

Instructor Satisfaction in University of California Extension's On-line Writing Curriculum

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ABSTRACT

This article describes instructor satisfaction in 14 on-line courses in freshman-level composition and literature, business writing, and English as a Second Language offered in the University of California (UC) Extension's on-line program. The courses chosen for this case study reflect UC Extension's entire ALN program, in that they comprise a broad selection of college- and professional-level courses organized in course sequences and certificate programs. The paper reviews UC Extension's ALN program, describes course and instructor selection criteria, and discusses such issues as course production and costs, instructor support, the transfer of teaching skills, instructor computer literacy, and instructor compensation. The results of an informal instructor survey also are discussed. Obstacles to adoption, effective and problematic practices, and critical programmatic and individual course factors gleaned from this analysis are outlined.

I. INTRODUCTION

UC Extension has over a century of experience designing and offering relevant, high-quality continuing education in both classroom and independent-learning formats. It also has extensive experience creating certificate programs and other post-baccalaureate training that respond to adult needs for highly focused, current knowledge that is applicable in the workplace. Developing an ALN program has been a logical step in fulfilling our goals of reaching students where they are, and using technology in program delivery.

UC Extension's student base is largely comprised of college-educated working adults who are seeking professional development, career change, or personal enrichment. They are self-identified as people who cannot attend regularly scheduled classes because of work or travel schedules, family commitments, or a preference to study at times and places of their own choosing. We have enrolled more than 4,000 students since the program's launch in January 1996. Currently, about two-thirds of our students are from California, with the remaining portion coming from 46 states, the District of Columbia, Guam, and countries such as Russia, Mexico, Japan, and Canada.

Through its statewide Center for Media and Independent Learning (CMIL), UC Extension launched its on-line course program on America Online (AOL) on January 22, 1996. With funding from the Alfred P. Sloan Foundation, CMIL developed a nine-course on-line certificate program in Hazardous Materials Management. CMIL then tested student interest in 16 additional courses in a variety of other subject areas.

The Sloan Foundation awarded a second grant in June 1996 for the development of another 100 courses. UC Berkeley Extension implemented this grant in collaboration with CMIL, blending Extension's extensive curriculum design and program development resources with CMIL's experience and expertise in distance education. UC Berkeley Extension offers more than 30 professional certificate programs and 3,000 courses each year, logging more than 70,000 registrations. The Center for Media and Independent Learning, a statewide program of UC Extension, has offered independent learning, or correspondence, courses— increasingly with electronic options such as E-mail

and fax delivery—for more than 80 years. CMIL has extensive distance education course development and publishing expertise, as well as the infrastructure for supporting distance students and instructors.

Berkeley Extension and CMIL have further committed to develop an additional 50 courses at the end of the grant period, so that UC Extension Online ultimately will offer 175 courses.

Currently, 106 courses have been developed in subjects ranging from Critical Thinking to Systems Analysis and Design to Environmental Issues. Among these courses are five professional certificate programs in Computer Information Systems, Project Management, Marketing, Business Administration, and Hazardous Materials Management. Three to four new courses are slated to open monthly.

II. RATIONALE

The courses selected for this case study reflect the UC Extension's entire ALN program, in that they comprise a broad selection of college- and professional-level courses organized in course sequences and certificate programs. Fourteen courses are reviewed here; they range from freshman-level composition and literature courses to sequences in business writing and English as a Second Language. Eight courses were modified from existing independent learning courses. Six others had been taught in the classroom before being developed for on-line delivery. (In other parts of the ALN program, courses are sometimes developed de novo for the ALN curriculum; for example, courses about using the Internet in various disciplines.) Most of the courses are taught via AOL, but two are offered at UC Extension Online's Internet site—one in ESL, and another in advanced technical communications. The courses have been developed during the past four years as part of the development of UC Extension's ALN program, with substantial Alfred P. Sloan Foundation funding.

The writing and composition courses discussed in this paper:

- Technical and Business Writing
 - Technical Writing
 - Technical Communication II
 - Business Writing Review
 - Practical Grammar for Writers and Editors

- Creative Writing
 - Exploring Your Creative Writing Potential
 - Creative Nonfiction Workshop
 - Writing the Short Story
 - Popular Forms of Fiction
 - Developing the Novel

- Composition and Literature
 - Introductory Composition
 - Composition and Literature
 - Writing a Successful Essay

- English as a Second Language (ESL)
 - Grammar and Writing for Business
 - Writing for Professionals

III. BACKGROUND INFORMATION

UC Extension Online is a joint project of the statewide CMIL and University of California Berkeley Extension (UCBX). As a result, initial ALN course offerings were adaptations of first CMIL, and later UCBX, courses. The former courses were correspondence courses while the latter were classroom courses. Instructors were hired to

author and adapt the courses for ALN delivery. In most cases, the person who develops the course also teaches it. However, now that the ALN program is several years old, instructors who did not originally write them are teaching many of the courses.

