

Distance Education

Guidelines for Good Practice

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Introduction

THE TERM DISTANCE EDUCATION IS commonly used to describe courses in which nearly all the interaction between the teacher and student takes place electronically. Electronic communication may take the form of audio, video, e-mail, chat, teleconferencing, and, increasingly, the Internet. Distance education courses range from short-term training workshops to undergraduate and graduate programs for college credit.

Distance education courses for academic credit have been expanding dramatically at colleges and universities. To cite just one example, in just three years—from 1995 to 1998—the use of Internet-based courses grew from 22 percent of institutions to 60 percent. A National Center for Education Statistics (NCES) survey estimated that more than 1.6 million students were enrolled in distance education courses in 1997–98. Proponents of distance education point out that the practice may allow learning to reach thousands or even millions more people on an “anytime anywhere” basis. This applies especially to potential students who are homebound or physically remote from a college campus, as well as students who find it extremely difficult to fit their family and work responsibilities into a traditional academic schedule.

Observers point to numerous case studies indicating comparable student performance in distance education courses. Proponents maintain that distance education is better able to foster independent study—that it is preferable to move the faculty member, as they often say, from a “sage on the stage” to a “guide on the side.”

Still, a good number of educators remain skeptical. Believing that teaching and learning are

inherently social processes, these educators consider “same-time same-place” interaction central to a successful educational experience. Pointing to shortcomings in the research on distance education (see the 1999 AFT/NEA sponsored report, *What’s the Difference?* [Institute for Higher Education Policy]), skeptics cite a variety of concerns, among them:

- Whether deep understanding of difficult material—beyond amassing facts—can occur in the absence of same-time same-place interaction;
- Whether distance education may be ineffective for certain types of subjects and students, leading to higher dropout rates;
- Whether needed equipment, training and technical support is reaching distance education students and faculty; and
- Whether limitations on the availability of library and learning materials impair distance education courses.

AFT has long been active in distance education. In 1996, the union released its first report on the subject, *Teaming up with Technology*, which urged higher education unions to become involved in a host of distance education issues on their campuses, from cost and workload to intellectual property and educational quality. Follow-up reports have appeared since then. AFT has also been a leading figure in policy debates about distance education, arguing that educational quality, not financial gain, should guide where, when and how distance education is employed.

This report constitutes the next step in the AFT’s involvement. In the fall 1999 academic term, the union surveyed 200 members of AFT higher education locals who are themselves practitioners of distance education. These practi-

tioners taught distance education courses in every major academic area and delivery mode (the largest type being Web based.) The vast majority had taught equivalent on-campus classes. A summary of the survey results, along with selected individual responses, appears at the end of this report.

Drawing in large part on these responses, as well as scholarship on distance education and the advice of AFT's higher education program and policy council in the 1999-2000 academic year, this report presents a set of guidelines for good practice in distance education. These guidelines—drawn from what we know today amid a constantly changing landscape—are not in any way designed to be the “last word” on the subject. We have attempted to make our standards high without being unattainable, specific without being rigid. We have also tried to go “deeper” than a number of other guidelines we have reviewed.

For example, many existing standards of good practice state that there should be a high level of interchange between the professor and the student. That is true, but the really important question is: What specific things do we need to do, what do we need to put into place to have what we’re willing to call a “high level of interchange”? And what are we willing to do about a course if we do not have the appropriate level of interchange? Frankly, we are concerned about good practice guidelines being applauded at their inception and then ignored whenever it becomes inconvenient to stick by them. If these guidelines have validity, administrators and faculty members must be willing to say “no” to practices that violate good practice.

We hope that the following guidelines will assist faculty members teaching, or preparing to teach, distance education courses, as well as higher education locals negotiating distance education issues with management. We also hope the guidelines will be useful to college administrators and public officials who want to put quality at the center of their technology programs, as well as other organizations around the country

who are attempting, as are we, to shape new media of instruction in constructive ways.

In that vein, we want to note at the outset that **the practitioners responding to our survey overwhelmingly indicated that we should move forward with distance education:** 169 (of the 200 respondents) said they would teach by distance education again, while only 31 said they would not. These respondents reported that students who successfully completed their distance education courses performed the same (109) or better (55) than students in comparable courses that they taught in the traditional classroom did. Reviewing the responses, it is also clear that faculty members teaching distance education courses are serious, gifted instructors utilizing every means they can to serve their students. Most practitioners believe they are successful in their distance education classes when they are given the proper time, tools and training, and when they have mature, highly motivated students with appropriate equipment and training. At the same time, the responses pointed to circumstances under which distance education seemed problematic. Our standards embody both these themes.

Also, please note that many of the points embodied in the upcoming pages may have applicability to all types of distance education—from job and skill training to undergraduate and graduate credit programs—because they are simply about good teaching. Our primary focus—encompassing the special expertise of our higher education membership—is on distance education in college credit-bearing degree programs: two-year, four-year, and graduate.

Finally, these standards apply equally to public, private, non-profit, and for-profit educational providers. In our view, for-profit providers warrant a higher level of scrutiny because the commercial marketplace creates special incentives to cater to the consumer’s desire for ease and convenience rather than academic rigor. For-profit enterprises that meet the guidelines of good practice, however, deserve their place at the table.

The Standards

1. Faculty Must Retain Academic Control

■ **To receive college credit, distance learning courses offered by the institution should be reviewed and approved in advance by the faculty.** Review is necessary even when changing a course from a classroom mode to a distance learning mode. Faculty do not always make perfect decisions, but their choices are much likelier to be based primarily on educational concerns aimed at student learning rather than market incentives that elevate convenience, attractiveness and digestibility above all else.

■ **Decisions about particular courses should be made at the departmental or interdepartmental level,** including the decision to award credit for distance courses generated by transfer from another institution or provider.

■ **Distance education courses for credit should be taught by faculty appointed and evaluated through traditional processes involving the faculty and the department.**

■ **Teaching and research faculty, not just “curriculum specialists,” must be involved in developing the curriculum.** A number of studies (see, among others, Classroom Research, K. Patricia Cross and Mimi Harris Steadman, 1996) have demonstrated the importance to student learning of establishing a feedback loop between classroom teaching, curriculum devel-

opment and scholarly research. That loop becomes inoperative when teaching faculty operate from workbooks based on a prefabricated curriculum that the faculty member had little role in developing, a curriculum that was not shaped directly by the practitioner’s experience in teaching these classes or conducting research on these subjects. Students deserve teachers who know all the nuances of what they are teaching and who can exercise professional judgement and academic freedom in doing so.

