

presents

# Distance Education: Are the Benefits Worth the Costs

## Audio Conference

## Wednesday, August 16, 2006

1:00 PM - 2:30 PM (Eastern) 12:00 PM - 1:30 PM (Central) 11:00 AM - 12:30 PM (Mountain) 10:00 AM - 11:30 AM (Pacific) (Times listed are daylight savings time)

Presented by:

## **Dr. Barry Willis**

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## **Dr. Barry Willis**

Dr. Barry Willis is Associate Dean for Outreach for the University of Idaho's College of Engineering and Professor of Education. In addition, Dr. Willis serves as the UI's Associate Vice President for Educational Outreach. Previously he served as the University of Alaska's Statewide Director of Distance Education, Associate Vice Chancellor for Distance Education/Academic Planning, and Director of Instructional Development. He has taught for Boston University, the University of Alaska-Fairbanks, Utah State University, and the University of Idaho.

Dr. Willis has authored two textbooks, "Distance Education: Strategies and Tools" and "Distance Education: A Practical Guide." In addition, he serves as Contributing Editor of the Journal of Educational Technology and is on the Editorial Board of *The American Journal of Distance Education*.























- 1. Factor in anticipated one-time and ongoing **costs** <u>before</u> proceeding
  - 1.1 I use a 20% "fudge factor"
- 2. Identify all "stakeholders" and identify strategies to insure that they all **benefit**















### THE BENEFITS/COSTS OF DISTANCE EDUCATION: ARE THE BENEFITS WORTH THE COSTS?

Barry Willis University of Idaho

By most measures, and under the best of circumstances, distance education is an expensive undertaking. This is an educational reality that's often lost in the headlong administrative rush to generate excitement and garner a larger share of diminishing education dollars. There is typically surprise when the reality slowly dawns on administrators and politicians alike that, first, not everyone is "sold" on the notion of distance education as a wise financial investment; and second, the "real" cost of delivering high quality programs at a distance is far more expensive than anyone ever imagined.

It seems that significant progress in both areas could be made by employing two relatively straightforward strategies:

- 1. Factor in all costs of doing distance education, both one-time and on-going, before making the decision about whether or not to develop a program.
- 2. Identify all stakeholders involved in the distance education enterprise at the outset, and insure that all benefit in an equitable, obvious, and indisputable way.

Let's begin by looking at these issues/strategies in greater detail.

#### The Cost of Distance Education

When analyzing the cost of providing distance education-related services, administrators tend to focus on one-time technology costs (e.g., computers, compressed video systems, servers), curriculum development/adaptation costs (i.e., instructional design), and faculty pay. While these are real and significant expenses that directly impact the distance education enterprise, they are just the tip of the iceberg. Other, equally real and constant costs include student and academic support, program administration, marketing, and research/development.

In a recent cost analysis of a distance education program delivering complete graduate degrees in engineering-related fields, Gaffney and Bancke (2003) totaled costs in these areas (including production/technology) and found that 37% of all program expenses were attributable to student and academic support services. Expense categories within this category included the coordination of the admission and registration process itself, and communication/coordination among various enterprises including financial aid, bookstore, library, Veteran's Services, Graduate Studies, etc. Other academic support-related functions included shipping materials, tracking homework and exams (including assignment of proctors), and verifying/processing course drops, refunds, incompletes, and extensions. An additional academic support category was oversight of the program web site including development, verification, and maintenance of program information, online formative/summative student evaluations; and development of "three-year course timelines" with academic department chairs.

The next largest cost category was technology and production services (i.e., 27%) which included all of the technological services that are normally associated with the production of distance delivered courses including technical development, editing, and duplication, as well as engineering/technical support, and all development, maintenance, and upgrading.

Program administration was the third largest cost category (i.e., 24%) which included reviewing and establishing new graduate programs, certificate initiatives, and short courses, as well as the review, evaluation, and updating of existing programs. Other administrative components included the development and tracking of program participation metrics, new faculty orientation, the scheduling of classrooms for course delivery and distribution, and the tracking and distribution of faculty/department incentives and royalties for program participants. An additional time consuming function entailed the development, review, and constant updating of the myriad policies needed to integrate distant and more traditional forms of program delivery within the institutional bureaucracy.