A. Course Selection

Because ALN encompasses many factors that differ from those required of independent learning and classroom delivery (such as greater development experience and computer aptitude), we have developed additional criteria by which we judge the suitability of developing an ALN version of a course. Among these are

- Appropriate for on-line delivery
- Good classroom enrollments
- Involve a campus course or professor
- Part of a sequence or certificate
- Funds for development available
- Subject of great public (student) interest

We have found that writing courses lend themselves to ALN because they fit many of the criteria above and because the flexibility of ALN broadens the availability to a wide audience of creative people who might not otherwise be able to attend a course.

B. Instructor Selection

Instructors are selected, oriented, coached, and monitored by our instructional support specialist who has primary academic responsibility for ongoing course instruction. The specialist also monitors all courses for quality control and resolves issues or coordinates their resolution. He/she monitors, coaches, and evaluates instructors and participates in the development of training activities for instructors.

Instructors are chosen for ALN based on their expertise in the content area, their teaching experience, their interest in developing and teaching via ALN, and their technology background. Because Extension courses are often designed for adult professionals, real-world experience combined with the appropriate academic preparation is critical. The UC Berkeley campus must approve all UC Extension on-line courses and instructors. Therefore, instructors of lower division and professional level courses must possess a master's degree, while a Doctorate is required for all upper division and UC Berkeley equivalent courses. While we may seek ladder-rank UC faculty to teach certain ALN courses, we have found that practicing professionals and faculty from other institutions are often more available for ALN and, in some instances, may be more appropriately prepared to teach a particular course.

The instructors in the English composition and creative and professional writing curricula had previously been independent learning or Extension classroom instructors, or were recruited specifically to teach the ALN courses. Some instructors teach more than one course, although seldom do ALN instructors teach more than three. A perusal of the academic and professional background of the instructors listed below reveals the wide variety of backgrounds, experience, and academic preparation they bring to the ALN program.

BRIA, Suzanne

Business Writing Review
Writing a Successful Essay

Ms. Bria holds an M.A. in English from Sonoma State University, and a California Community College Teaching Credential in Language Arts and Literature. Ms. Bria has been a Lecturer in English at the University of California at Berkeley Extension Program, and an Adjunct Professor of English at John F. Kennedy University. She has been both an Instructor Assistant and a Teaching Assistant in English at Sonoma State University, and has worked as a Student Affairs

Officer at the College of Letters and Science, University of California at Berkeley. Ms. Bria has developed a syllabus for a Master of Arts in Teaching six-unit thesis course, as well as courses in Freshman Reading and Composition.

DRISCOLL, John

Grammar and Writing for Business

Dr. Driscoll holds a Ph.D. in English and Linguistics from Uppsala University, Sweden, and an M.A. in American Literature from Sussex University, England. He has been Academic Director at Master Projects, Inc. in Singapore, and Director of the English Language Skills Center at Golden Gate University. Dr. Driscoll has also taught English at the University of San Francisco, ESL/Literacy Methodology at UC Berkeley Extension, and English as a Foreign language at University Extension College in Uppsala, and at Our Lady of the Lake University in San Antonio, Texas. He is the author of the Accelerated English CD-ROM interactive TOEFL Preparation Course (Disks 1-4), published by CPI/Harcourt Brace.

EVANISKO, Joseph N.

Writing the Short Story
Popular Forms of Fiction

Mr. Evanisko holds an M.A. in Writing from the University of San Francisco with emphasis in teaching fiction, nonfiction, and narrative writing. He has taught College Writing I and II for the Expository Writing Department at the University of San Francisco, and has worked as a volunteer and substitute teacher in the Sonoma County school system. Mr. Evanisko is a member of the Conference on College Composition and Communication, the National Council of Teachers of English, and the Modern Language Association.

