

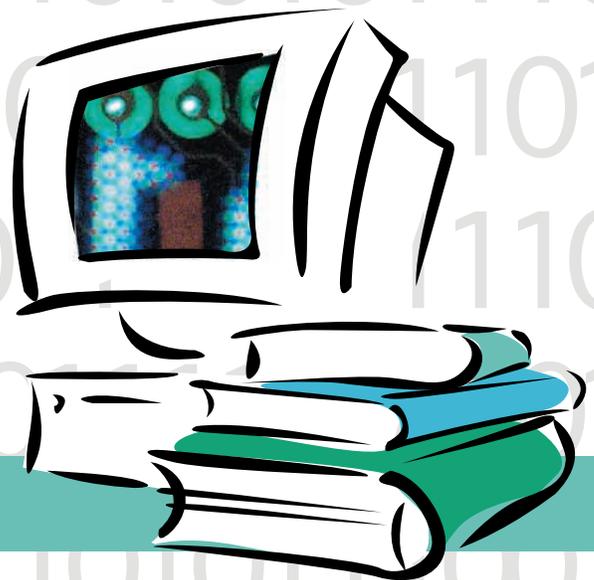
Online Staff Development

Lessons Learned

from Developers

from Facilitators

from Participants



The opportunities for learning and growth online are virtually limitless. Internet-based education transcends typical time and space barriers, giving [participants] the ability to access learning opportunities day and night from every corner of the globe. Coursework can now provide material in highly interactive audio, video, and textual formats at a pace set by the student.

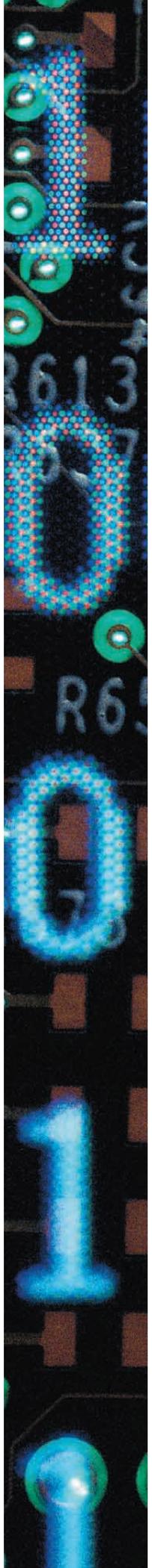
(Institute for Higher Education Policy, National Education Association, 2000, p. vii)

At a time when teachers face growing needs for ongoing professional development, online courses and components, delivered via the World Wide Web, are becoming increasingly popular. Individuals, institutions and commercial organizations are developing online staff development in order to effect more timely and less expensive training. Proponents see online learning as a potential solution to all training needs; opponents see it as less effective than traditional strategies. What is clear is that a great deal of research is needed to guide staff developers and educators in making the most of this exciting opportunity for meeting the increasing demands of educators for updating and training.

While research findings are just beginning to make their way into the literature, a great deal is being written about distance learning, online training, and eLearning. Courses and components are being developed, offered, evaluated and revised. Participants are learning from online components, as are online instructors, those charged with facilitating the learning experiences. We can learn a great deal from these “pioneers.”

This document is a compilation of “lessons learned” in online staff development for professional educators. It examines online learning from three perspectives:

- From course developers—those who are responsible for the creation of the course or component. They are responsible for choosing appropriate online activities, sequences, strategies and resources to match content and desired learning outcomes.
- From course facilitators (or instructors)—those who are responsible for the day-to-day monitoring of the course, providing expertise in the course content as well as technical assistance and feedback on participants’ progress. The instructor may also revise activities and lessons based on assessment data and participant input. (The course developer may also be the facilitator, but this is not always the case.)
- From course participants—the learners in online courses or components. In this case, they are educators who have taken a course or component as part of their inservice training or for their own professional development.



These “lessons” have been gleaned from a thorough review of the literature—examining both print and web-based documents, which are listed in the “Resources” section. Additionally, a survey instrument presenting a draft of the “lessons” was emailed to over 200 developers, facilitators/instructors, and participants who reviewed, validated and critiqued the lessons and then contributed additional lessons from their own expertise and experiences. While many reviewers asked not to be identified, others are listed in the “Contributors” section. We appreciate every reviewer, every comment, every lesson shared.

While not all “lessons” apply to all courses or components, educators involved—or contemplating involvement—in any way in online staff development should consider each lesson. As educators know, “learning never ends.” And now, through online staff development, there are more and more opportunities for educators themselves to continue to learn and to grow.

Florida Instructional Technology Resource Center
University of Central Florida
September 2000

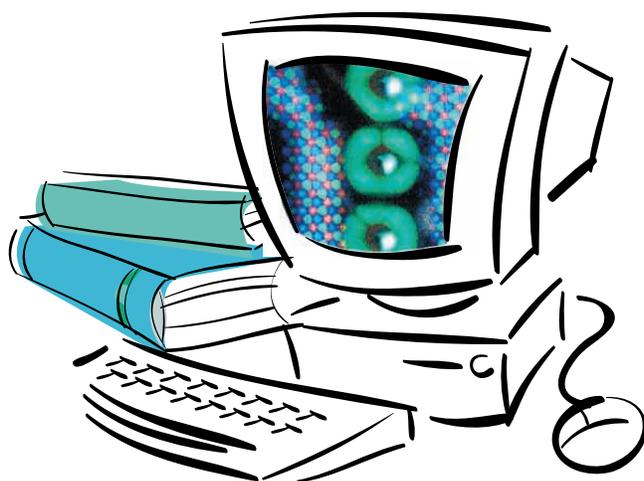


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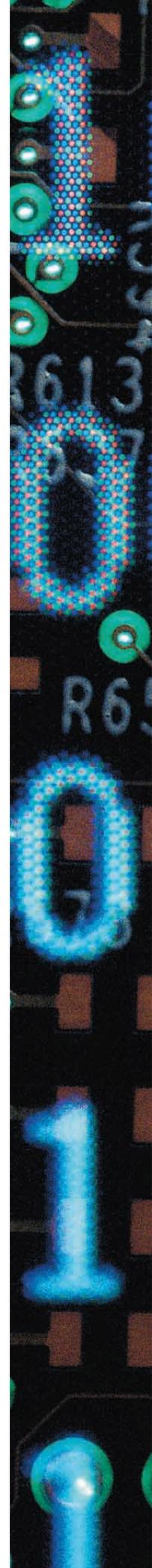
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Acknowledgements

We are indebted to many who have shared these lessons—pioneers in online teaching and learning. We appreciate the researchers and writers on whose works this document is based. We are especially grateful to the educators of Monroe County (Florida) Public Schools who taught us our first lessons in online staff development as we tried to teach a little about integrating the Internet into the classroom; to the staff of UCF's Course Development and Web Services who have continued to support ITRC initiatives in word and deed; to our own staff who continue to learn and to lead; and to the many participants in our workshops and online components who continue to model the professionalism, dedication, and enthusiasm exemplified by Florida educators.