2. Faculty Must Be Prepared To Meet the Special Requirements of Teaching at a Distance

BACKGROUND

Faculty teaching distance education courses must become proficient in the communications technology employed in their distance education courses. They must be prepared—either on their own or working in teams with other specialists—to design courses that take full advantage of the potential of the medium in which they are operating. Faculty teaching Web based courses must possess strategies and skills to communicate with their students electronically in the absence of visual and oral cues.

As a result, faculty teaching distance education should be prepared to spend a good deal more time preparing for distance courses than traditional ones. Almost uniformly, practitioners responding to our survey emphasized that the

preparation time for distance learning courses is much greater than for a classroom-based course, particularly the first time the course is offered by the faculty member. Faculty members teaching Web based courses, for example, must prepare, in advance, highly structured written materials and graphics covering every detail of the course. Some estimates range anywhere from 66 percent to 500 percent longer.

Similarly, once the course is under way, faculty must be prepared to be available to students on an extended basis electronically. Again and again, practitioners report that it takes considerably more time to communicate with students electronically. In addition, faculty members must keep up with the odd hours many distance education students have to devote to their coursework and the more tenuous connection many of them have to the institution. For example, to reduce potential attrition, a number of practitioners reported that faculty must answer questions right away, grade papers very quickly, and follow up with students within a week or two if they are not participating in class.

REQUIRED SUPPORTS

To handle these responsibilities effectively:

■ **Faculty must be provided adequate training and technical support—in terms of hardware, software and troubleshooting.** The importance of adequate technical support was emphasized repeatedly by faculty in the field. Support should include special assistance in instructional design. Upon request, the institution must enable faculty members to work with knowledgeable instructional and technical design specialists in designing courses as long as the faculty member has the final say about presentation.

■ **Additional compensation should be provided to faculty to meet the extensive time commitments of distance education.** Despite the clear demand for extra preparation time and the increased time commitment of e-mail, only half of respondents reported that they had received any form of compensation for the additional time required.

Compensation can be provided in the form of credit toward load assignment, which means that

the additional time counts toward the faculty member's required workload for the term. The need for extra time is most pressing the first year, but that may not be the end of it. The report of the 1999 University of Illinois Distance Education Seminar indicates that the second iteration of an on-line course may require as much time and effort in making improvements as the first required in changing format. "It is not until the third iteration that the preparation effort begins to diminish," according to the Seminar report.

- **Institutional reward systems for faculty—** including policies regarding promotion, tenure and special funding for faculty projects—**should accord positive recognition for the creative work of formulating distance programs.**
- Because distance education calls on a specialized set of skills, **teaching distance education courses should be a matter of faculty choice.**

3. Course Design Should Be Shaped to the Potentials of the Medium

BACKGROUND

As we all know, live theatre is a special experience that delivers a unique brand of emotional impact. In most cases, however, live theatre looks claustrophobic and strangely inert when it is filmed "straight on," without the camera moving among different locations, doing close-ups and engaging in its own special tricks. This tells us that you can't "do" film the same way you do a live performance. Each medium has its own strengths and weaknesses and can deliver different kinds of dramatic experiences.

The literature on distance education suggests a similar relationship between same-time same-place instruction and distance education. It may not always be effective to simply transfer a live lecture and accompanying course materials into an electronic course on the same subject.

Similarly, faculty members who try to literally "match" traditional classroom interaction with the kind of interaction available in a distance education course may well be frustrated and disappointed.

Same-time same-place instruction and distance education each have their own pluses and minuses, and each have their own potential to deliver certain kinds of learning. As noted by Professor Andrew Feenberg of San Diego State University, "Writing is not a poor substitute for physical presence and speech, but another fundamental medium of expression with its own properties and powers. The on-line environment is essentially a space for written interaction. This is its limitation and potential. Electronic networks should be appropriated with this in mind and not turned into poor copies of the face-to-face classroom that they can never reproduce adequately." In short:

STANDARDS

■ **Faculty members developing distance education courses should approach course design—curriculum planning, class projects, visual aids, library materials and student interaction—not in terms of replicating the traditional classroom, but in terms of maximizing the potential of the medium that will be employed.** This harkens back to the importance of substantial technical support.

4. Students Must Fully Understand Course Requirements and Be Prepared To Succeed

BACKGROUND

Over all, the survey respondents rated the performance of distance education students about the same (54 percent) or better (27 percent) than their classroom-based students. At the same time, a substantial proportion (over 42 percent) reported higher dropout rates in their distance education courses.

Over 85 percent of the respondents reported that particular kinds of students perform better in distance education than others. Many noted that successful distance education students need to be highly motivated, and found the practice more problematic for younger, less-motivated students. Some emphasized that distance education students must have strong written communication skills; that cyberspace coursework may be more difficult for students whose personal learning styles depend heavily on visual and verbal cues. Finally, many respondents stressed the importance of students receiving good advance information; too many students, they believe, begin distance education courses under a false impression that they are easier and less time consuming than traditional courses.

STANDARDS

In light of these findings, every institution, as a matter of good practice, should have procedures in place to ensure, to the extent possible, that new distance education students have the wherewithal to perform successfully.

■ **All first-time distance education students should be given a clear statement of course requirements in advance.** This should include: (1) all course requirements; (2) the weekly time commitment and specific computer skills required by the course; and (3) a presentation of the practical difficulties of working at a distance and what is needed to manage those challenges successfully. This information must be provided either in written form or through a same-time same-place video or Internet-based orientation program.

■ **In response, before the course begins, students should be required to submit a written statement to the institution delivered electronically.** As little as a paragraph or two explaining the student's aims, the statement would be designed to demonstrate: (1) that the student possesses the proper equipment and knows how to make it work; (2) that the student has the skills needed to perform effectively in a writing-based medium; and (3) that the student has motivation and realistic expectations.

■ **If potential problems surface in the student's response, training in advance of the**

course must be provided to those who have the appropriate equipment but do not know how to use it properly, and advice should be offered to students who appear to have problems with written communication skills or motivation.