Marketing support came in at 7% of total program costs and focused primarily on the establishment and maintenance of a high-profile, high-quality web site, including identifying new "search engines" for inclusion and site updating to maximize the number of "hits" by prospective students. Other marketing related efforts include direct mail campaigns, the development/distribution of program catalogs, brochures, and flyers, and placement in selected distance education "guidebooks." On-going marketing efforts include attending selected "education fairs" sponsored by corporate entities and the development of the print-based semester course catalogs to complement the program's strong web presence.

Overall program research and development (R&D) came in at 5% of total expenses and included the exploration of alternative hardware/software delivery formats, including the evaluation and testing of new equipment. Other R&D expenses included the exploration of new program content areas, and the review and refinement of the various processes needed to keep a distance education program competitive.

In summarizing this cost category analysis, it's striking that the vast majority of these expenses are on-going and necessary if the program is to be constantly evolving and relevant. Equally striking is the relatively small cost component (i.e., 27%) attributable to production and technology, even though the program reviewed is in the midst of transitioning from videotape course delivery to DVD/web-supported delivery.

#### **Identifying and Serving Stakeholders**

It takes a large cast of characters to bring long-term success to any distance education program. In addition to the faculty who deliver the instruction, there is typically instructional design/graphic support and the technical support/telecommunication infrastructure that needs to be developed and maintained. Other stakeholders include the academic department that sponsors the distance delivered course/program and the umbrella campus outreach organization that oversees and administers all distributed learning activities.

Until recently, and on a national level, there has been a collective amnesia allowing the true costs of delivering and supporting distance education to go unnoticed. It seemed that almost everyone was enthusiastic about the potential of this ever evolving form of delivery. Even typically skeptical faculty were intrigued by the potential time-savings that were attainable once courses were delivered and available in web-based/supported formats. The same went for university administrators who saw dollar signs and the need to create "for profit" educational entities to deal

with the riches that were sure to result from the technological revolution. Even those managing the instructional technology infrastructure seemed willing to temporarily ignore the accumulating expense that came with the demands for more bandwidth, server space, site licenses, and technical support.

It appears that those days are quickly coming to an end. We are rapidly burning out our "early adopter" faculty. Having gone through the process of developing technology-based courses and suffering the slings and arrows of students, colleagues, and academic administrators who have shown little understanding of the time commitment inherent in "delivering" (not just developing) web-based courses, many are crying "enough!" The once isolated demands for fair compensation in the form of financial and load-reducing incentives are growing. Since many of these earliest risk takers are also the best and brightest academic faculty, we are now faced with the secondary effects of this lack of encouragement and support, namely, a diminishing pool of faculty willing to give distance education a try. This is compounded by the fact that "early adopter" faculty are typically department mentors, whom newer faculty rely on for guidance and inspiration. If our best faculty are demoralized with the lack of incentives and technical support services offered by the institution, they will pass this frustration on to the newcomers who will be loath to take on these burdens if their faculty mentors aren't enthusiastic and supportive.

Like most seemingly complex problems, the solutions might be more obvious then one might initially expect, including:

- 1. Focus on niche programs where a verifiable market exists for the programs you'd like to deliver at a distance. Before proceeding, be confident your target market is willing to pay the full price of program development, delivery, and evolution. No institution, or distance education program, can be all things to all people. Those offering too many programs that target too many different audiences typically end up serving everyone poorly, until they become irrelevant and go out of business.
- 2. Understand who your competition is....and isn't. Public institutions historically view their competition as the other in-state institutions they compete with for diminishing state dollars. It is natural, but misguided, to view distance education competition in the same manner. Rather than waste needless energy and political capital going head-to-head with the school down the road, realize that the global reach of the Internet and other technology-based delivery systems render state lines and politically motivated "service area boundaries" meaningless.

Instead, think globally. After all, that's what the students you hope to serve are doing. What are the needs and expectations of these students and what can you do better than the competition...regardless of geographic location? Answer that question and your program will be a success.

3. Beware of public education administrators who offer distance education programs with the primary aim of making money. Most educational institutions have a tough enough time making ends meet in the slower-paced (and more forgiving) world of the "non-profits." Leave the "for-profit" competition to venture capitalists and business-types who don't get weak-kneed after a few years of losing money. If your business plan can't absorb several years of losses before breaking even, you probably should stick with the much needed, but less financially competitive world of the "not-for-profits."