Developers

Planning



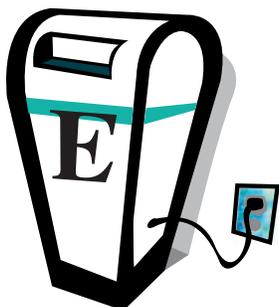
1. Define what you want to teach in clear and simple goals and objectives.
2. Identify appropriate materials, activities, strategies, and media that will help participants meet those goals.
3. Identify how success will be measured.
4. Set realistic goals for your development process; it takes time to develop any content, but especially interactive multimedia content.
5. Start with simple delivery techniques and strategies, but work towards a long-term course development plan.
6. Brainstorm with colleagues on possible topics and techniques.
7. Borrow from others who have developed online training before you and have been successful. Remember to get permission and then give credit to any contributors.
8. Plan for gradual change-over as you transition from the old system to new.
9. Plan for problems and have a back-up plan.
10. Diagram the hierarchy or file structure of the course website on paper before you begin building files.
11. Don't plan to dump data, such as a syllabus and class notes, online and call it training.
12. Design with adult learning principles in mind.



13. Define and communicate pre-requisite skills prior to registration to be sure technology issues don't get in the way of participants' learning.
14. Provide "how to use the Internet" material, instructions on how to use your particular courseware product, and how to operate through your school's computer system.
15. Review the plan for the course with a small group of potential participants to be sure the content and flow will work well.
16. Develop a back-up plan for when the technology fails.
17. Develop a "shell" that can be used for subsequent courses.
18. Establish protocols for assignment completion, hardware, software, virus protection, email headers, etc.
19. Remember—the learner, not the trainer, should be in control when participating in online learning. However you need to plan how much control the learner can have. (If the course is self-paced, can the learner move ahead of the group and complete assignments early, or does the course require group dynamics and need all the participants to work on the individual assignments at the same time?)
20. Consider revealing course content and activities in small chunks throughout the semester to keep participants interested.
21. Identify realistic minimum hardware and software requirements and design the instructions with these in mind.
22. Consider alternatives for potential participants who may not have the bandwidth or the know-how for your current plan.
23. If working with subject matter experts to design the course, establish a good working relationship and a clear understanding of responsibilities.



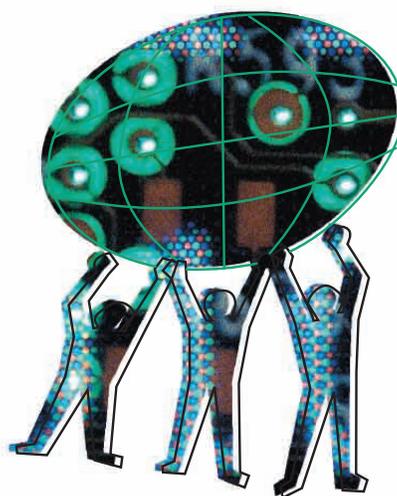
Contact and Support



1. Create a course calendar online.
2. Create a class distribution list.
3. Provide facilitator and help desk contact information in plain view on most pages.
4. Create activities that require regularly scheduled communication from participants.
5. Provide a Frequently Asked Questions (FAQ) section on the course website and make sure the participants are aware of its existence.
6. Provide participants with the opportunity to offer periodic feedback on the course.
7. Alert instructors and participants immediately of any scheduled down time on the server so they can plan accordingly.

Online Community

1. Develop activities that encourage interactions between your participants and others in a variety of ways and develop a plan for monitoring that interaction.
2. Develop activities that encourage cohort groups and online study groups.
3. Create a special “coffee house” forum, bulletin board, or threaded discussion area in which participants can freely exchange news and views about topics not directly related to the course but of interest to the participants.
4. Create web pages for participants including participants’ names and pictures so everyone can “see” each other; secure these from access by others unless you have participants’ permission to open this area to outsiders.
5. Establish communication between course participants and others who could be helpful.
6. Design opportunities for participants to conduct peer reviews of drafts and assignments and share their experiences.



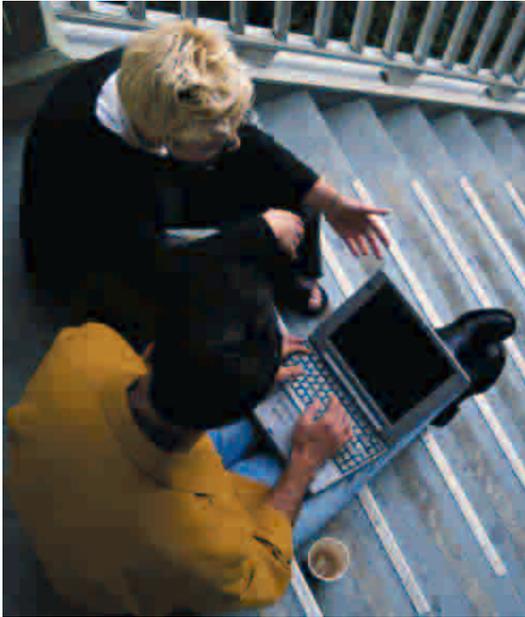
Content

1. List required and recommended texts and other materials.
2. Provide a description of the grading policy.
3. Provide advanced organizers for each lesson or module.
4. Practice and preach “netiquette.”
5. Make activities and assignments clear and concise.
6. Be sure content is aligned to district needs and to state and national standards.
7. Design content to be as complete and rich as face to face instruction—or more so.
8. Provide challenging activities that have value in the classroom.
9. Provide extra challenging activities as bonus projects to extend learning for those who wish to do so.
10. Provide participants with exam and online course content study guides.
11. If appropriate, use rubrics for assessment of project based learning.
12. Utilize links and existing resources on the Internet—keep an up-to-date “virtual library.”
13. Develop activities that allow participants to solve the kinds of real world problems they would face in their work setting.
14. Direct participants to other self-help resources relating to basic computer competencies, such as workshops provided by the district, computer stores, videotape tutorials, or online tutorials.



I think it is important to remember that using the bells and whistles can be fun—but many students don't have the appropriate plug-ins or bandwidth to take advantage of them.

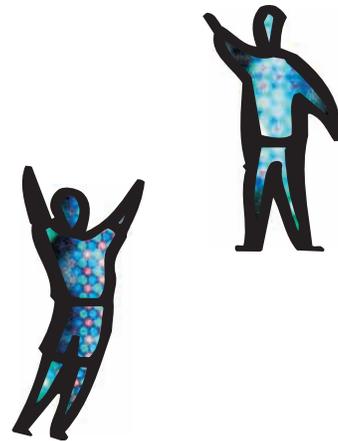




15. Provide a complete outline of the component that is aligned with the general description and learning objectives.
16. Design activities to support the content that require participants to analyze, synthesize and evaluate.
17. Ensure that learning outcomes—not technology—determine the technology being used to deliver the content.

Format

1. Vary your class activities and provide options to support the learning goals and different learning styles—email, listservs, threaded web discussion, chats, web page development, audio, and video. Consider the strengths and weakness of each.
2. Mix the formats of and strategies for delivering the course content. No single format works in all situations or for all learners.
3. Keep lessons and pages short.
4. Make the course pages easily navigable, pleasing to the eye, and fast loading.
5. Build interactivity into each lesson and component.
6. Break longer content into smaller sequential chunks on separate pages.
7. Optimize images for web transmission.
8. Be selective about what is included on web pages; ensure that timely access to information is not sacrificed for superfluous graphics, sounds or other elements.
9. Use advanced organizers, including menus, headings and subheadings, to create a clear structure.