GANNAWAY, Gloria

Creative Nonfiction Workshop

Dr. Gannaway holds a Ph.D. in English/Rhetoric from the University of Texas at Austin. She is currently an instructor with the Academic Talent Program at the UC Berkeley Graduate School of Education, and has also been an Adjunct Lecturer for UC Berkeley's College Writing Programs. In addition, Dr. Gannaway taught English at the University of Texas at Austin, the University of Mississippi, Northeastern University, and Cukorova University in Adana, Turkey. She is the author of *Transforming Mind: A Critical Cognitive Activity* (Westport, CT: Greenwood Publishing Group, 1994), and has worked as a technical writing consultant for Applied Research Laboratories at the University of Texas, and for Apple Computer.

GILBERT, Rondi

Writing for Professionals

Ms. Gilbert holds an M.A. in English from the University of California at Berkeley. She has taught English and Writing Skills for Non-Native Speakers, Composition for Students, and Writing Skills for UC Berkeley Staff at UC Extension for almost 20 years. Ms. Gilbert has also trained others to teach English Composition in Tutorial Practicum courses, and has coordinated preparation courses for the GMAT, LSAT and GRE since 1979. Currently she is an Academic Coordinator, Research Coordinator and Principle Analyst at UC Berkeley's McNair Scholars Program, as well as the Educational Technology Coordinator at the Student Learning Center.

HARTLEY, Denise

Exploring Your Creative Writing Potential

Ms. Hartley holds an M.F.A. in Creative Writing from Mills College, and a B.A. in English/Creative Writing from San Francisco State University. She is an Instructor in English at Pierce College in Tacoma, Washington, where she also served on the Distance Learning Committee and the English Outline Revision Committee. Ms. Hartley has also taught English at Diablo Valley College, Las Positas College and Ohlone Valley College in California, and has worked as a journalism coach at California State University at Hayward, and as a guest lecturer at Mills College.

PRICE, Georgia

Practical Grammar for Writers and Editors

Ms. Price holds an M.A. in English (Teaching of Writing and Literature) from George Mason University in Fairfax, Virginia. She is currently a project manager and writing instructor at PeopleSoft Inc. in Pleasanton, California, where she has produced print and on-line implementation materials, and taught Effective Writing seminars to employees. Ms. Price is also a writing instructor with University of California, Berkeley Extension, and has taught writing and editing to students both in classroom and on-line environments. Previously, Ms. Price has worked as a writing center tutor at Mary Washington College in Fredericksburg, Virginia; a reporter for the Fredericksburg *Free-Lance Star*; and a writer/editor at Stewart Communication Associates.

SOLES, Caro

Developing the Novel

Ms. Soles holds an M.A. from the University of Toronto in French Drama, and has done Ph.D. work in French Literature. She also possesses an A-Certificate teaching credential from the Ontario College of Education. Since 1991, she has taught the self-designed How to Write a Novel course at George Brown College, and has also conducted the Nomads Writing Workshop, as well as creative writing and French language classes at Seneca College. Ms. Soles has appeared as a guest panelist and workshop facilitator at a variety of fantasy and science fiction conventions.

TABOR, John

Technical Writing

Technical Communication II

Mr. Tabor holds a B.A. in English (with a Writing emphasis) from Loyola Marymount University. The author of more than 300 technical manuals, Mr. Tabor has taught technical writing at the UC Center for Media & Independent Learning, and is a consultant to various corporate and government clients for John Tabor Publications. Mr. Tabor is a Senior Member of the Society for Technical Communication, and the Editor of the *Southern California Paleontological Society Journal*.

TOMBLESON, Gary

Introductory Composition

Composition and Literature

Dr. Tombleson holds a Ph.D. from the University of California at San Diego, and a master's in Library Science from UC Berkeley. He is currently Vice President for Academic Affairs and Professor of Humanities at Armstrong University in Berkeley, California, where he previously held the posts of University Librarian and Dean of Instruction. Since 1980, Dr. Tombleson has

been an instructor in the novel and composition at the University of California, Berkeley Extension. Dr. Tombleson is also an Adjunct Assistant Professor in Library Science and English at Chapman College, and has been a Lecturer in English at the University of San Diego.

C. Instructor Support

Support is provided to instructors during course design and development as well as throughout their teaching experiences. The course design and development process is a team effort and includes the curriculum developer, the course author, an instructional designer, a course editor, and a technical staff person.