This brings to mind a recent *Chronicle of Higher Education* article reporting on the latest closing of a higher education "for profit" online learning consortium. After two years of operation and an investment of \$14.9 million that earned \$700,000 in fees, the chief executive officer of this educational enterprise was quoted as saying, "The reality is, we're going out on a high. We've outlasted nearly everybody" (Carlson, 2003). You can bet a reality check is needed when losing \$14 million can be spun into a "positive."

4. Track the real costs of technical program support and infrastructure and realize at the outset that whoever is paying the bill will need to be reimbursed. Avoid the temptation to shield users and administrators from the technical costs of program implementation. This is typically done in the false hope that cost consciousness will diminish as enthusiasm builds. As was stated in the first sentence of this piece, "...distance education is an expensive undertaking." Better to look at the real costs of this endeavor before committing to its pursuit.

We end where we began: "...Are the benefits of distance education worth the costs?" The answer is simple...and complex. When it comes to publicly funded institutions of higher learning, distance education should be about increasing access, not making money. If your institution can meet the needs of these previously under-served students at a distance, cover the full cost of academic and technical support, while providing adequate rewards and incentives to all who contribute to program success, the answer is a resounding "Yes." If not, save your money, energy, and enthusiasm for other enterprises that will serve the needs of your students...without breaking the bank.

#### References

- 1. CARLSON, S. (2003). *After losing millions, Columbia U. will close online-learning venture,* Chronicle of Higher Education, 49(19), A1.
- 2. GAFFNEY, T., BANCKE, D. (2003). Services provided in support of engineering outreach programs, University of Idaho, Moscow.

#### Author

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#### **CASE STUDY**

## **Distance Education Services and Related Costs**

\*Estimated costs per category were calculated on 03/28/05 for entire FY06, based on estimated 850 enrollments of 3 cr hrs each

#### **Contributions to Central Administration (taxes?)**

*Estimated cost of incentives and contributions:	\$482,725
32% of total expenses	

On a yearly basis, the program financially supports the institution in a number of categories.

•	Provide departmental/faculty incentives:	\$165,000
•	Provide royalties to faculty for course sales:	\$ 1,000
•	Provide administrative support for university outreach activities:	\$ 41,215
•	Contribute university outreach fees from student fee revenues:	\$ 99,700
•	Contribute university facility fees from student fee revenues:	\$ 59,130
•	Contribute general administrative fees:	\$ 43,080
•	Contribute support to the college through administrative budget holdbacks:	<u>\$ 73,600</u>
	Total	\$482,725

#### **Technology & Production Services**

\*Estimated cost of services: \$360,498 \$424 per 3-credit enrollment \$141 per credit hour 24% of total expenses

- · Produce and duplicate regular semester-length credit courses in DVD and online formats
- Produce and duplicate short courses on DVD and CD
- Provide technical assistance and training to instructors
- Maintain a media library of courses produced
- Provide field production for remote instructional labs and field trips
- · Provide DVD editing with linear and non-linear capabilities
- Provide DVD duplication for instructors
- Monitor all aspects of audio/video/DVD/CD production for quality control
- · Provide engineering support and equipment maintenance for studio classrooms
- Provide equipment and installation for studios and classrooms
- Provide assistance with construction of studio/classroom facilities
- · Operate a routable compressed digital video codec connected to digital video network

#### **Administrative Support Services**

\*Estimated cost of services: \$269,095 \$317 per 3-credit enrollment \$106 per credit hour 18% of total expenses

- · Coordinate implementation of new outreach programs/courses
- Review and evaluate existing programs
- Schedule courses in studio classrooms for production
- Provide orientation for new instructors
- Coordinate accounts receivables for course fees, including third-party billings
- Coordinate internal procedures for certificates
- · Provide trend lines and statistical analysis of enrollment data for academic units

#### **Student & Academic Support Services**

\*Estimated cost of services: \$258,526 \$304 per 3-credit enrollment \$101 per credit hour (includes faculty incentives) 17% of total expenses

- Provide prompt, knowledgeable, and consistent information by phone, email, and the Internet
- Coordinate admission, registration, and other related processes
- Provide a toll-free telephone number for student access to instructors and on-campus student services
- Facilitate communication between students, instructors, and university departments and services
  - $\nabla$ Admissions
- ☑ College of Graduate Studies
- $\checkmark$ Financial Aid  $\mathbf{\nabla}$ Registrar
- ☑ Bookstore