10. Use plenty of white space—double spacing between paragraphs and generous margins.
11. Use standard fonts (Times, Helvetica, Arial)—readable and loaded on most computers. Serif fonts (Times) are more easily read in smaller print. Use sans-serif fonts (Arial and Helvetica) for headlines.
12. Use graphics, animation and sound only to clarify concepts and improve learning.
13. Maximize readability. Avoid busy or highly colored backgrounds.
14. Minimize the number of layers that participants must navigate before reaching the information they need.
15. Design important web pages so they can be easily read as printed documents. Test layouts and colors to ensure that critical information won't be lost in printing.
16. Embed a concept glossary that allows those users who need the clarification to click on a hyperlink to get it.
17. Keep in mind that all participants may not have computers with the latest bells and whistles that enable multimedia presentations.
18. Be aware of impending upgrades in browser or course development software. Whenever possible, view your class in the new version and advise participants about impending changes.
19. Check course appearance and functionality on various browsers, platforms, and screen sizes.



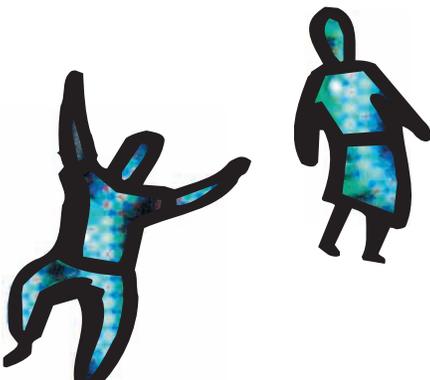
20. Strive for consistency: develop a standard kit, bag or library of screen design elements including graphics, buttons, icons, and color pallets.
21. Check your pages at Bobby (<http://www.cast.org/bobby/>), a web-based tool that analyzes web pages for their accessibility to people with disabilities.
22. Use <http://validator.w3.org/> to validate your web pages. This site checks HTML documents for conformance to W3C HTML, XHTML, and other HTML standards.

Miscellaneous

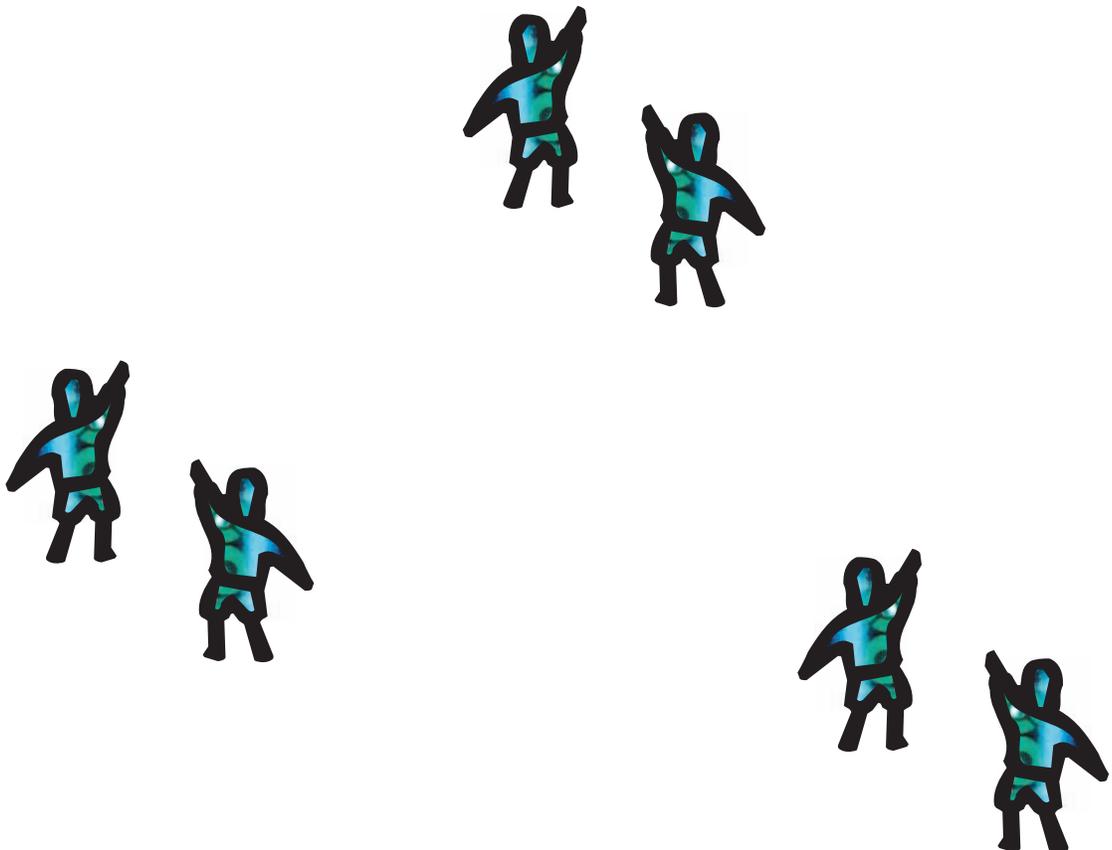
1. Check and update all URLs and links on a regular basis. Use a link checker (i.e., LinkGuard—<http://www.howamazing.com/linkchecker.htm>, Big Brother—<http://pauillac.inria.fr/~fpottier/brother.html.en>) to find broken links.
2. Adhere to copyright law with all graphics, audio, video, and printed material.
3. Network with your colleagues who are also developing online training. You can learn from each other and borrow techniques to improve your course.
4. If you need to gather data from the participants, make it part of the course requirements and give them credit for completion.



5. Have someone not involved with the course (and, if possible, who is an expert in the field) review the instruction before opening it to participants.



6. If possible, observe someone working through the instruction to identify areas of confusion, content that may be incomplete, or assignments that are not clear. Watching someone navigate through the course may give you ideas for improvement.
7. Spell and grammar check the text on your web pages.
8. Employ both formative and summative evaluation measures; evaluation and development must go hand-in-hand.
9. Print and file a hardcopy of the course when completed.
10. Save copies of your original work in a variety of places (housed on local server, desktop, zip disk, etc.).
11. Develop a good working relationship with your webmaster or MIS department.
12. Assist novice course facilitators in managing online instruction.
13. Communicate with course facilitators to advise them of technical support available and encourage them to use it.
14. Be sure institutional security and back-up systems are in place and that technology is as reliable as possible.
15. Develop and enhance your own professional skills by participating in “virtual” and other training opportunities.



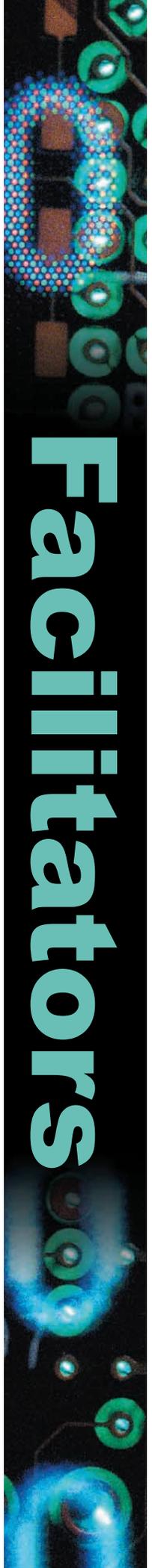
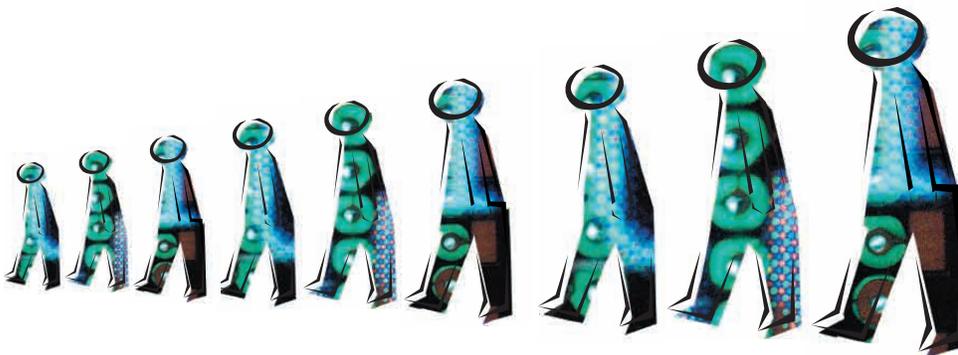
Facilitators