We have found the team approach to be particularly critical when designing an on-line course. Not only must technical staff get involved in course development at an early stage, but also course authors need to understand how the on-line features can be used effectively in the learning activities of the courses. This latter point is particularly critical and has important pedagogical implications. In our experience, if a course author is willing to use technology but has little experience doing so, he or she can have considerable difficulty developing meaningful learning activities using on-line course features. An instructional designer well versed in the capabilities of the on-line features can provide valuable assistance to the course author in designing an ALN course that takes optimum advantage of the various on-line program elements.

An on-line Course Development Workshop that guides the instructor step-by-step through the course development process supplements extensive, one-on-one interactions with the instructional designer. The guidelines provide examples from existing courses as well as a standard format for course design; it is our expectation that the guidelines will assist instructors in developing courses that, from the outset, more appropriately incorporate our design features.

In addition, the workshop provides on-line information and resources about course development and on-line teaching. We also conduct periodic instructor development workshops that provide an opportunity for instructors to meet with peers to share their experiences with ALN instruction.

D. Transfer of Teaching Skills

While it is natural to assume that great classroom instructors will be able to transfer their teaching skills to ALN delivery, we have found that this is not always the case. Delivery of a course via ALN requires that the instructor be able to write down every word of a lecture. The instructor must take the bare bones of a course outline and infuse it with words and examples that bring it to life. In addition to being able to clearly articulate concepts and ideas, the instructor must be able to look at a course she or he may have taught for years and find completely new ways to achieve course objectives. The ALN instructor must be a creative writer and thinker.

E. Instructor Computer Literacy

Our experience further tells us that the qualified ALN instructor must possess an above-average degree of computer literacy at the time of undertaking the course design. We have found that instructors who have weak computer skills are often unable to master the complexities of ALN course delivery.

Of the nine responding instructors, only three had not used computers in their classroom teaching. But even these were computer literate, having used computers for their own research or writing. The other six instructors had involved information technology in some aspect in their classrooms. They reported using Web pages to support their classroom teaching, using campus computer labs as part of the course, and assigning students to use the Internet for course research.

IV. METHOD

A. Content Delivery

UC Extension's ALN courses are typically delivered asynchronously on a rolling-enrollment basis; students enroll at any time and have up to six months to complete the course. At this time, most of our courses are delivered via AOL, and the writing curriculum is no exception. Of the courses under discussion here, 12 are offered via AOL while the other two are delivered via UC Extension on-line's Internet site. Thirteen are rolling-enrollment, while one is offered in a cohort, fixed-date format. The cohort course, Writing for Professionals, has been offered four times since its development in July 1998.

Grammar and Writing for Business was initially offered as a cohort course. We attempted to offer it three times; however, we only secured sufficient enrollments (more than six students) once and had to cancel the course the other two times. Therefore, we modified the course to make it available on a rolling-enrollment basis in order to attract more enrollments over time.

B. America On-line

At the outset of our project, we selected AOL as the service provider for UC Extension Online. Because of the rapidity of technological change, we opted to focus our attention initially on the curricular and program support components of the ALN program. This required that we find an appropriate existing delivery system to provide connectivity for our students and instructors.

AOL was a strong candidate for a number of reasons. Their interface is intuitive and easy to use. The system runs on all major hardware platforms and is available nationwide (and beyond). They provide technical support to users via an 800 number. Users have Internet access, and we can also provide course-specific software and services. We also have found that AOL subscribers are demographically similar to Extension students in their educational levels, income, and age. And because AOL is market driven, they are incorporating new technologies such as Java, streaming audio, and streaming video as the installed user base acquires equipment sophisticated enough to access them.

C. Internet Program Site

With our program infrastructure and basic processes in place, in March 1998 we built our own Internet program site with essentially the same on-line features as the AOL program site. The site serves as a delivery mechanism primarily for courses designed for Internet-proficient audiences; for example, engineering and computer sciences. We have also used the site to deliver regional programming such as curricula, and courses designed for state of California licensure or credential requirements. Additionally, the option of delivering courses directly on the Internet opens international markets that currently have limited connection to AOL; the writing sequence for ESL students is a good example of courses appropriately delivered via the Internet. We have one ESL course on our Internet site and plan to add others in the future.

D. On-line Course Features

The primary objectives of UC's ALN format are communication, interaction, and access to resources. The ALN courses require individual study, one-on-one interaction with the course instructor, and on-line contact with other students. They may also require on-line group activities. In addition to submitting course assignments to the instructor, the students participate in class discussions on the course message board. These discussions and other on-line interactions between students and instructor are graded and assessed in the student's final course grade. The student is required to demonstrate mastery of the course material through original work on course assignments and projects and, in most courses, by sitting for a proctored final examination.