- ☑ Veterans' Services  $\mathbf{\nabla}$ Student Disability Services
- ☑ Library
- ☑ Computer Help Desk
- Coordinate process for status changes, incomplete grades, and petitions
- Duplicate course media and distribute
- Scan and post course handouts and record shipping information on the Web
- Coordinate the examination process, including verification of proctors, exam distribution, delivering exams to instructors, returning graded exams to students, and tracking
- Process homework and projects to/from instructors and return graded materials to students
- Provide information on the Web about degree programs and courses offered, including:
  - Degree information and three-year course timelines
  - Course information and syllabus
  - $\mathcal{T}$  Coordination with instructors for provision of quality course Web sites
  - $\checkmark$  Contact information for advisers, instructors, and departments
  - Tormative/summative student evaluations
- Provide technical support for courses containing online elements

#### **Marketing Services**

\*Estimated cost of services: \$82.118 **\$98 per 3-credit enrollment** \$33 per credit hour 5% of total expenses

- Maintain a high-profile, high-quality Web site
- Provide first contact by phone and email for prospective students
- Produce print and online flyers for degree programs, certificates, and short courses
- Produce semester course offerings catalog, in print and online
- Coordinate direct mailing projects, including obtaining and compiling lists
- Provide distance education strategies with online series titled: Distance Education at a Glance
- Participate at education fairs at regional corporate and U.S. military locations
- List programs and courses on major search engines and major distance education Web sites

#### **Research & Development**

- \*Estimated cost of services: \$59.075 \$70 per 3-credit enrollment \$23 per credit hour 4% of total expenses
- Design and develop short courses and online student orientation
- Research new technologies, products, and equipment
- Design and develop studio/classroom facilities
- Research and develop ideas for new programs
- Test and edit new formats for course delivery
- Improve and develop processes
- Attend relevant conferences to maintain current knowledge of DE best practices

7/20/2006

## **Distance Education's Best Kept Secrets**

Barry Willis, Professor Associate Vice President – Educational Outreach Associate Dean for Outreach College of Engineering University of Idaho

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In a relatively short period of time, distance education and its offspring (e.g., web-supported instruction, videoconferencing, etc.) have been transformed from a quaint irrelevancy to a lightening rod for change on many university campuses.

Sherron and Boettcher (1997) suggest that the current rush to implement distance learning programs by colleges and universities is occurring for three major reasons:

- The convergence of communication and computing technologies,
- The need for information age workers to acquire new skills without interrupting their working lives for extended periods of time, and
- The need to reduce the cost of education.

These reasons and others have attracted hopeful politicians and others with minimal background and little previous interest to distance education. Others who view distance education as the Trojan Horse signaling "the commodification of higher education" have been equally moved by distance education for quite different reasons (see Noble, 1997, 1998, 1999). It is ironic that the politicians who trumpet the benefits of distance education the loudest know relatively little about it, while those who see a dark side to the use of educational technology feel quite comfortable using the Web and related media to espouse their views.

Irony aside, the accompanying claims of what distance education can and can't, should and shouldn't do, have resulted in an ever-widening gap between the rhetoric and reality of distance education. Closing this gap can be accelerated by thoughtfully considering what could be labeled "Distance Education's Best Kept Secrets":

1. Distance education is about increasing access, not making money. Those who look to distance education as a revenue-generating machine resulting in financial windfalls for their programs or departments are typically disappointed when they factor in the true costs of this endeavor (see Oppenheimer, 1997). These costs include hardware/software, system maintenance/upgrading, telecommunication charges, technical support, faculty/program development and evaluation, student support...and a myriad of personnel and infrastructure costs associated with these vital components and services. The importance of these critical costs and constant technological change usually necessitate the reinvestment of virtually all income generated by the enterprise. Those who take profits typically do so at the expense of needed upgrades with the potential risk of losing whatever market share they fought to win in the first place.

This is not to say that distance education is without its financial benefits. Many Land Grant institutions, for example, provide statewide educational programs and services. A few years ago, this could entail

chartering aircraft to fly faculty to remote outreach or extension centers in various locations served by the Land Grant Institution. Even today, it is not unusual for faculty to drive 200-300 miles a week to meet with students located far from campus. The costs of such enterprises in terms of time, energy, and faculty goodwill are excessive.