Contact and Support

1. Contact participants before course begins with a welcome message, a reminder about the course starting date, and to verify their email addresses. Consider asking about their experience in online learning. Novices need extra TLC during the first week.
2. Be as accessible as possible (within reason) through email, discussion groups, and the telephone. Supplying your email address, phone number and fax number as part of your welcome correspondence conveys a feeling that you are open to communication. Participants will rarely call, but knowing they can helps the ‘tone’ of the class.
3. Set realistic ground rules and limits to your accessibility so that participants don’t expect 24 hour service, 7 days a week. Establish regular “virtual” office hours.
4. Consider sending an “assignment received” message to let the participant know you received the assignment and will be grading it within a reasonable period of time.
5. Notify participants when you plan to be away (convention, workshop, etc.) and let them know that replies to email may be slower than normal or that you might be unavailable. Try to give them an alternative contact person if they need help while you are gone.

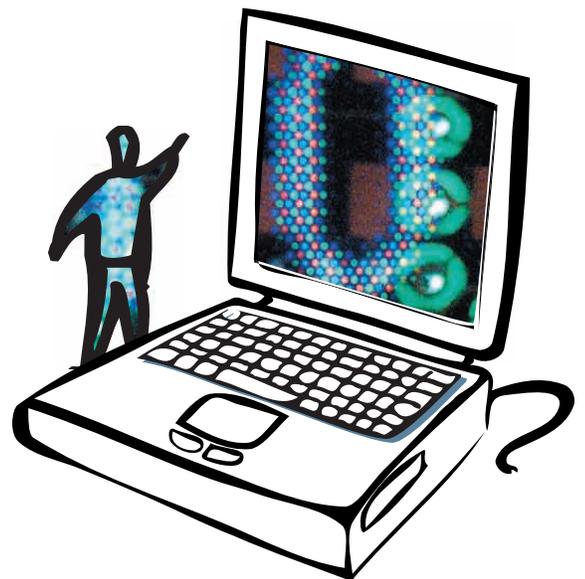


It is very important to stay in contact with the participants—that can make the difference between an okay experience and a great experience.

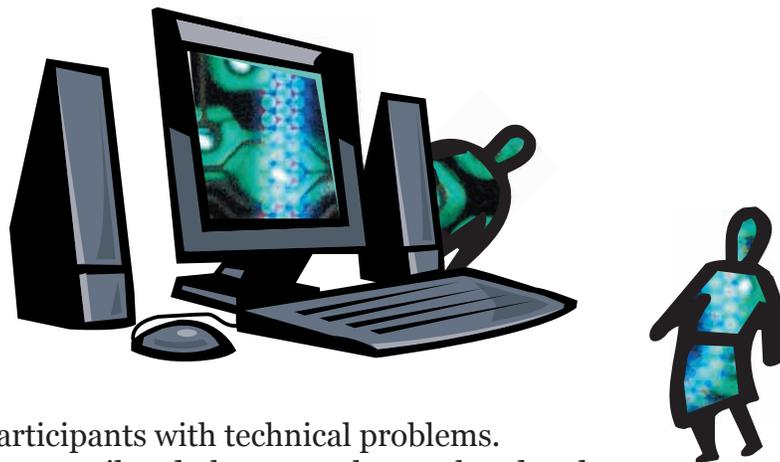




6. Alert participants as soon as possible of any scheduled down time on the server so they can plan accordingly.
7. Send regular emails and/or forum, bulletin board or threaded discussion postings with reminders, explanations, and reactions to participant concerns.
8. When posting or emailing technical directions with a “how-to” answer remember to spell out each step concisely. Try to understand the questions behind the questions they are asking. This kind of on-the-fly tech writing takes patience and practice.
9. When you write something to a participant, re-read what you wrote to ensure it doesn't convey something other than what you intended.
10. Learn how to organize your email, with the use of filters and folders, to maintain a high level of management and organization with your courses.
11. Emphasize the use of specified subject headers (i.e., Lesson 2 - AUP ideas) when submitting assignments by email. This makes sorting and filing easier.
12. List both the participants' email addresses and what they teach (grade level/ subject) wherever you record your grades. This helps you personalize your responses to them, and having their email addresses handy saves a great deal of time.
13. Use private email when appropriate to individualize instruction; use group communication methods when that is more appropriate.
14. Monitor participants' progress and provide feedback on a regular basis. Be sure feedback on assignments is specific and helpful.
15. Ensure mastery of concepts through quizzes and assignments that require applying new knowledge or skills before allowing students to progress to lessons based on those concepts.
16. Scan the forums, bulletin boards, or threaded discussions for stranded messages—significant posts that have not gotten a response after 3 or more days. Respond as appropriate.
17. Help stimulate online discussions through effective use of questions, comments, and other techniques; maintain an online environment that is professional and conducive to learning at all times.



18. Consider creating an email emergency system. Designate a special phrase to be used in email subject headers when the situation is urgent. Clearly specify what constitutes an emergency.
19. Encourage participants to develop troubleshooting skills by reading FAQ's and communicating with virtual colleagues before contacting the instructor.
20. Encourage participants not to "save up" all completed assignments before they are sent in. They may be practicing errors that might require redoing everything they submitted.
21. Be prepared to support participants with technical problems. However, have tech support email and phone numbers at hand and use them if you need to.
22. Be flexible with deadlines since the reliability of technology is sometimes out of control of the participants.
23. Grade assignments and post results within a fair amount of time. Communicate with participants to let them know when to expect to see their grades and get feedback.
24. Help students learn skills to access and use other online information resources related to the content of your course: online databases, interlibrary loans, news services, search engines, government documents.
25. Model professionalism.



Establish regular "virtual" office hours so that participants don't expect 24 hours a day, 7 days a week service.



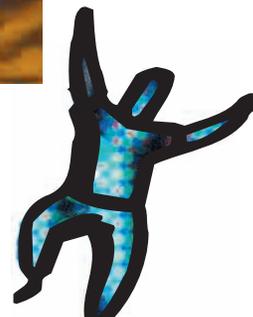
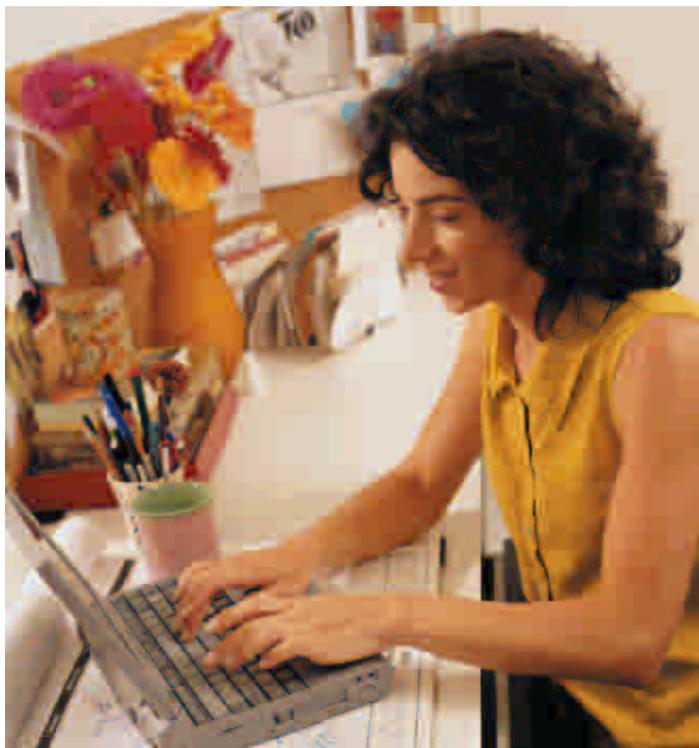
Online Community

