, to say that technology cannot be one of the mediums through which this interaction occurs. This is further supported by Li, who notes that in studies conducted by Galbraith and Haines (1998), "no students reported that they preferred to learn science exclusively through the use of computers, although they acknowledge the benefits of using technology" (2007, pp. 377 - 397). Li points out that this indicates

that students view technology as an enhancement to classroom learning, but not a substitute for it. This, he argues, should allay "fears that teachers might have about being completely replaced by technology in the classroom" (2007, pp. 377 - 397).

Technophobia is another frequently cited roadblock to more efficient implementation and utilization of technology in the classroom. Li notes that technophobia, or the fear of using technology, "was not caused by a simple lack of exposure to technology" (2007, p. 377 - 397). To be sure, there may be many educators for whom the implementation of technology in the classroom may simply be out of the question for reasons that may not seem rational to many, but are nevertheless entirely valid to the teacher in question. However, one may suppose that a great deal of resistance to the implementation of technology in the classroom that is attributed to technophobia is, in fact, reflective of a general ignorance of its use. Again, this observation is certainly not new. In the late 1980s it was observed that there was often a "lack of application to the teaching process: not only is ignorance of where to make use of technology a problem; so too is the lack of appropriate software and the knowledge of how to use it" (Moon, 1987, p. 1 - 49). Such problems are clearly still with us. Certainly, a device which one does not know how to use is of little utility, and even worse, may present an unwanted distraction. Conversely, Li notes that "when a computer was perceived as easy to use, teachers tended to think it was useful and intended to use them in the classroom" (2007, p. 377 - 397).

Other researchers indicate that some instructors fear that greater reliance on technology will lead to a loss of autonomy. This seems to be particularly prevalent in the delivery of online classes at some institutions. For example, at Empire State College:

> Another key decision was to concentrate on student ease of use. This led the college to adopt a uniform course-management template. Although some faculty would have preferred more latitude for experimenting with different course-management systems, the use of a single platform has considerably simplified student training and support (Lefor, Benke & Ting, 2003, pp. 35 - 42).

In the above scenario, such fears do not seem unfounded. Further, some educators might fear that if this is perceived to work in an online environment, there might be temptation by some administrators to bring such conformity into the realm of the traditional classroom. This fear may seem groundless, but it is one that schools should nevertheless address and seek to allay if necessary in order to facilitate greater and more efficient use of learning technology in the classroom.

Impact of Instructors' Fear and Resistance on Learners

The fears of and resistance to use of technology exhibited by some instructors may even have a negative impact on students. For example, it has been reported to the author of this paper by numerous students that they find it refreshing to have an instructor who will allow them to use various electronic resources as research material for term papers and other projects. Such students report a large number of instructors who will allow the use of no source that "cannot be physically picked up" or who tell them "if you have to use a keyboard to get it, you can't use it." It seems reasonable to suppose that traditional books, journals, and other print sources are not going to disappear any time soon, and it is both logical and commendable that instructors should want their students to know how to effectively utilize print sources in research. However, to reject the use of any and all electronic sources, which might include but not be limited to Internet sites, online databases, CD-ROMs, video cassettes, etc., is severely limiting the resources available to the modern college student and, moreover, is preventing them from practicing skills that are useful in the modern workplace. Interestingly, the availability and quality of electronic sources available today have achieved a level of quality on par with more traditional sources and, in fact, simply represent a redundancy of such traditional sources. This realization has led the American Psychological Association to revise its most recent publications manual:

> The format specified in the previous edition of this manual required information about the source and format of the database in addition to information about the material retrieved. These days, however, most databases are available from a variety of sources or suppliers and in a variety of formats (e.g., on CD-ROM, mounted on a university server, available through a supplier Web site). Moreover, the distinctions between these various sources and formats are usually not apparent to

the end user. Therefore, when referencing material obtained by searching an aggregated database, follow the format appropriate to the work retrieved and add a statement that gives the date of retrieval and the proper name of the database (Publication manual of the American Psychological Association, 2001).

The above remark is significant because it recognizes that the end user, in this particular case the instructor grading a paper, will likely find it difficult to differentiate between print sources and electronic sources, as they are now often identical. Should the student include the retrieval statement then yes, the instructor will know. However, it seems likely that the instructor who seeks to prevent use of electronic sources is fighting an uphill battle that is likely not worth the effort. It is highly likely that many students would still use the online sources and simply leave off the retrieval statement, making it appear as though the identical print source was used. One might suppose that the time spent by some instructors in trying to prevent the use of electronic sources might be better spent in teaching students how to effectively use electronic sources, particularly when one considers that such use is likely to occur regardless.