- **Students require reliable, extended-time technical support throughout the course.** In all course materials, institutions should specify the nature and extent of technical support to be provided. A telephone contact number for technical support is essential, with as many hours of availability as is feasible.
- Since distance education will not suit every student, **states and localities are obligated to ensure that no one is offered distance education as his or her only option for obtaining a college education.** There could be no worse result than a two-tier system directing less affluent students to distance education while the socializing and networking benefits of on-campus education remain largely the preserve of the affluent. Anyone who meets institutional admissions standards should not be barred from obtaining access to a campus.

5. Close Personal Interaction Must Be Maintained

BACKGROUND

Almost everyone agrees that the most important challenge facing distance education is the need to develop a rich level of personal interchange between professor and student and among students themselves. Respondents to the AFT survey went to great lengths to maintain communication with their distance education students, utilizing, among other things, e-mail, electronic discussion groups, telephone, mail, fax and audio/video conferencing. In about a third of the cases, students were required to come to the campus or the faculty member met with stu-

dents off campus at least once during the course.

Practitioners using interactive TV frequently cited problems in maintaining interaction with students, often based on the limitations of the technology that was available to them. On the other hand, Web based courses received generally higher marks from those who taught them. Many practitioners maintain that in-depth interaction with students over the Web is actually stronger than in traditional classrooms. Others, however, felt that the loss of immediate visual and verbal interaction undermined the advantages of Web based coursework.

Specific positives cited by respondents: Web based communication provokes more thoughtful answers on the part of students. Some students feel more immediacy of feedback. Some faculty members believed that less aggressive students did better in a Web based setting; others disagreed. Often-cited negatives: There is a high learning curve for both teachers and students in getting cues right when there is no eye contact. It is harder to tell if students understand when you can't see "the light bulb go on." Distance education is too dependent on equipment functioning properly. It is harder to catch cheating. It may not be as effective for students with written communication deficits.

STANDARDS

- **To maximize communication electronically, distance learning courses should, to the greatest extent possible, incorporate both:**
 - real-time electronic interchange** through devices such as chat rooms and discussion groups; and:
 - asynchronous forms of communication** such as e-mail and computer bulletin boards.
- **Wherever it is feasible, opportunities for same-time same-place interchange between the teacher and student, or among students, should be built into credit courses taught at a distance.** Many distance education students are not too far from the college campus to visit from time to time, and it is not uncommon for their instructors to arrange group meetings once or twice a term. Teachers also arrange meetings of some students at remote sites such as another campus, library or community center. Evening

and weekend time can be employed. Of course, exceptions are in order for homebound or truly isolated students or in cases where literally no students or professors are near enough to travel to one another.

Why do we emphasize the necessity of same-time same-place interaction? First, because we believe there is something unique and important about the simultaneous visual and verbal interaction of individuals in the same place working together toward a common educational goal. Second, we place a high value on same-time same-place interaction because it permits students to connect directly to the resources of the campus—from classrooms, laboratories and libraries to social and performance spaces. Access anytime/anywhere is a great advantage, but a campus visit helps each student to understand that he or she is part of a learning enterprise greater than this one course. On-campus students are surrounded with those reminders each day, motivators that enrich them as they make their way through an academic program.

Distance Education recommended smaller faculty-student ratios in distance education because there is so much information to be monitored. Most of the practitioners we consulted, however, did not endorse such a hard-and-fast rule.

STANDARDS

- **Class size should be established through normal faculty channels** to insure that educational rather than bureaucratic or financial considerations drive the process.
- **Class size should encourage a high degree of interactivity.** Given the time commitment involved in teaching through distance education, smaller class size should be considered, particularly at the inception of a new course.

6. Class Size Should Be Set through Normal Faculty Channels

BACKGROUND

We have seen how strongly practitioners feel about the need for very extensive preparation time in distance education courses. We have also seen that most distance education courses require more time for personal interaction. The question of class size for distance education courses must be seen in that light.

About a third of our survey respondents taught classes of fewer than 20; over half taught classes of 20 to 50 students. Less than a tenth taught classes of more than 50, and only a few taught classes of more than 100. The 1999 report of the University of Illinois Faculty Seminar on

7. Courses Should Cover All Material

BACKGROUND

Based on the earlier findings, it is not surprising that some respondents to our survey reported difficulty in covering as much material, including laboratories and practica, in the same amount of time through distance education compared with traditional classroom. Factors such as the slowness of interactive TV transmission and the need to rely on written communication in Web based courses all contribute to this.

STANDARDS

- **The amount of material covered in a distance education course, and the depth with which it is covered, should equal that of a classroom-based course.**

8. Experimentation with a Broad Variety of Subjects Should Be Encouraged

BACKGROUND

Some faculty members have more difficulty teaching certain subjects at a distance than others do. For example, one survey respondent cited Spanish as a problem; another cited theoretical philosophy. Some, but not all, faculty members have been unable to incorporate laboratories and practica into a distance mode. That said, however, there is not sufficient evidence to believe that distance education can be ruled out, *a priori*, for any particular kind of credit course. If a faculty member is having a problem with a particular course, another professor in another location may be fixing that problem right now; there is no reason to declare most problems unsolvable under the right conditions. Similarly, the weight of the evidence is that higher-order thinking skills, as opposed to rote training, can be acquired in distance education.

STANDARDS

- Thus, **experimentation in offering a variety of subjects through distance education should be encouraged.** Some faculty members report success in supervising real or virtual laboratory activities, and even practica, at a distance. However, “hands-on” activities of this nature should be reviewed very carefully by the department faculty prior to approval.
- **Institutions should not continue to offer courses that have been unsuccessful.** If attrition rates are high or test scores are low, or if the teacher reports disappointing results, the faculty should declare a “time out” during which a careful evaluation is conducted, along with an exploration of successful learning techniques employed elsewhere. If the faculty determines that problems have been overcome, the course can be re-instituted.

9. Equivalent Research Opportunities Must Be Provided

BACKGROUND

To a varying extent, all college degree programs—whether two-year, four-year, or graduate—must provide numerous and varied opportunities for students to conduct independent research. Students need to have access to a broad spectrum of research materials in all formats and to learn how to evaluate such material critically. This requires a partnership between faculty and librarians, working together, to develop in students “information literacy”—competencies that allow individuals to recognize when information is needed and to locate and use effectively the needed information. As has often been reported, the ability to critically evaluate material is especially important in light of the mass of seemingly authoritative, but sometimes bogus, material seen on the Internet.