1. Create assignments that require participants to utilize online class discussions through forum postings, bulletin boards, threaded discussions, and/or synchronous chats.
2. Prepare to provide more faculty contact and support at the beginning of a course. Begin immediately to encourage participant interaction with one another and support and model the interaction.
3. Provide a coffee house forum, bulletin board or threaded discussion in which participants can freely exchange news and views about topics not directly related to the course content but of interest to participants. Some facilitators choose not to participate in the coffee house, making it a place for “participants only” communication exchange. Others join in the conversation.
4. Encourage cohort groups and online study groups. In addition to small groups, foster a total group identity for everyone in a course.
5. Address participants by name in online discussions. Encourage participants to address each other by name and sign their postings in the forum, bulletin boards, and/or threaded discussions.
6. Recruit or develop experts, assistants or mentors to whom participants can be referred for additional help when needed.
7. Identify good examples of participant work and share those online.
8. Be supportive of participants—let them know that both instructor and participant are learning together.
9. Encourage risk taking.
10. Maintain a sense of humor. Joke, but use emoticons to ensure that your humor is understood.
11. Practice patience.
12. Praise participants.
13. Show real care and concern for participants and their learning.
14. Be warm and open with participants, showing your personality in as many ways as possible.

“Stress the value of peer feedback.”

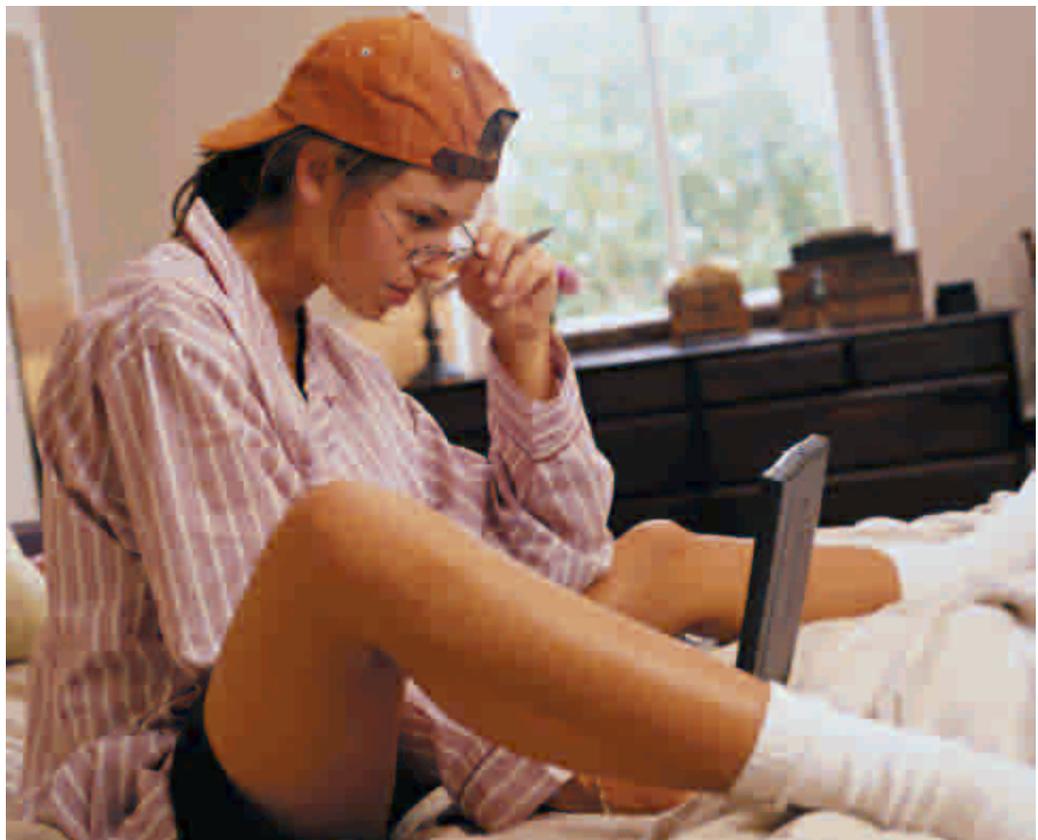


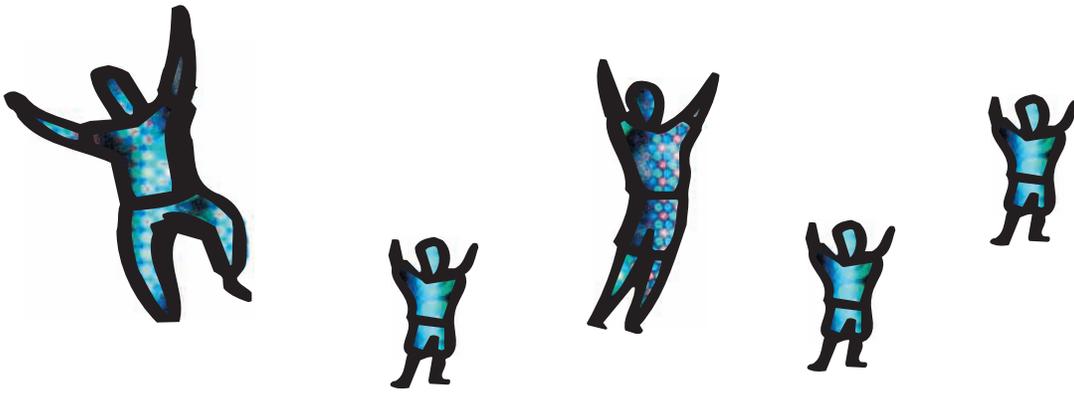
15. Find ways for participants to work together and get to know one another: require some collaborative efforts, provide email addresses and photos of participants, and encourage communication between participants to solve problems before communication with the instructor.
16. Consider offering occasional incentives for motivation: mouse pads, T-shirts, coffee cups, software or demo software, and other inexpensive items. Sometimes words of praise or virtual gold stars are just as effective if not more so!



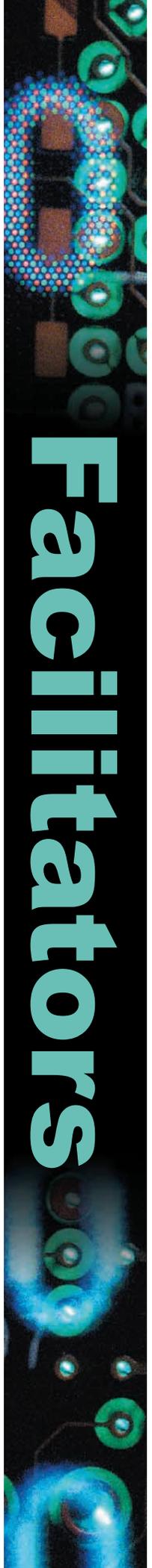
Miscellaneous

1. Hold an initial face-to-face class meeting, when possible, to meet the instructor and each other, ask questions, and become acquainted with the course logistics. If possible, consider offering an optional face-to-face class meeting before a difficult assignment.
2. Network with colleagues who are also teaching online. You can learn from each other and borrow each other's techniques to improve your courses.
3. If web pages or assignments are revised in the middle of the course, make sure participants are aware of the revision.
4. Keep organized folders on your computer by participant and assignment, so that you don't forget who has done what assignment. Save the messages in your "sent" message folder until after the course is completed. This is an easy way to track participant assignments, particularly if you send an "assignment received" message.