Benefits of Technology

Having discussed the perceived challenges in implementing technology as a management and instructional tool, it is now necessary to examine the potential benefits. For example, Li (2007, p. 377-379) cites an earlier study by Kim, Grabowski and Song (2003) which found that "Web resources made students' learning more dynamic and active…(and) motivated students to be more active in the learning process." These sound like positive results that would be desirable for instructors at any level. In order to understand how such results can occur, it shall now be demonstrated that technology can play a role in each of the "three C's" of classroom management- covenant, conduct, and content management. This demonstration will occur within a humanistic framework.

Technology and Role-Conflict

As already established, the typical community college classroom contains a high percentage of non-traditional students, many of whom are also adult learners, and all of whom are likely to experience role-conflict to varying degrees depending on their responsibilities outside the classroom. This can include conflicts arising from parenthood, employment, and the like. Such students should not be treated as children, and deserve teaching methods and learning environments that are flexible and responsive to their needs and responsibilities. "For adult learners…traditional teaching methods can not only demean and infantilize them, but they do not acknowledge the real-life experiences and knowledge that the students bring to the class" (Kazis, et al., 2007, p. 17). Since we can safely assume that such adult learners would have little to gain by engaging in negative behavior, it makes sense to adopt a humanistic approach in delivering their education. "The humanistic position presupposes that humans (have)… a natural inclination toward positive behaviors that promote optimal growth and development" (Iverson, 2003, p. 15). Iverson explains that instructors who utilize a humanistic approach "allow students to unfold, search, explore, grow, and develop…" (2003, p. 15). Technology can be a powerful tool in fostering such an environment and achieving these ends.

Technology and Covenant Management

Covenant management "is the facilitation of trusting, respectful relationships, willingly entered into, that promote optimal school success…" (Iverson, 2003, p. 22). Certainly, any instructor of a humanistic bent will seek to foster such relationships with his or her students. Providing an environment in the classroom where students feel comfortable talking with the instructor, not only about class matters, but also personal, is the cornerstone of covenant management in the community college classroom. Simply opening up and sharing a few personal thoughts before or early in any given class session can help promote the openness and trust needed for good covenant management. Allowing open discussion throughout the class also helps. But how, one might ask, can technology aid in covenant management? The answer is quite simple and straightforward. First, instructors can and should maintain a school e-mail address, and check their e-mail often. Instructors should stress that students who wish can e-mail the instructor about anything they feel compelled to. This could include questions about course content, personal issues that may result in missed class, etc. Perhaps the bottom line is that the instructor must

be approachable, and e-mail is just one of many ways in which students can contact the instructor. This becomes far more convenient for the student when it is realized that many students can even send e-mail from modern cell phones. In other words, e-mail allows the student to contact the instructor at any time. However, for this to work, it must again be stressed that the instructor must check e-mail frequently and acknowledge all e-mails received.

In addition to e-mail, instructors can enhance covenant management with online chat rooms. A major part of many classes is classroom discussion. It is during such discussion with adult students that much covenant management takes place. However, in recognition of the role-conflict suffered by many adult learners, the humanistic educator must realize that there will be times they miss class, not because they want to, but because they must. However, instructors who have access to such platforms as Blackboard may wish to utilize its chat room feature. For example, the instructor might schedule a one-hour optional chat session per week. Students who miss a class session during the week could make it up during this scheduled chat, during which both formal and informal discussion may occur. The formal discussion would involve the previous week's lectures, and the informal aspects would reinforce covenant management. The drawback to this is that it would likely have to occur on the instructor's own personal time, and students who might benefit from it may not be available at the time the chat is scheduled. Nevertheless, some instructors might find this useful.

Technology and Conduct Management

Iverson explains conduct management as "the facilitation of positive social-emotional-behavioral growth in children" (2003, p. 22). As the focus of this paper is the adult learner, conduct management is of only marginal interest. It should be pointed out that classroom rules should be explained on the first day of class, reiterated in the course syllabus, and, taking advantage of technology, posted online. Again, many community college instructors have access to Blackboard or some similar platform. Although these programs are designed for online courses, many schools make them available to traditional course instructors as well. Maintaining a Blackboard site for a face to face class literally amounts to having a class website. This is a great place to post the syllabus. Many students will invariably lose the one they are given on the first day of class, and thus lose their only copy of course rules and expectations. By posting the syllabus online to such a site, the student will never really lose it, or any other course materials the instructor wishes to post there.