In contrast, the appropriate use of distance education can be cost effective...even if the end result isn't a financial windfall. What does result from the appropriate use of technology may be even more beneficial: the ability to grow the market for institutional programs and services, while proving the critical educational role the institution plays.

**2.** There is no technological "silver bullet." Every new technology is accompanied by its share of advocates proclaiming it to be the ultimate delivery tool promising to solve all instructional problems, even those yet to be identified. In reality, a poorly defined problem has an infinite number of solutions...we just never know which one is the most appropriate. Until instructional needs are understood in detail, any technology could be appropriate...or inappropriate.

Even those at the forefront of technological innovation, like Andrew Grove of Intel, candidly admit they are unsure where the future of technology will lead their companies (Grove, 1999). As a result, they invest heavily in marketing, research, and development in efforts to maintain their technological preeminence wherever the future might lead them.

For institutions without the research and development funding to invest in every potentially beneficial instructional delivery innovation, the best advice is to avoid technological solutions in search of instructional problems. Instead, focus on the requirements of the content being delivered, learner needs, tangible instructional opportunities (e.g., the need to train a computer literate cadre of highly motivated professionals), and potential obstacles (e.g., limited bandwidth to the locations you serve). Attend to these requirements and the most appropriate technological solutions will become apparent.

In this context, the primary benefit of the Web is not as a delivery system in and of itself, but as a standardized platform from which various technological solutions can be launched. Nevertheless, those who think the Web is the ultimate solution to all instructional problems should review the research literature of the 1950's stating the same thing...about the overhead projector.

**3.** The only constant in the world of instructional technology is change. Anticipating change and technological directions is always challenging and filled with uncertainty. Move too fast and your technological upgrade will be obsolete before it is fully implemented. Move too slowly and your programmatic market share could slip before you can catch up. Just as damaging, failure to innovate will signal your competition and potential markets that your program is no longer viable. In a world of technological change, timing is everything. Those who learn to embrace technological innovation when the timing is right will be the big winners. The rest will be left to fight over the crumbs.

**4. Lasting technological change is typically the result of evolution not revolution...**Over the past thirty years technological innovation has evolved in a fairly consistent manner. This process could be referred to as technological birth, death, and resurrection. In the "birth" stage, new technologies emerge, unrealistic expectations are set, and the potential impact of the new tool is over-hyped. In the "death" stage, the original outspoken advocates move on to the next innovation and general enthusiasm fades as the realities of what the new technology can and can't do emerge. In the "resurrection" stage, thoughtful reflection occurs as the new technology is tested in various, often random, instructional settings. While the technological innovation is found inadequate in most applications, it proves beneficial in addressing a limited number of very specific needs.

Over time, the once proclaimed technological cure-all takes its place among other teaching tools and fades from the forefront of technological innovation...into the hands of those who can put the benefits of the technology to best use.

**5.** The emphasis of distance education should be in the quality of the academic program, not in the use of technology. Selecting technology is easy compared to the focused attention and subtle insights needed to design, develop, and implement a truly effective academic program. Successful program administrators spend adequate time and resources to nurture and support creative and concerned faculty who are willing to take the leap of faith required to be successful in the distance education enterprise.

Instructional delivery experiences that rely almost solely on technology (e.g., first generation web-based courses) with little apparent influence and day-to-day involvement of a thoughtful and skilled teacher may generate initial student interest. Without adequate course design, focused faculty attention, and student readiness, however, there may be little hope for the overall instructional program, or the promise it originally offered.

**6.** There is no glory in managing instructional technology. You'd think there would be, but there isn't. Keeping up with technology is a never ending battle filled with unmet expectations, too few resources, and the need to constantly plan ahead realizing that the technology that you are implementing today is likely already dated and on the road to obsolescence.

The best that can be said about the management of technology is that someone has to do it...and do it right. Without exceptional management skills and a thick skin, the implementation of technology is an impossible task that gives those involved the illusion that they are in control, when in reality they are at the mercy of technological innovations that don't exist today, but will be demanded tomorrow.