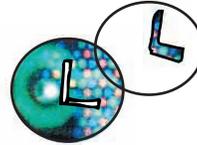




5. Pilot the course or component with a small group to be sure that you catch major glitches such as spelling errors, bad links, and confusing directions.
6. Establish a back-up plan for when the technology fails.
7. As part of online registration or pre-course activities, consider a quick survey, asking questions that help you and potential participants to determine potential technical limitations (computer, hardware/software knowledge) or lack of pre-requisite knowledge or skills that may hinder performance in the class. Contact the participant to discuss the issues.
8. Take an online course or two before attempting to teach one.
9. Assess student progress against established and published standards and rubrics.
10. Review learning outcomes regularly to ensure clarity and appropriateness.
11. Assess the effectiveness of the course through a variety of methods including student evaluations, established student outcomes, retention of learning, etc.
12. Look for opportunities to learn more about facilitating online staff development through virtual and non-virtual workshops, discussion groups, and conferences.



11. If you are planning to earn staff development points, CEUs or credit for taking the course, check with your staff development office in advance and get permission to do so in writing. Understand what you or the instructor need to provide to the office to get your credit and any deadlines or forms that might apply.



Course/Time Management

1. Commit to the course. It is very important to be able to devote the time needed to successfully complete it.
2. Log in to the course often for updates, messages, and communications among the participants.
3. Realize that online courses require at least as much time and effort as face-to-face courses and in some cases, more.
4. Set goals and deadlines for yourself, and stick to them.
5. Note any dates or deadlines and plan for them: starting date, ending date, assignment due dates, quiz dates, etc.
6. Plan ahead for scheduling problems such as grading periods, end of year, classroom activities.
7. Plan ahead for technology problems. Remember Murphy's Law? Servers can be down, your computer can crash, electricity can go out, or viruses may choke the Internet.
8. Enjoy the convenience of working at your own chosen time and place.
9. Be self-motivated and self-disciplined.
10. Accept the fact that if you are a procrastinator, this might not be for you.

I especially enjoyed the freedom of doing the assignments at my convenience (usually late at night).

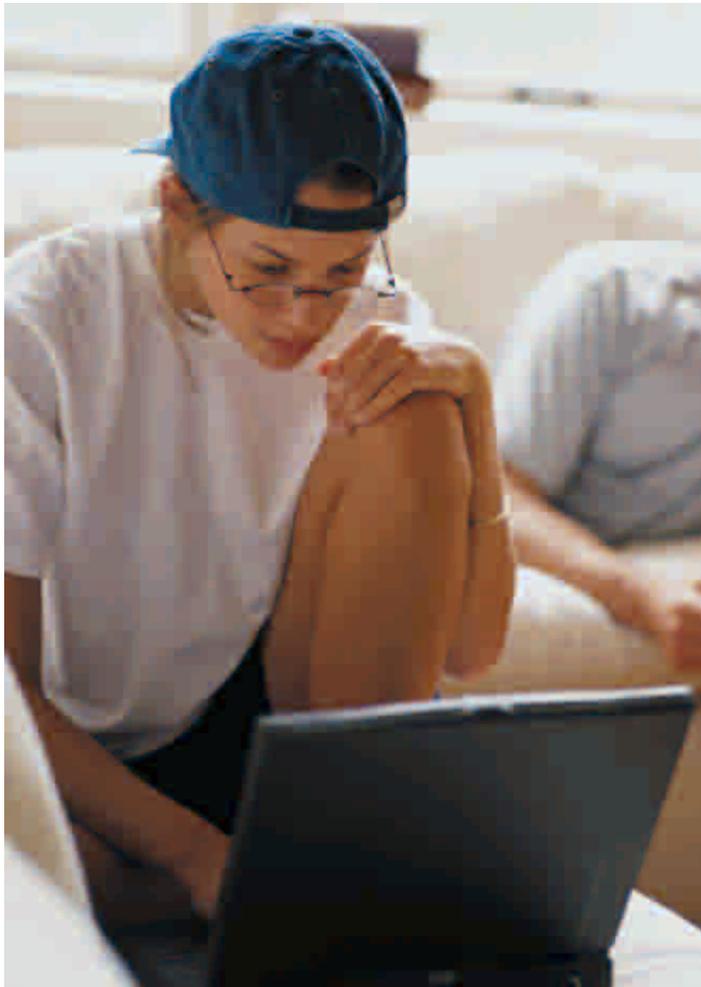


11. Make sure you have a private space where you can work.
12. Print hard copies of lessons and assignments and keep back-ups in case you need to re-send something.
13. Anticipate being at the computer for extended amounts of time.

Having access to all of the assignments from the start made it easy to manage my time.

Communication

1. Reply to email from your instructor after you receive your first email message. This will let your instructor know that s/he has the correct address.
2. “Speak up” if you are having problems. If you are having technical difficulties, or problems understanding something about the course, let someone know that something is wrong. Seek out help from your classmates and be willing to help out classmates in need.
3. If you are in over your head, let the instructor know immediately.
4. Actively participate in forums, bulletin boards, threaded discussions, etc.
5. Practice “netiquette.”
6. Use the spell checker and grammar checker.



7. Realize you often have the opportunity for more interaction with fellow participants and the instructor than in a traditional course and in some cases, more interaction is required.
8. Realize that online asynchronous communication provides time to reflect on what you wish to say. Take time to think ideas through before responding to communications from the instructor or other participants.
9. Think before you hit “return” or “send!”
10. Utilize comments and discussions posted in forums, bulletin boards, and other threaded discussions as a review of topics.



Take advantage of course determined “groups” to communicate with your classmates on a regular basis. This avoids the isolation that online classes can create.

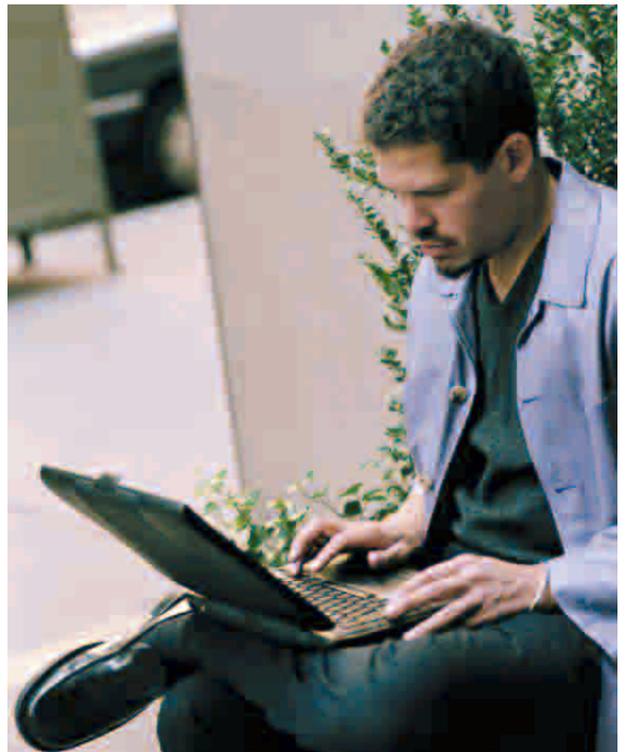
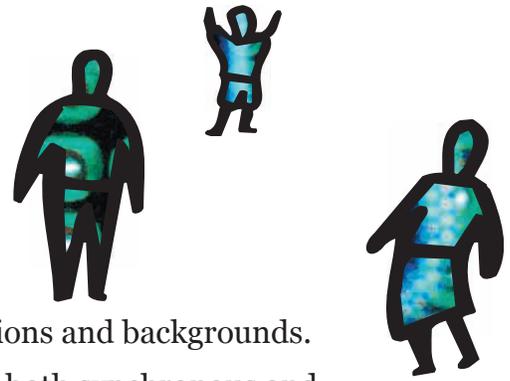
11. Pay careful attention to instructions and be certain that you understand what is being asked when submitting assignments.
12. If you have questions regarding assignments, email the instructor or a classmate for help immediately. Don’t wait until the assignment is due.
13. Understand that asynchronous learning means that answers and assistance may take several days to reach you.