Course materials include an on-line syllabus with links to related study resources: lecture notes (typically on-line and sometimes additionally printed when extensive), textbooks, and supplementary materials such as videotapes, software, or other learning aids. Course materials that are not posted on-line are shipped to the student when he or she enrolls.

A number of the writing courses use Web links extensively for specific course materials and for more general reference materials. In a number of the courses, students engage in research on the Internet as part of their studies.

Writing for Professionals has an added feature on its opening page: an audio welcome message from the instructor. In addition, at several points during the course, the instructor has recorded audio clips illustrating key concepts for non-native English speakers. This course won a Meritorious Course Award from UCEA's Division of Independent Study, in part due to its thoughtful use of audio.

E. Technology and Infrastructure

AOL courses are mounted using the service's proprietary software and are delivered via AOL. Internet courses are mounted using NetObjects Fusion and are delivered using Netscape Collabra for message boards and I-Chat for the live chat feature. The network is currently comprised of three Windows NT servers, one UNIX server, and one Macintosh server. The servers run Netscape Enterprise, Netscape Collabra, Netscape Directory, I-Chat, and RealMedia software.

Generally speaking, AOL provides technical support for AOL courses, while UC staff provides support for Internet courses. We provide instructors teaching via AOL with a resource manual about using AOL, and provide on-line technical information for our Internet site to those using the Internet for instruction. From the beginning, we work very closely with each instructor to ensure that his or her comfort level with technology is sufficient to enable him or her to satisfactorily teach the course.

F. Course Production and Costs

We currently budget \$20,000 per course, which includes course design and development, technical infrastructure support, and marketing. However, the per-course development cost is variable depending upon a number of factors: the scope of the course, the amount of instructional design, writing, and editing required, and the technological features incorporated. Cost is also influenced by the ability of the instructor to write appropriate course notes, the need to identify Web resources and develop other course features such as message board threads, and finally by the extent of coordination required among team members.

Because the writing courses are heavily text-based, they involved less production time in initial development than many of our other courses. The exception to this was the Writing for Professionals course with its audio features. However, we are encountering in the writing curriculum—as in others in the program—the need for regular modification of courses added to our inventory. Thus, course maintenance is becoming a more substantial part of our production work.

Generally, course maintenance falls into two categories: labor-intensive activities such as revisions necessitated by textbook edition updates, instructor revisions of course content, finding and training replacement instructors, and course rewrites (this primarily occurred in redesigning the early on-line courses to our improved course design). Additional, less labor-intensive fixes include deleting/changing dead links, adding second sections of courses, catalog changes, and de-bugging.

We have done major maintenance work on ten writing courses during the project, with an estimated average of 40 hours of production work per course. We revised the content of three courses, modified Grammar and Writing for Business from fixed-date format to asynchronous format, and modified six other courses to reflect new instructor information due to instructor replacements.

The fixed-date writing course, Writing for Professionals, requires maintenance each time it is re-offered, and our goal is to offer it two or three times annually. We are developing strategies for streamlining fixed-date repostings; however, we expect that the maintenance work on these courses will be at least 20 hours per re-offering. It currently ranges between 30 and 60 hours per course.

G. Enrollments

The number of students in a course can range from one or two to more than 100. Our enrollment projections were originally based on 20 enrollments per course per year. Recent data indicates that we are seeing a "build" effect which we believe can be attributed to having more courses from which students can choose: the average number of enrollments per course per year in 1998 was 24 compared to 17 in 1997 and 12.4 in 1996. Thus, our current goal for each course is an average enrollment of 24 students annually; our hope is that, over time, enrollments will build to considerably higher levels. Of the 14 writing courses, three have reached or exceeded that enrollment goal and two more had 23 enrollments this year. Average annual course enrollment in the writing courses is 14, lower than our overall average. (Our strongest enrollments are in computer science, engineering, and business courses.)

H. Instructor Compensation

Because most of the on-line courses are offered in a rolling-enrollment format, instructor payment is based on a per-assignment model with an additional payment when the student starts, in recognition of message board interactions and informal electronic interactions. Generally speaking, 25% of course revenues are allotted for instructor payment. Enrollments in rolling-enrollment courses are not capped. Payment arrangements for cohort courses have been more variable, generally with the 25% allotment distributed over fewer payments during the enrollment period.