In general, the distance education practitioners responding to our survey felt that their students had adequate access to informational materials. Many of them worked hard to prepare packages of materials for all students, and some offered students extensive information about online materials.

STANDARDS

- **Opportunities for distance education students to conduct independent course-related research must be substantially the same** as the opportunities provided to other students.
- **Distance education students should be given access to all possible electronic research material.** Students must be shown how to connect with online articles, books and catalogues at the college library or cooperating libraries. Students should be given the names, e-mail addresses and phone numbers of librarians trained to handle electronic requests for materials.

- For any course requiring independent research, as long as it is feasible, **distance education students should be expected to visit a campus or public library at least once** to confer with professional librarians and employ the variety of informational materials and professional resources available there.
- If there is no accessible location where a student can obtain needed hard copy research, and there is no online source, **the college should arrange, as some have, to get books and materials to students through overnight mail, either for sale or loan.** This is known as document delivery, although in many locations a quick turnover time cannot be expected.

10. Student Assessment Should Be Comparable

BACKGROUND

Two-thirds of the respondents indicated that they use the same criteria for grading their distance education courses as for their traditional courses. Some indicated they placed less reliance on tests in their distance education courses. Respondents were split about whether there should be greater concern in a distance education environment about security related to papers, tests, etc.

STANDARDS

- **The level of achievement expected of students, and tested for in a distance education environment, should be as challenging as that in a classroom-based course.** Again, differences in electronic and classroom educational techniques may dictate different forms of assessment or different emphases in assessment. But the overall standard of student achievement should be equivalent.
- **As a matter of prudence, steps should be taken to limit the possibility of fraud and**

abuse in a distance education environment.

- Whenever possible, it is preferable to bring students to one or more public places and utilize a proctor in administering exams. Eighty-four respondents indicated that tests were proctored; 64 said they were not.
- Colleges should follow the development of new electronic security technologies aimed at curbing fraud and utilize those that are effective and cost efficient.

11. Equivalent Advisement Opportunities Must Be Offered

- **Care must be taken to offer distance education students pursuing college degrees repeated opportunities for individualized advisement by academic professionals.** Same-time same-place advisement should be made available, particularly at key junctures in the student's academic career, but telephone contact is an acceptable alternative when that is not practicable.

12. Faculty Should Retain Creative Control over Use and Re-Use of Materials

BACKGROUND

Until now, faculty members have developed courses and course materials largely on their own. Since the faculty member taught any further iteration of the course, he or she effectively maintained control over subsequent changes in course materials and the overall quality of the presentation.

Courses developed for distance education may differ from this model in a variety of ways:

- The faculty member may have worked in col-

laboration with other institutional employees, such as design and technical support personnel, in assembling the course;

- The institution's technical facilities may have been used to mount the course for video or the Web;
- The courses and course materials may be in an easily reproducible form.

As a result of these differences, the institution may claim ownership of the course and all materials related to it. If it assumes ownership, the institution may seek to reproduce the course year after year, utilizing different faculty to teach the same material or make changes in the course over time without involving the faculty member who created it.

STANDARDS

There is not enough space here, nor is this the right venue, to explore the range of legal and negotiation issues surrounding the ownership of intellectual property in distance education. The use and re-use of course materials, however, raises an issue of quality and educational good practice.

- **The faculty member(s) developing a course should maintain creative control over the use and re-use of the course in subsequent years.** In the absence of such control, students have no guarantee that the course they take is of the same quality as in previous years and has been updated to reflect changes in the subject area.

13. Full Undergraduate Degree Programs Should Include Same-Time Same-Place Coursework

BACKGROUND

The fact that distance education may be a good option for teaching a particular course, or set of courses, does not automatically mean that it is acceptable to offer an entire undergraduate degree program, two-year or four-year, without providing students in-class experience. Four

years ago, AFT's higher education division wrote, "Our experience as educators tells us that teaching and learning in the shared human spaces of a campus are essential to the undergraduate experience and cannot be compromised too greatly without rendering the education unacceptable."

This view was reaffirmed in the report of the 1999 University of Illinois Seminar on Distance Education, as well as AFT's survey of distance education instructors. When asked what percentage of an undergraduate course of study ought to be taught by distance education, about 35 percent of the AFT respondents answering this question said a quarter or less and another 35 percent said between a quarter and a half. Altogether, over 70 percent of the AFT respondents answering the question came out in favor of half or less of an undergraduate degree offered by distance education. These responses are important because they came from distance education practitioners who were generally favorable to the practice, considered it successful and indicated that they would teach a distance course again if asked.

STANDARDS

- **The faculty at each institution should assume responsibility for carefully considering how much coursework is appropriate to be obtained through distance education.** Deliberation should take place at the campus, department and inter-department levels, allowing for differences among disciplines and an appropriate amount of experimentation. Based on the survey findings, we believe faculty, as a general rule, should consider permitting up to 50 percent of a full undergraduate course of study to be offered at a distance.

- **Procedures should be established to ensure, on a case-by-case basis, that a full undergraduate distance education program is available to those students truly unable to participate in classroom education at any time after considering all other options.**

- **A full program taught at a distance may be acceptable at the graduate level and for some certificate programs,** as determined by the faculty.

14. Evaluation of Distance Coursework Should Be Undertaken at all Levels

Even as we encourage experimentation in distance education, we must conduct much more rigorous evaluation of distance education programs and disseminate the results broadly. At a minimum, this should take place at three levels.

■ **All institutions offering distance education coursework should become laboratories of program evaluation.** Areas for evaluation should include the characteristics of successful and unsuccessful distance education students; variations among academic disciplines; faculty-

student interaction; student performance; and the efficacy of offering large parts or all of an academic program by distance learning.

■ **Evaluation of distance education should become a priority concern of the federal government.** The federal government should take two steps immediately:

—**Create a national information clearinghouse** to share data about successful and unsuccessful practices; and

—**Initiate a priority program of targeted research** in distance education in the areas outlined above.