Technology and Content Management

"Content management is occurring when teachers manage space, materials, equipment, the movement of people, and lessons" (Iverson, 2003, p. 22). When one considers this definition of content management, it may become apparent how a platform system such as Blackboard could facilitate greater use of space and materials, and even, perhaps, lessons. For example, as already stated, a class site on Blackboard is a good place to post the syllabus for an online class. Further, instructors who utilize a great number of handouts and other materials may also find it handy to post such materials to the site. Realizing that adult learners may find it necessary to miss class at times, this gives them ready access to materials they missed. Further, instructors who utilize programs like PowerPoint to present lessons can post these lecture slides to the course site as well. Students who miss an in-class lecture could simply review the slides and then participate in the optional chat room discussion envisioned earlier. This gives the student greater flexibility, allows for the same material to be covered, and still allows for real-time interaction with the instructor. Again, this will likely require the instructor to sacrifice some personal time. Nevertheless, it does present an option that many students and instructors alike will find attractive.

It should be pointed out that the use of PowerPoint slides in the classroom, as mentioned above, represents yet another facet of classroom management taking advantage of technology. This can be an important element of content management that addresses the needs of different learning styles. For example, if one considers Howard Gardner's Multiple Intelligences Theory, it becomes apparent that use of such slides will appeal to visual-spatial type learners, who like images and visual effects. PowerPoint and similar programs are uniquely capable of delivering such stimulation. Such slides can also feature the text from the lecturer's notes, which would appeal to verbal-linguistic learners, who enjoy being able to read material. In this way, technology is allowing the lecturers words, which would appeal to the interpersonal type learners, to reinforce the learning of other types of learners. It might also be

mentioned that use of such slides, and student access to them via Blackboard and similar platforms, could be invaluable to some ESL learners, who may not be able to digest information quickly enough during a traditional lecture. Coming full circle, the instructor who takes these extra steps will demonstrate a level of concern for the success of his or her adult learners that will foster trust, enthusiasm for the topic, better learning, and reinforced covenant management. Indeed, this may be viewed as an important example of the scaffolding we can provide our students by using technology. It should also be pointed out that a great deal of scaffolding exists on most college campuses today that is designed to help students better utilize technology. It can safely be assumed that most college campuses have computer labs, learning labs, and the like to help students learn to take advantage of the technological resources provided for them. Additionally, the staff of most academic libraries can be very helpful in getting novice students started in using a computer. Indeed, providing computer resources has become an important mission of many academic libraries today. Instructors should be aware of these resources and promote their use by students as well.

Finally, in regards to content management, it should be pointed out that if one accepts the humanistic position that educators must provide a supportive environment in order to promote the intellectual and spiritual growth of the student, those instructors that seek to suppress use of technology in the classroom are effectively seeking to put blinders on their students. For example, when instructors prohibit use of electronic sources, they are hindering their student's ability to grow, develop, and explore an important part of today's world.

Conclusions

In conclusion, there are indeed challenges and pitfalls in utilizing technology in community college classes. However, there are also great potential benefits. Advanced information technology is a fact of life in the 21st century. It cannot and should not be ignored. To do so is doing the student, who must be prepared for the modern and future workplace, a tremendous disservice. Further, to ignore or repress technology in collegiate level education is to push a dogma that many students will recognize as obsolete, and damage rapport with the student population. Such dogmatic or fearful thinking should not have been surprising twenty years ago, but its persistence into the 21st century should be viewed with some degree of alarm. There is no reason why technology cannot be utilized to some degree by instructors of virtually any discipline. It is not, and should not be perceived as a panacea to all students' needs and weaknesses, but it can be a tremendous tool. Not all students are likely to perform well in online or hybrid courses, and it is likely that there will always be a need for traditional, face to face classes. Some readers may feel that this paper is essentially espousing a move to the hybrid course. Such courses have designated mandatory online and face to face components. That, however, is not the case. Rather, this paper poses that traditional classes need not make use of online sources mandatory, but such resources should be an available option for the students who wish to take advantage of them. Further, the availability of such resources will likely prompt less technology savvy students to experiment with them a bit in a non-threatening environment. Instructors of traditional courses can borrow ideas from online and hybrid courses to enhance their own class, promoting skills that will benefit the students in the emerging information age.

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