#### 7. Learning is enhanced when technology is used to directly link students to other

**students.** The lack of effective and personalized student-student interaction and feedback is the potential "Achilles heel" of distance education. Conversely, the need for effective distant student-student interaction provides a great opportunity to creatively use technology. In fact, whether it is teacher-to-student or student-to-student interaction, learning is enhanced when technology is used to improve communication (see Flottemesch, 1999).

In my experience, effective instruction almost always requires that a fully engaged teacher establish the learning framework, even when the target audience consists of highly motivated adults. Also of critical importance is the learning that takes place when students are linked to other students...without any teacher present. Given the inherent separation that is evident in most distant learning environments, it is difficult for many students to maintain any continuing connection to the instructional context, let alone the content being presented in any given course. By creating learning spaces and technological linkages that bring distant students together as groups and as individuals, the gaps between what is being taught and what is being learned can often be bridged (see Wallace & Weiner, 1998).

# **8.** Face-to-face instruction is still a valid delivery method in support of distance delivered courses...when possible. Many assume that there is no need for face-to-face instruction in distance delivered courses. That is why many get involved with distance education in the first place...to avoid the "real time" constraints of face-to-face contact. Still, some of the best distance delivered courses have well-integrated components in which teachers meet directly with students, either individually, in small groups, or with the entire class. If personal interaction among the teacher and students is deemed an important course component, it is critical to meet as a group as early in the semester as possible. Experienced distance education faculty report that the student comfort level in using technology

increases significantly if the students and instructor meet early in the course and develop a personal working relationship.

Depending on where the course is being delivered, it may be physically impossible to bring the teacher and students together. Nevertheless, it is better to rule out personal contact as impractical or instructionally irrelevant than it is to fail considering it in the first place. When the logistics can be successfully navigated, teachers and students alike are rewarded by well-planned and highly interactive face-to-face contact.

**9. Many faculty are comfortable when distant students from other institutions take their classes, but don't like their students taking classes from faculty at other institutions.** This is a major stumbling block to cooperative distance education ventures and has limited the success of strategic partnerships relying on the sharing of faculty expertise. The best partnerships are forged when specific academic needs are identified *and* on-campus expertise is absent. In these cases, competition is not a factor and both sending and receiving institutions benefit. Despite being a major institutional and political motivator for the initial start-up of distance education efforts, true academic alliances have proven elusive and are the exception, not the rule.

Until the culture of course "ownership" moderates and the "not invented here" syndrome fades, wide scale institutional cooperation will be more a goal than a reality.

#### In Summary...

At its core, distance education is a change process, not a delivery system and historically higher education culture has proven resistant to change. Perhaps the greatest benefit of distance education is its potential role as a catalyst for adapting the way educational institutions do business. In a relatively short span of years, the proliferation of programs and services available at a distance have resulted in a heightened sense of competitiveness unheard of in higher education. For institutions that are up to the challenge, the current interest and growth in distance learning presents a new opportunity.

Although the dangers of competing and failing in this new world of educational access may pose significant problems, the refusal to look ahead, take calculated risks, and move forward may be the greatest risk of all.

#### References

Flottemesch, K. (1999). Building effective interaction in distance education. *Educational Technology Journal*, (In Press).

Grove, Andrew (1999). Charlie Rose Television Interview, Program #2407, Bloomberg Television. New York City, NY.

Noble, D.L. (1997). Digital diploma mills, part 1: The automation of higher education. <u>http://communication.ucsd.edu/dl/ddm1.html</u>

Noble, D.L. (1998). Digital diploma mills, part 2: The coming battle over online instruction. <u>http://communication.ucsd.edu/dl/ddm2.html</u>

Noble, D.L (1999). Digital diploma mills, part 4: Rehearsal for the Revolution. <u>http://communication.ucsd.edu/dl/ddm4/html</u>

Openheimer, T. (1997). The computer delusion. *The Atlantic Monthly*, 280 (1), 45-62. <u>http://www.theatlantic.com/issues/97jul/computer.htm</u>

Sherron, G.T. & Boettcher, J.V. (1997). Distance learning: The shift to interactivity. CAUSE Professional Paper Series, #17. Boulder, CO.

Wallace, D.R., & Wiener, S.T. (1998). How might classroom time be used given WWW-based lectures? *Journal of Engineering Education*, 87 (3), 237-248

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