■ **Regional and specialized accreditation agencies should establish high standards for distance education programs and ensure that distance education programs are always included in the evaluation of the institutions that offer them.**

Conclusion

CLEARLY, EVERY FACULTY UNION SHOULD become deeply involved in technology decision-making. Faculty should negotiate with management on a variety of technology-related subjects, such as workload (including e-mail and prep time), compensation, training, jurisdiction, staffing levels, class size, acceptance of credits from other institutions, travel to other sites and grading responsibilities. Unions must also attempt to negotiate protection of intellectual property rights in cyberspace for their members. Materials and technical assistance for local unions attempting to fulfill these responsibilities are available from the American Federation of Teachers.

The potential benefits of distance education, coupled with its successful application in many forums, clearly warrant a continuing effort to develop quality programs. Plenty of room should be left for experimentation, and we should not be defeatist when we encounter problems. But as we move forward, we must insist on the high standards outlined here—standards

that, we believe, are not impossible to meet and are worth sticking to, point by point. When problems arise, we must make every effort to surmount obstacles, but we must also be prepared to say about distance education, “not us, not now” when the required level of quality cannot be achieved.

Some believe that distance education erects too many impediments to faculty-student interaction and therefore should be abandoned or severely restricted. Others say that the “market” will demand convenience and a flashy presentation style above all other values and that higher education had better adapt or lose out to competitors. It is indisputable that colleges and universities should develop courses that are as attractive as possible and no more onerous than necessary. But credit-bearing coursework must produce education that lasts, and to achieve that, we must develop and stick to high standards of good practice. We hope this report makes a positive contribution to reaching that goal.

Appendix: Practitioner Questionnaire

Distance Education Practitioner Questionnaire

AMERICAN FEDERATION OF TEACHERS HIGHER EDUCATION DEPARTMENT

March 2000—Survey results: 200 returns, 200 survey results completed

1. Indicate the mode(s) of distance education you have employed:

- * One-way audio/visual (example, telecourses) [31]
- * Two-way audio/visual (real-time, Interactive Television (ITV) [83]
- * Two-way audio, one-way video [7]
- * On-Line/web-based/Internet, asynchronous or real time [129]
- * Desktop video conferencing, real time or asynchronous [5]
- * Asynchronous desktop conferencing combined with CD-ROM [3]
- * Other. (Please specify) [26]

2A. Describe the course(s) that you teach or have taught at a distance:

- * Humanities [34]
- * Math & Science [35]
- * Social Sciences [24]
- * Technology [24]
- * Career [35]
- * Child development/education [11]
- * Writing [20]
- * Other [12]

2B. # of credits:

- * 2 [14]
- * 3 [124]
- * 4 [19]
- * 5 [14]
- * Other [27]

2C. Level(s):

- * Freshmen [107]
- * Sophomore [88]
- * Junior [37]
- * Senior [31]
- * Graduate Level [34]
- * Other [26]

3. Have you taught equivalent courses for on-campus classes?

- Yes [186]
- No [13]

4A. Did you find any difference between the preparation time required for your distance education v. traditional classes?

- Yes [203]
- No [14]

If yes, please describe:

- * More time needed, especially up front [154]
- * Less time [6]
- * Never Measured [1]
- * Other [13]

Illustrative comments:

* More time — set up pages/maintain pages/communicate via e-mail attachments takes more time than hard copy. There is much more 1 to 1 communication than regular class.

* Getting materials a real pain. "It's in the mail!" Materials need to be duplicated and mailed at least 3 weeks in advance. Overheads redone, phone calls to students, LMC personnel, etc. When a student missed, a real pain if class wasn't taped.

* Preparing for distance education classes took a significant amount of time, more than traditional. Lecture materials had to be very detailed for the student.

* The presentation materials needed revision and more work and time given to make sure the sites interacted between them and with the instructor.

* I spent many more hours to prepare course online 1st time. I logged in over 150 hours to learn and set up course. 2nd course—half that time; rethinking how to present content was time consuming.

* Massive prep time for the Internet course. Not significantly different between videotape and regular.

* Much more time required for one-on-one contact time with students via phone/e-mail.

* All lecture materials had to be created in html format. Detailed instructions had to be written for laboratory exercises (which would normally be conveyed orally).

* The 1st time teaching the distance learning course was a larger commitment than the 1st time teaching the traditional course. The 2nd time there was no difference.

* EVERYTHING must be mapped out, and planned to the minute. Must be prepared for hardware problems.

* Course must be more tightly planned in distance learning. Handouts must be mailed, testing coordinated. Lectures must be "choreographed" more and the blackboard is used less since students look at you on it. Thus, you need more handouts.

* I had to be very prepared with lectures that would fit exactly in a 50-minute time frame. I had to be sure my slides were good ones. I had to be aware of my very varied audience. Art discussions are frequently controversial. I had to anticipate questions. My appearance also was important.

4B. Were you compensated, given release time or otherwise rewarded if the distance education preparation time exceeded traditional preparation time?

Yes [100]

No [100]

Please describe:

* Stipend

* Less than \$250 [2]

* \$250-\$1000 [13]

* Over \$1000 [5]

* Yes, but no amount specified [34]

* Course Credit/ Release Time [32]

* Other [11]

5A. How many students were in your largest class (all sites combined) taught at a distance? (#)

* Less than 20 [63]

* 20-50 [112]

* 51-100 [15]

* More than 100 [6]

* N/A [1]

5B. In conducting your distance education course, please tell us what methods you used to maintain personal interaction between (a) yourself and the students and (b) the students with each other?

* Email [132]

* Discussion Groups online/web postings [69]

* Audio/Video Conferencing [19]

* Campus Visits [30]

* Onsite Visits [17]

* Telephone [65]

* Mail [10]

* Fax [9]

* Other [14]

* Welcome letter to course on-line, explaining what to do; participation encouraged in class discussions for all to "see" and respond to; personal e-mail; drop in to visit me; 1 class held on campus to meet each other.

* Audio conference, 2 hrs/week, required; e-mail, optional written assignments and about 50 one-one telephone calls/week that deal w/distance students. Students are given other students phone numbers and email. Students at sites where there are other students are required to work together on lan modules.

* Small group activities, presentations by students, reports, projects and essays. One-on-one discussion on-line after class session, written comments, open discussion during class.

* A) one-on-one email, phone conversation, and some would drop by my office; (b) they had to post interactive activities and respond to each other. I also set up a "Help Me, Please!!" folder in which they responded to each other (and in which I participated as well).