V. RESULTS

For this study, we conducted an informal survey of the writing instructors. Nine of the ten instructors were able to respond. Six of the instructors were interviewed by telephone, while three opted to write their responses and return them via E-mail.

Our questions and a summary of their responses follows:

■ **Why did you want to develop and teach an on-line course?**

Instructors indicated an interest in professional development, in technology, and trying a new way of teaching and learning: "On-line is a new and growing phenomenon; teaching on-line is being promoted at most colleges now . . . looking for teachers willing to . . . and who have had experience."

They felt that ALN was particularly appropriate for writing courses. They also wanted to reach more students and saw ALN as a way to accomplish that:

"Because it reaches out to more students. Also, it makes the University more accessible."

One instructor expressed interest in seeing how students would react to on-line course delivery.

■ **Did you have any experience with using information technology in your courses before teaching an on-line course?**

Instructors gave a wide range of responses. One instructor only had experience with her personal computer; several used selected on-line features such as on-line research in their classroom courses. Two instructors had extensive experience with computers in the classroom.

■ **Did you find the training adequate? Do you have any recommendations regarding training?**

Response to this question was generally positive. Recommendations included developing a stronger community among instructors and providing a handbook for on-line training.

■ **How have you had to adapt your teaching for on-line delivery?**

Instructors reported extensive modification of their teaching approaches for on-line delivery. They commented on needing to provide lots of motivation for students, the time-consuming amount of writing they are doing to engage students appropriately, and overall the additional amount of time their teaching takes. One instructor identified the following teaching strategy as a way he has adapted to ALN:

“ . . . encourage students to connect with each other. Usually they bond with two other students. This makes the class feel more like a community, less like a private tutoring session.”

■ **How satisfied are you with your on-line teaching experience?**

Instructors reported being generally satisfied with the experience. Six gave strong yes responses while three others expressed mixed reactions, identifying concerns related to lack of student motivation (and thus, dropouts or nonstarts), difficulties adjusting to asynchronous course delivery, and compensation.

■ **Please discuss your experience with technology, such as E-mail, message board, and chat room in this course.**

Instructors reported generally positive reactions to the use of message boards in their courses and uniformly found E-mail satisfactory. However, many reported less than satisfactory experiences with the live chat feature, often due to lack of participation, and found its use very limited in their courses.

"Message board is a decent substitute for discussions. Chat—forget it; can't accommodate enough students."

One instructor did report using chats successfully for one-on-one discussions with individual students.

■ **How would you rate the importance of the following components of the instructional process? (1-5 scale, 1-very important; N/A-not applicable)**

Instructors ranked course components in the following order of importance in the courses:

Graded assignments	Average 1.6; range 1-4
Informal interactions	Average 1.7; range 1-3
Message boards	Average 1.9; range 1-5
Web resources	Average 2.2; range 1-4, N/A
Group projects	Average 3.0; range 1-5, N/A
Chat room	Average 3.4; range 1-5, N/A

■ **What have been the advantages and drawbacks of using technology in instruction?**

Instructors commented on the flexibility of the on-line approach for both students and themselves, and the fact that teachers . . . can be anywhere and do this on-line." They also were pleased with the number of students they have reached and their access to different sorts of students.

In terms of negatives, they commented on the time it takes to adequately respond to students on-line, difficulties fitting in their on-line teaching with their other commitments, and the lack of group interaction in some courses. One instructor commented on the difficulties that the technology can impose on students. "Not all students have knowledge of higher technology; students don't know how they are supposed to learn."

■ **How has the workload for teaching this course compared to your workload in other courses?**

Two instructors reported the workload to be the same and four reported that teaching on-line is more work than traditional instruction. Three others indicated that the workloads are not comparable, or had been very variable.

■ **To what do you attribute your answer to the above question?**

Instructors commented on the closer, more intense interactions with students, the need to provide more individualized responses, the students' expectations of rapid response, the longer time it takes to develop rapport, and the fact that students turn to the instructor more for support than in a classroom.

■ **What have you liked most about teaching on-line?**

Instructors like the flexibility and access to students who normally could not attend their courses, the variety of students (in terms of age, ethnicity, geographical location), the closer and more intense dialogue with students, and the strong work submitted by students. They observed increased confidence both on the part of students, and in themselves. One instructor commented, "... on-line learning allows students to stretch themselves more than in a traditional classroom."

■ **What have you liked least about teaching on-line?**

Instructors reported frustration with not being able to see students, lack of participation comparable to a classroom situation, the added instructional time required, and students' expectations for fast responses, and compensation. One instructor sees technology as a hindrance, not an aid, and also reported concerns about teaching in a rolling-enrollment environment.