14. Plan to take the time to write clearly and concisely in all assignments, threaded discussions and other course communication.
15. Keep a copy of all email you send to your instructor. You may want to cc yourself. That way you will know that the email is being delivered, and you will also have proof that it was sent on time.
16. Understand that when you post a response or comment in a forum or bulletin board area, everyone in the class will read it. Use email to the instructor for private communication.

Online Community

1. Use the online community as a chance to meet and network with interesting people from very diverse geographic locations and backgrounds.
2. Participate fully in the online experiences, both synchronous and asynchronous, to avoid feeling isolated.
3. Contribute your ideas, perspective and comments on the subject you are studying, and read about those of your classmates. Your instructor is not the only source of information in your course, you can gain great insight from your peers and they can learn from you as well.
4. Participate in listservs and discussion groups if they are offered. This is a great way to get to know some of the other people in your class. It will also allow you to ask questions of the group.
5. Find some study-buddies. If you feel the need to study with other participants from the class, ask your instructor for help in identifying other participants who may want to work with you. If you can, find someone at your school to take the course with you.
6. Be open to sharing life, work, and educational experiences as part of the learning process.
7. Realize that if you need the quick verbal exchange of ideas and the sometimes lively give and take of a typical classroom experience, online courses may not be for you.
8. Forums, bulletin boards, and other threaded discussions provide the opportunity to network and help others by recommending resources and other solutions.



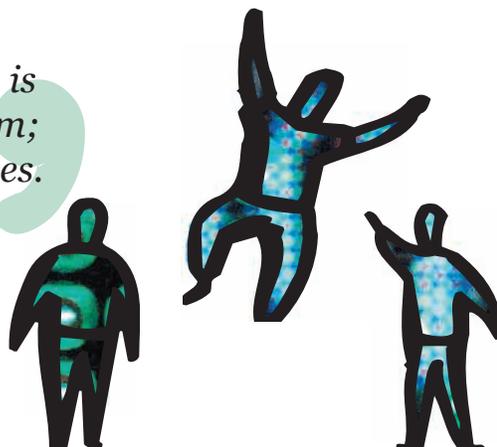
9. Be polite and respectful to everyone involved in the course. This is especially critical for a productive and supportive online environment.
10. Try to resolve any problems you may be having by asking for assistance from your classmates first and then the instructor.

Attitude

1. Be flexible.
2. Be willing to take risks.
3. Enjoy exploring new things.
4. Enjoy the freedom to choose, day-to-day, when to “attend” class.
5. Enjoy the opportunity to take training that is not offered locally.
6. Maintain a sense of humor. It’s not always you, it’s not always the course, it’s not always the technology, sometimes it’s a combination of all three!
7. Be easy on yourself. This is new to almost everyone!
8. Recognize this is a relatively new way to teach and learn and technology doesn’t always work the way you or the instructor would like it to.
9. Stay calm! Remember that you are not alone and that your classmates and instructor are there to help if you reach out to them.
10. Practice patience with yourself, other participants, and the instructor.
11. Recognize that instructors and course developers can make mistakes too.
12. Believe that high quality learning can take place without having face to face interaction and work to make it happen for you.

Besides learning very valuable information, I had more fun taking this course in my pajamas, than any other “fully dressed” course I have taken at any time.

Be flexible! Adaptation is the key in the classroom; apply it to online classes.



Taking the Course

1. Research online links. These are often the richest resources in a course. Bookmark or record them for later use.
2. Complete all activities and readings. The course has been designed to give you the most information and provide the best learning experiences. Take advantage of that!
3. Complete self-assessments honestly.
4. Apply what you learn. If it is possible, take the things you learn in your online course today and use them in your workplace tomorrow.
5. If you must use hard copy, print out only the current lesson, not the entire course. Things may change during the course and the instructor may make changes to the web pages based on feedback.
6. Know the requirements and procedures for accessing and taking any tests or quizzes online. Are there time limits? Can you take it more than once? Is a proctor necessary?
7. Be sure to read carefully and follow directions. Reading is one of the most important skills in online learning, since the written word is the primary source for directions and information in online courses.
8. Plan ahead, and have a back-up plan for submitting assignments. Technology frequently fails when you need it most.



Resources

Abernathy, D. J. (1998, September). The WWW of distance learning: Who does what and where? Training & Development, 52 (9), 28-32.

This article presents recommendations for identifying distance learning team members, establishing a team structure, and assessing the team needs.

Abernathy, D. J. (1997). A start-up guide to distance learning. Training & Development, 51 (12), 39-47.

Looks at the use of distance education as a means to deliver training. Discusses advantages, technologies involved, program development, and offers a glossary of distance learning terms, tips for developing effective programs, tips for teletraining instructors, and additional resources.

Allen, B. (1997, May 22). Management of course resources. [Online]. Available: <http://EdWebiii.sdsu.edu/T3/Module4/Connect.htm>

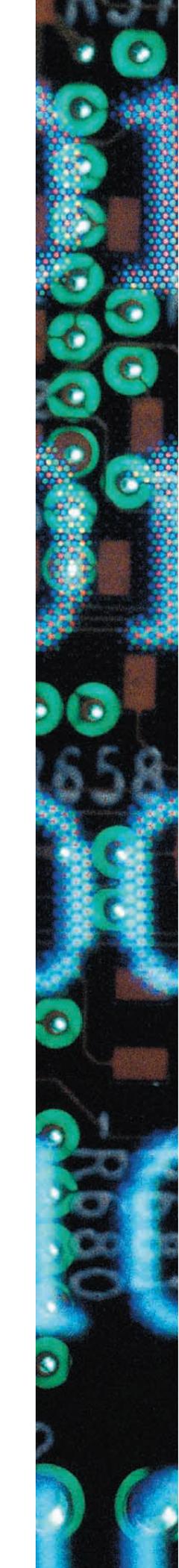
Part of the T3 (Tools, Templates, and Training) Modules developed at San Diego State University's Center for Learning, Instruction, and Performance Technologies. A collection of advice from the T3 development team. It is intended to be a starting point for discussions with your own mentors, coaches, and colleagues.