* (a) telephone, e-mail, appointments in person. (b) the seminars for self-study students. Bulletin Board discussions and assignment posting, and Chat room assignments for online class.

* (1) I held my "office hour" in the distance learning classroom with the camera and mike on for 30 minutes before each class and up to another 30 minutes after each class. I also drove to the remote site three times and transmitted back to the normal sending site. (b) No difference from any other class.

* Students communicated through computer

conferencing with both instructor and peers. A friendly writing tone was established to promote interaction.

* E-mail was frequently exchanged. I knew more about my on-line students than most of my in class students.

* (1) Every student had a copy of a seating plan for both sites so they could recognize each other; (2) Frequent student presentations to increase participation and improve attention; (3) Visits between sites including a pot-luck final exam and dinner.

* Students worked in groups in the sites and in my classroom. Group work was shared, and students were asked to participate in class discussion. Students always shared names and exchanged e-mails.

* I gave my office phone number with office hours. I was available for two hours before the class met at night and I gave them my e-mail address. In the latter years, that was used extensively. As for the students, I passed around a sheet where they could indicate when they could get together to study. That was purely voluntary. However, it was my experience that many of the students took the class with someone else, spouse, significant other, etc.

5C. Did you require students to come to the campus (or elsewhere) at least once during the course to meet with you as a group?

Yes [68]

No [121]

Some Comments

* Require no; encourage yes.

* Twice we met at a museum and we met for a public art walk.

5D. In terms of interaction, what strengths and shortcomings did you find compared to the traditional classroom?

* It is identical. You have talkers and silent students in both.

* Web discussions can work very well.

* Strengths: Reached people who would not be able to take courses on campus, older, working students. Shortcomings: no face to face discussion.

* I work with adult students in distant learning. They are self-motivated, accomplished individu-

als who gain flexibility by working at a distance. The majority are excellent students.

* Asynchronous—(negative) takes longer to understand a particular point; difficulty interpreting questions/answers; not following “rules of discussion”; positive: problem-solving enhanced with asynchronous.

* Strength: Course was available to non-traditional students. My own schedule is flexible. Weaknesses: lot of work (i.e. more) to monitor and evaluate.

* Very difficult and time consuming to explain technical concepts and answering students questions through e-mail and discussion rooms. A “real time” chat environment is an important feature to make communicating work between students and instructors.

* Strengths: Accommodates more students, offering classes closer to home; introduces students to another learning environment.

Shortcomings: Participation isn't as high as in a traditional class, as students may fear speaking into mic.; students sometimes can't hear what others say from other campuses.

* Like the face-to-face class, it depends on the group dynamics and the interest of the students. I have had excellent interaction in both and disappointing interaction in both. I have had excellent discussion depth in both and disappointing depth in both. The mode is not the major factor nor are the numbers. The most important factor seems to be student attitude.

* I much prefer on-line to telecourse because of the more frequent interaction with and between students. Compared to traditional, they both allow physical anonymity, which lets shyer students be more active. Distance Education cuts out the visual aspect of a classroom, and relies more on verbal communication (important in my field).

* Some students drifted away in the absence of regular face-to-face meetings in spite of vigorous efforts to keep in contact via e-mail and telephone.

* The limitations of the technology require a greater emphasis on pedagogy, student active learning and outreach to students and a building of a learning community. Without this extra effort the medium detracts from learning. But the medium can also engage students because of the novelty and because of the diversity it brings to the course.

6A. Did your distance education students have regular access to an adequate physical library?

Yes [122]
No [36]

6B. If not, how did you handle the issue of getting instructional and research materials to your students? Describe in what ways, if any, you were limited.

- * Library on campus [4]
- * Web based/internet [48]
- * Library Web sites [6]
- * Sent books [25]
- * Local Library [8]
- * Textbook [9]
- * Fax [10]
- * N/A [7]
- * None [5]
- * Other [5]

7A. Were there any differences in the persistence/dropout rates of students in distance vs. traditional courses?

Yes [80]
No [107]

- * More self initiative needed by students in an asynchronous environment.
- * Distance ed. Students dropped out at a much higher frequency than traditional classes.
- * Fewer drops with my off-site students!

7B. If there is a problem with persistence, do you have any thoughts on what causes it or how to combat it?

- * Students seem to stay with the courses if the instructor is very flexible about deadlines. Strict deadlines will force distance learners out of courses. I cannot figure out how to do it but "self-paced" courses seem to be needed.
- * Some students don't handle independence well. Need to create mechanism to promote regular work and interaction.
- * Students drop before class starts when they receive my orientation letter with the syllabus 2-3 weeks prior to class start. Expectations are made clear and a commitment letter and self assessment form for readiness and ability are required of them.
- * I had a slightly higher dropout rate than in my traditional courses. Some students were not ready technically, others thought online would be "easy" and dropped when they realized it was

a "real" class.

* Students must be self-motivated. I think this mode of delivery is only for those students who are self-motivated. It's not for everyone.

* A problem with persistence is sometimes due to having immature, unmotivated students who thought on-line courses would be easier. I had a policy of student removal for three missed deadlines. I think my optional weekend workshops helped retain students who needed extra help with the technology and course content.

Community building through use of the Web Board helps retain students. Students use guided "Peer/Self Review Sheets" to interact with each other. Additionally, they discuss poems, stories, and plays through threaded discussions.

* Television, by its very nature, encourages passivity. Students are used to television as an entertainment medium rather than an instructional medium. Many of the students did not take notes from the materials and did poorly on that part of the objective exams. A second consideration is that many students come in with the attitude that this is going to be an easy course. When they find out that they're expected to work at the same academic level as in a regular class but without the presence of an instructor, they drop out. They lack the self-discipline to succeed.

8A. What criteria did you employ to grade students in your distance education course (papers, multiple choice testing, essays, etc.)?

- * MULTIPLE CHOICE [39]

8B. Does this differ from the criteria you might have used in a traditional classroom course?

Yes [59]
No [134]

If yes, please describe.

* I can put an emphasis on discussion because I have a written record to justify scores.

* Distance ed was heavily weighted toward multiple choice testing of performance whereas in traditional courses performance was evaluated more on critical thinking and essay/writing skills.

* I place less point value on the test because it cannot be secure. The live skills demonstration that traditionally is done in an interview is taped

and sent to me.