■ **Do you like teaching on-line courses as much as traditional courses?**

Six instructors report that they like teaching on-line as much as teaching traditionally; three instructors prefer traditional teaching.

■ **Would you recommend on-line teaching to a colleague? Have you done so?**

Six say yes, three say maybe to the first part of the question. The latter response was given by instructors who did not feel they had sufficient experience yet to decide, and by those who felt that the teaching approach would be suitable to only certain types of instructors:

"Would recommend to people who like using PCs, but would also warn of additional time constraints."

Of those who responded regarding whether or not they have recommended on-line teaching to a colleague, six have done so and one has not. One instructor said she "supports diversity of teaching styles and learning opportunities as best for students. The more on-line instructors, the better."

■ **What changes in course development and delivery do you suggest?**

Instructors gave a variety of suggestions on a wide range of matters including interface design, course design, technical features, instructor payment, and study time limits.

A. Obstacles to Adoption

The lack of face-to-face interaction may be an obstacle to adoption of ALN by some instructors; it was the most pervasive theme of concern expressed in our survey. In addition, for those instructors who perceive the workload to be greater than in their other teaching experiences, compensation is seen as inadequate.

B. Practices

Based on instructor feedback and our observations, our most effective practices have been a strong course development process and good instructor training. Problematic practices include the chat feature and instructor pay.

Because the instructor is key to the academic success of our courses, we will continue to develop ways to keep our instructors up-to-date on the best practices for ALN delivery. Our on-going instructor development workshops will continue; the subject of our next workshop will be course management. This is because we believe that many instructors would be less likely to report burdensome workloads if they were better able to administer the variety of tasks associated with an ALN course. In addition, we are planning to develop an instructor Web site that will not only be a resource center but also a kind of faculty club where instructors can meet to share ideas about ALN.

As the pay issue is undeniably a critical issue for our instructors, we are in the midst of a complete analysis of our pay structure and expect to make significant changes in the way we pay in the near future.

VI. CRITICAL FACTORS

Both programmatic and individual course critical factors can be identified. At the program level, we note the following critical factors:

A. Course Selection

All future program activity (and success) depends on which courses are selected for development. Elements to be considered include how courses fit into the overall program curricula and instructor selection.

B. Instructor Selection

Instructor proficiency with technology is critical, along with their content expertise and teaching experience.

C. Marketing

Program sustainability (at least for self-supporting programs like ours) is dependent on successful marketing; it also is important to have sufficient enrollments in each course to allow for robust group interactions.

D. Interface Design

The appeal and ease-of-use of site interfaces are critical to student success in ALN courses and have a direct bearing on program marketing.

E. Reliability of Technology, Both Server Robustness and Selection of Software for Course Features

Instructor and student satisfaction and success depend on reliable technology.

F. Administrative Support of Instructors

Providing strong instructor support is critical to their success and satisfaction.

G. Administrative Support of Students

Because students are geographically removed from the instructor, they require assistance with various administrative matters throughout their enrollment. This requires adequate internal infrastructure.

H. Course Design

In addition to meeting quality standards for instructional pedagogy, successful ALN courses must use technology effectively.

I. Instructor Compensation

Instructor excellence is essential to program success; instructor satisfaction is very important, and the perception of fair compensation is critical to their satisfaction.

For individual courses, we have identified the following critical factors:

J. Instructor Expertise

While on-line instruction allows for extensive contributions by students that enrich the courses, it is important that instructors be expert in their fields and able to communicate their expertise to students.

K. Instructor Responsiveness

Instructors need to be timely and thorough in their responses to the class and to individual students.

L. Instructor Technical Proficiency

Technology cannot be an impediment to instructors if they are to successfully teach ALN courses.

M. Student Technical Proficiency

Students need a sufficient level of proficiency with technology to be able to interact appropriately and fully in the course.

N. Reliability of Technology, Both Server Robustness and Selection of Course Feature Software

Technology needs to be as invisible to students and instructors as possible; to the extent students and instructors have to focus on problem resolution rather than on course content and activities, the learning experience is diminished.

O. Support of Instructors, Both Technical and Administrative

An adequate infrastructure is needed to provide instructors with full support, so they can focus on teaching the course and not on “administrivia” or technical problems.

P. Support of Students, Both Technical and Administrative

Students need strong technical and administrative support during their studies.