* I seem to be more "test" dependent in the classroom and less creative, whereas now I've become more creative and I feel more valid is my evaluation methods by limiting "memory" testing.

9A. If tests were given at the end of the course, were students in a proctored environment?

Yes [84]

No [63]

9B. Do you have any concerns/recommendations about security related to papers, tests, etc., in a distance learning environment?

Yes [79]

No [97]

Please describe.

* Without video classes, F2F sessions to take writing samples are necessary to establish identity. Recommend personalized assignments based on course-supplied materials to limit opportunity for plagiarism.

* Students present drafts of their work and edit according to participation in discussion area before submit final paper; assignments driven by class discussions and input from professors and students; if someone else does the work it would be an obvious change; no different than doing take home exam in class. Why pay for an education to have another do the work?

* Some—if a paper is lost in the mail, and a student did it, do they redo or get the grade? On some projects it is hard to tell if they actually did it. I guess this needs to be addressed in some of my courses; it hasn't happened yet.

* In some labs, it's hard to see what they're doing. I tend to grade heavily on presentations they have to do in order to cut the effect of cheating on grades.

* No more concern than I have in on-campus classes. There is so much writing in an on-line class that I quickly come to recognize the student's voice and style. I don't worry about someone else doing the work either because there is so much work involved that I doubt that a student could find someone willing to do the work for them.

* For many teachers online plagiarism is a big concern. I am currently developing a faculty workshop on teaching students about plагia-

rism—and developing assignments structured to avoid it.

* I have discussed this in Internet classes and the basic consensus is that if a student wants to cheat they will find a way despite the mode of transmission.

* We use college aides to supervise remote sites.

* The video conference medium offers an innovative approach to both delivery and evaluation of course content. Since it is unconventional many of the conventional security problems can be avoided by asking the students to demonstrate their comprehension in a presentation.

10. Have any questions about ownership of intellectual property arisen concerning your work in distance education?

Yes [71]

No [119]

If yes, please explain.

* Who owns the syllabus, etc.? The admin. fellas say that if it is electronic they own it. That being the case I do not do certain things that I know will be creative because they are too easily stolen.

* College policy is unclear, so I do not use the college server to host Internet courses.

* The instructor should have ownership.

* Not yet, however, this could change.

* I spend many hours developing materials/learning objects. I feel cheated when people that have access to the ITV take these materials without permission.

* Courses belong to faculty unless they sell them to their institution—or others—or unless faculty contracts specifically state that course development is "work for hire" and courses belong to the university. Either arrangement is o.k.

* Yes, after I developed the course, other faculty wished to teach it. I told them I had ownership and that the real compensation for spending 80 hrs developing the course was to teach it.

* Yes, very concerned about this issue. Distance requires preparation of a very organized prepackaged course, almost like writing a text. Yet I am not sure what I have any say whatsoever in whether my work at some point may be handed over to someone else to teach (an adjunct would be cheaper than me and I work on a contract and am not tenured).

* I work hard at developing creative learning activities for the classroom and have wondered to whom do these ultimately "belong".

* We rely on the laws that exist. Any gray areas will be settled in courts eventually.

11A. On the average, how did your students perform compared to students taking similar classes through traditional means?

Better [55]

Worse [26]

About the Same [109]

11B. If there is a difference, to what do you attribute it?

* Distance students on the whole appreciate the convenience and recognize their obligation to work more independently. Also, because distance courses have to be designed and constructed up front, they tend to be better in terms of meeting course objectives in a thoughtful and coherent manner that the student can see from start to finish.

* Students who complete the course are 1) more motivated; 2) less influenced by peer pressure; 3) given more time to reflect on the material; 4) forced to use more critical thinking skills rather than regurgitating what the teacher has presented.

* I have a wider range of students in my traditional classes. Up to this point, more independent, motivated students gravitate towards the online courses.

* Since this was a telecourse I had contact with most students throughout the semester.

Telecourses do not present the problems that a distance learning

* Students who stay have to be self-motivated and organized or they won't be able to complete the course. This type of student usually excels in the traditional classroom, too.

* The medium and pedagogy gives students with varied learning styles to demonstrate their achievements in their own way. It also promotes communication skills which may not be required in a traditional classroom. TV classes have to be smaller and it is less likely that a student will hide from the camera than from the unaided eye of the faculty member.

12. Did you notice that some particular kinds of students perform better than others in a distance education mode?

Yes [168]

No [27]

Please explain:

* Older do better [18]

* More Motivated do better [80]

* Younger do better [2]

* Mid career adults do better [12]

13A. What kind of technical support were you provided in conducting your distance education course(s)?

* Help Line [26]

* Technical Support Staff [56]

* Seminar/Class [22]

* Distance Ed office [6]

* Minimal [20]

* None [14]

* Other [44]

13B. Was it sufficient?

Yes [139]

No [59]

Selected "No" Comments.

* I would have liked more technical support for print-based courses including info on Service Providers (which they have begun to do) and use of virtual resources at the College.

* Frequent problems forced us to a) lose access to site; b) shut down early and c) poor quality of audio limited discussion.

* Transient problems with equipment and transmission lines frequently disrupt course work. Sound systems are particularly insensitive. This adds strain and miscommunication which detract from the learning environment. This needs some serious work and investment.

* Very little technical support. This has been, by far, the major shortcoming/frustration with the program. The support consists mostly of everyone involved technologically (vendor, telephone company, etc.) blaming everyone else for problems when the system goes down. Repairs, if any do take place, seem to take forever.

* Weather was a problem which was never discussed. Exams were not discussed. When I had slide projector problems there was no assistance.

13C. Did your institution provide satisfactory

technical support to students in the distance learning course(s) you taught?

Yes [120]

No [60]

IN CLOSING:

14. If you have an opportunity to teach courses through distance education again, would you want to do so?

Yes [169]

No [31]

Please explain.

* I am committed but my administration has not supported me. It's the wave of the future.
* I feel I know my students better in distant learning than in a traditional classroom meeting. Among the students I've met are the house husband home tending the 3-year-old while the wife works; the graphics artist in Chicago; the working housewife that did Earth Science Saturday morning at home while the family slept; the student who could not otherwise squeeze a science course in her schedule; the retired lawyer who answered essay questions with great detail and exacted answers from me for many questions of his own; and many more. DL has opened a wider world to me as much as it has for some of my students.

* It has been stimulating and exciting preparing to teach a long distance course.

* I am monumentally impressed by the qualitatively overall superior understanding and fluency which online students develop and demonstrate. I am impressed by the quantitatively increased level of interaction and participation which the online environment supports.

* It was rewarding. We are able to reach a large population who would otherwise not be able to be on campus and obtain a college education.

* For the discipline in which I teach, media studios, it is a great way to teach, better than the classroom for many courses. There will always be students and faculty who will prefer traditional, however. My concern is that many programs will not survive in the traditional environment without significant distance components.

* It reaches students who otherwise would be

unable to participate, but it is hard to find alternative course activities because you are "shackled" to the camera. We used films, guest speakers, presenters, student presentations as alternative course activities.

* Distance is at least as rewarding as campus teaching. I get a chance to help students living in remote villages in Alaska have opportunities that they otherwise might not have and presenting a lab science course by distance is a continuous creative challenge.

* Students' demand for distance learning will only increase; therefore this is an emerging role in providing access. I personally am enjoying the challenge.

* I'm hoping to use this system as a vehicle for teaching my discipline (geography) in the six local private colleges that do not have geography departments but do have two-way video rooms with the same type of equipment. This is potentially the most meaningful service that I could render to my profession and discipline. (I'm not publishing great research or holding organizational offices, and I don't expect to in the future.)

* This medium holds the opportunity for a great deal of creativity in the educational and learning processes.

* Although it is more time-consuming, I enjoy the level of self-disclosure that I see on-line. The entire group shares at a deeper level. I think they benefit from more one-on-one instruction/feedback.

* It is a challenge! It is more work, but it is also more convenient. Students can go to class anywhere, anytime but so can professors.

* Good way to reach a larger number of people who otherwise might not be able to come to my college for economic reasons or due to distance.

* Compensation would be an issue. At least twice the amount of effort as a traditional lecture class. However, results are significantly better.

* I believe it is beneficial not to see the student. I like working from home and setting my own hours.

15. In your opinion, how much of an undergraduate's coursework could be taught by distance education without impairing the educational experience?

* 76-100% [36]

* 51-75% [6]

- * 26-50% [58]
- * 0-25% [56]
- * Other [59]

Please explain.

- * I oppose any degree program which allows 100% to be distance learning.
- * The learning can be harder in this environment. Courses on teamwork would be an interesting addition to an online degree.
- * If we provide rich, robust online courses and programs, all could be distance. The majority of students are not involved in an institution's efforts for camaraderie. Most individuals know who they know, and don't get involved. Traditionalists deceive themselves, and use an invalid argument, that many schools engender much esprit de corps. Online, they actually "know" their fellow-students much better.
- * Each class should have an on-line component as described below. I don't believe any class should be taught completely on the Internet, instructor contact is a necessity. I would suggest 30% of the time be spent in the traditional mode of instruction, 50% on self-directed, content based study materials, and 20% on group-directed, content based project materials.

16. Are there any other important points to be made about good practices, practices to avoid, etc. in distance education that you have not addressed in your other answers?

- * Institutions need clear goals and objectives. Both faculty and student technical support is critical. Full degree programs are not yet within reach of current technology without some loss of quality and content. Class sizes must be controlled for non-automated courses.
- * I think online courses or distance learning is valuable and important for learning institutions to offer. Though there are numerous arguments against these practices, I believe it would be foolish to eliminate them. Professors need to educate themselves, lose their paranoia, stop fighting the institutions and learn to take advantage of the technology and see the benefits.
- * Support (technical and developmental) needs to be more readily available to faculty. Faculty need to be flexible while discovering what works and what doesn't, as much as they need to be in a traditional classroom.

- * Warn the students that it is a distance learning course and give them the choice to those that could have a "non distance learning" class offered at their campus. Some students are not given the choice and find out too late in the semester that the distance learning class is not for them.
- * The teacher must work very hard just to be a "talking head". Site visits are very important. Proctoring of tests is very important. Once in someone else's class, the students talked a new proctor into allowing them to use their textbooks for a closed book test. Bad idea! The teacher must work much harder at learning about each student and their concerns. This is not so easy. Getting papers back and forth was difficult until the college set up a site courier service. Now we know when umail will arrive and get there. A fax in the room and DL helps too. Teacher must be very prepared to teach DL with information ready before class starts. We are also paid for each site other than the native site if we are not paid for a study guide.
- * Be prepared before entering the classroom; be aware of the "what ifs". Good practices, etc. should be documented and shared.
- * Best practices: lots of support for instructor and recognition of extra work and time that many instructors put into distance ed. Screening/self-evaluations for students.
- Assessment of D.L. classes. Things to avoid: using D.L. to try to solve problems w/budget, staffing, facilities, etc. or to simply respond to student demand. Often, the expenditure and time investment (plus high drop rate) aren't compensated by other perceived gains.
- * It is incumbent on the faculty to keep active with responding to students on-line and to constantly work to lead the students in discussion threads.
- * Sharp clear structure for the course is essential. Requirements, expectations should be established at the start. Contact with students on list-serve and individually is important.
- * Very important not to simply take your current course and "copy" the lectures online. The course needs to be thoroughly thought through. Sequencing and consistency in course presentation is important. Most importantly, professors should walk through their own courses on the Web. Often one will find what you thought you directed or said was not what is actually "coming

across".

* Quality instruction is quality instruction. The same objectives presented and accomplished in the classroom can be presented and accomplished through distance education. However, the teaching methods may be quite different.

* 1. Training in the pedagogy and technology makes all the difference; (2) An honest and thorough discussion of expectations and limitations of the medium should begin, progress through and end every course. Student and faculty behavior must bend to the peculiarities of the medium. (3) The university should see Distance Education as a way to enrich programs and to reach the under served and not as a means of

making money.

* Perspective is essential for on-line course designers. One should investigate several approaches before deciding on methods that fit with one's pedagogical goals and personality. Information and workload burnout may be avoided by using Web-assisted courses as transitions into asynchronous offerings. On-line learning helps students and allows institutions to remain competitive with private businesses. If academic institutions fail to integrate technology, some may be replaced by private businesses (in locations where the student's cost per credit hour encourages this competition.)



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