Q. Course Design

Flexible course design is important, in order to allow for variety in teaching approaches and to accommodate different content.

R. Instructor Compensation

Because the perception of fair compensation is critical to an individual instructor’s satisfaction, it is important to clearly state compensation arrangements and amounts and to design courses in ways that take compensation rates into account.

Thus, there are a variety of critical factors for both programmatic and individual course success. The interaction of these factors, and the complexities of ALN program development and delivery, requires constant attention, evaluation, and refinement.

ABOUT THE AUTHORS

Mary Beth Almeda is Director of University of California Extension's statewide Center for Media and Independent Learning in Berkeley. She has more than 20 years of experience in the field of distance education. Almeda has been a leader in UC Extension's movement into the on-line arena; she has had a major role in shaping the on-line program and overseeing its development since its inception. In addition to the on-line program, she sets strategic directions, develops new program directions, and manages the design, production, implementation, and marketing of some 200 independent learning courses and the acquisition, sales, and rental of more than 3,000 media titles.

A graduate of Duke University where she received her bachelor's and master's degrees, Almeda was president of the American Association for Collegiate Independent Study in 1996 and also has held leadership positions in the University Continuing Education Association (UCEA), where the Division of Independent Study honored her with its highest individual award, the Gayle B. Childs Award, in 1993. She currently serves as a commissioner in UCEA's Commission on Learning and Instructional Technologies.

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Instructor Satisfaction in University of California Extension's On-line Writing Curriculum

Mary Beth Almeda, Kathleen Rose

Discussant: James Levin, University of Illinois at Urbana-Champaign

The paper by Mary Beth Almeda and Kathleen M. Rose describes a case study of instructor satisfaction in 14 on-line writing courses in the University of California Extension. They conducted an informal survey of nine instructors. From their analysis of the 15 questions about instructor satisfaction, Almeda and Rose derived a number of critical factors, both at the programmatic and at the individual course level.

One question is whether these critical factors can be generalized beyond courses in writing studies. Another question is whether their results would continue to be supported if they conducted a small number of in-depth case studies of representative instructors. In particular, it would be valuable to know how instructor satisfaction changed as instructors had more and more experience with on-line teaching, as they progressed from being novices with on-line teaching to becoming expert with the new instructional media.

This paper inspired three modest proposals for research in on-line learning and teaching:

- **An In-Depth Exploration of the Ways That Teachers and Learners Use On-Line Educational Media, Especially As They Acquire Expertise with Using the Media**

There are at least as many different ways of using a given on-line technology as there are of using a standard classroom for learning and teaching. Studies of the differences between experts and novices have shown that experts have many different ways of thinking about the domain of expertise, while novices have only one way of thinking about that domain (Chi, Feltovich, & Glaser, 1981; Larkin, McDermott, Simon, & Simon, 1980; Levin, Stuve, & Jacobson, 1999). In using on-line educational media, a teacher with expertise in teaching on-line (and students with expertise in learning on-line) will have many different ways to think about the on-line media, and will chose those different conceptualizations in ways that maximize student learning and teacher satisfaction. It would be very useful to understand how teachers become experts in using on-line media.

- **Systematic Ways to Think about the Multiplicity of Uses of On-line Media**

Having a taxonomy of ALN uses (and of synchronous learning networks as well) would help teachers, students, administrators, trainers, etc. to make choices about which uses are appropriate for what educational goals and with available educational resources. Chip Bruce recently proposed a taxonomy of educational media more broadly (Bruce & Levin, 1997) —perhaps that could be the basis for a taxonomy for on-line learning and teaching.

- **Exploration of New Interactional Frameworks for Learning and Teaching with On-line Media**

A key element of many on-line courses has been the uses of technologies for collaboration. This can certainly be valuable, but movement beyond simple collaborative frameworks is needed. New educational media enable new interactional frameworks. For example, the barriers between learning and doing can be breached with teleapprenticeship and tele-task forces (Levin, Riel, Miyake, & Cohen, 1987; Levin & Waugh, 1998). The immediate concern about instructor satisfaction may be irrelevant in the slightly longer run if the role of the adult expert in the learning environment is substantially redefined. The role of the instructor as the source of all wisdom is being challenged in many ways, including by new technologies for learning. Even if the

name instructor is maintained, the roles that the person with that name plays in learning may be radically different from those conventionally played by today's instructors. By exploring new interactional frameworks, we can find those that are effective and those that are less so.

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