Armstrong, L. (1996, July). Report on the teaching and learning on the Internet projects—RMIT TAFE. In Learning technologies: Prospects and pathways. Selected papers from EdTech '96 Biennial Conference of the Australian Society for Educational Technology (ERIC Document Reproduction Service ED 396 720)

This paper reports on the initial stages of developing training modules for study by students on the Internet in a course on local government. Some the advantages of this type of training over traditional off-campus distance education are discussed along with its limitations. Preliminary issues in setting up training courses on the Internet are discussed, including costs and funding, teacher involvement in decision making, and designs that maximize ease of use and student interest. The elements of a successful approach to the delivery of online training are also summarized.

The Board of Trustees of the University of Illinois (2000, June 20). Self-evaluation for potential online students. [Online]. Available: <http://illinois.online.uillinois.edu/model/selfeval.html>

A questionnaire designed to assist students in evaluating their potential success in taking online courses.



The Board of Trustees of the University of Illinois. (2000, June 20). What makes a successful online student? [Online]. Available: <http://illinois.online.uillinois.edu/IONresources/onlineoverview/StudentProfile.html>

A list of 10 qualities that the online student should possess: 1. Be open-minded about sharing life, work, and educational experiences as part of the learning process. 2. Be able to communicate through writing. 3. Be self-motivated and self-disciplined. 4. Be willing to “speak up” if problems arise. 5. Be willing and able to commit to 4 to 15 hours per week per course. 6. Be able to meet the minimum requirements for the program. 7. Accept critical thinking and decision making as part of the learning process. 8. Have access to a computer and a modem. 9. Be able to think ideas through before responding. 10. Feel that high quality learning can take place without going to a traditional classroom.

Black, D. (1998, September). Live and online: A WBT primer. Training & Development, 52 (9), 34-36.

How to achieve face-to-face results in WBT (web-based training). One of the most important factors is planning.

Brown, M. E. (1999). Beyond the first wave: A framework for online learning. Journal of Online Learning, 11 (1), 15-21.

In the hands of a good teacher the Internet offers many possibilities for active and meaningful learning. This article provides a theoretical lens to better see the opportunities for building strong new learning communities with the Internet. Like learning opportunities in the classroom, the Internet needs to be thoroughly integrated into the curriculum. Such integration requires careful planning and timely intervention by teachers who are knowledgeable about the learning process.

Carlson, R. (1999, September). Migrating your course to the online environment. Syllabus, 13 (2), 20-24.

This article outlines course planning options, conversion and implementation techniques, and methods of evaluation that will allow almost any experienced college classroom teacher to do a responsible and rewarding job of teaching students in the online environment.

College of Dupage. (1999, December 8). Are distance learning courses for me? [Online]. Available: http://www.cod.edu/dept/CIL/CIL_Surv.htm

A questionnaire designed to assist students in evaluating their potential success in taking an online course. (This questionnaire is adapted from “Are Telecourses for Me?” from PBS-Adult Learning Service, The Agenda, Spring 1994.)

Cooper, L. (2000, April 25). Online courses: Tips for making them work. [Online]. Available: <http://www.usq.edu.au/electpub/e-jist/vol3no3/article3/index.htm>

A number of post-secondary institutions are looking more seriously at offering online courses to meet the educational needs of a fast-paced, computer-literate society. For instructors who are interested in offering online classes, this article provides various steps and procedures for increasing their effectiveness.

Davis, N. (1998). Developing telecommunications within European teacher education: Progress, plans, and policy. Paper presented at SITE 98: Society for Information Technology & Teacher Education International Conference, Washington, DC.(ERIC Document Reproduction Service ED 421 160)

Teacher training is a priority of the European Commission. One action has been to fund three Telematics projects that focus on telematics and teacher training within the Telematics Application Program. The T3 (Telematics for Teacher Training) project focuses on the establishment of communities of teachers in four discipline areas. T3 uses two complimentary channels of telecommunications: Internet applications including World Wide Web, email and computer conferencing, and ISDN applications, particularly point-to-point enhanced video conferencing. Successes, problems, and future developments of the T3 project are discussed.

Driscoll, M. (1998, November). How to pilot web-based training. *Training & Development*, 52 (11), 44-49.

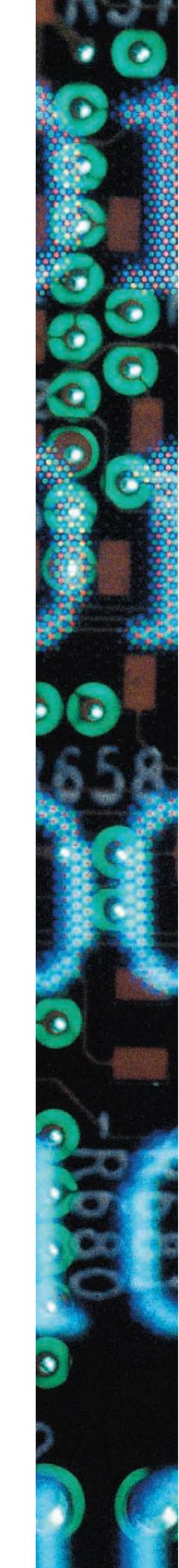
Provides 12 steps for planning, implementing, and piloting Web-based training: 1. Clarify the purpose of the pilot. 2. Identify and enlist the support of a high-level champion. 3. Form a core team, and identify extended team members. 4. Create a set of evaluation criteria. 5. Develop a plan to gather data. 6. Match the technology and topic. 7. Implement an off-the-shelf program, or develop the pilot program. 8. Prepare for rollout. 9. Conduct a dry run. 10. Deliver the program. 11. Gather data. 12. Summarize the experience, and make recommendations. Shows how a formal pilot can provide insight into how well the proposed solution will work within the organization.

East Carolina University. (1998, August 1). Learner profile for online courses. [Online]. Available: <http://www.sit.ecu.edu/SITOnline/dltips/LearnerProfile.html>

This article highlights the three most important qualities online students should possess: 1. Being an independent learner. 2. Being organized. 3. Being forthright.

Eastman, J. (personal communication, June 1, 2000)

Reflections from the perspective of a developer, facilitator, and participant.



Everett, D. R. (1998). Taking instruction online: The art of delivery. Paper presented at SITE 98: Society for Information Technology & Teacher Education International Conference, Washington, DC. (ERIC Document Reproduction Service ED 421 094)

This paper focuses on the process of preparing and delivering courses using compressed video by considering research related to how learners adapt in new environments, the approval process, the environment, and course delivery techniques. Over a two-semester period, a survey was administered to students in distance learning courses to address these issues. The survey produced results in three areas: feelings about the distance learning environment, factors which helped make sense of the distance learning environment, and technologies of the distance learning environment. Recommendations for online instruction are offered related to instructor training, adapting courses to the distance learning environment, assisting students in making sense of distance learning technology, teaching methods, learning and introducing new technologies and adjusting to meet student needs.

Harrison, B. (1997, April). Hardware/software to support distance learning classes. Paper presented at the Mid-South Instructional Technology Conference, Murfreesboro, TN. (ERIC Document Reproduction Service ED 430 518)

While the major part of any class is the classroom contact time, out-of-class support often makes the difference between success and failure of a student. With distance learning classes, teachers are faced with a unique set of problems in supplying this outside support. This paper covers hardware and software tools that can help to overcome these problems. Problems to consider include the availability of hardware/software, access control, Internet access, copyright issues, training, and costs.

Hoffman, B., & Ritchie, D. (1998). Teaching and learning online: Tools, templates, and training. Paper presented at SITE 98: Society for Information Technology & Teacher Education International Conference, Washington, DC. (ERIC Document Reproduction Service ED 421 092)

The 22-campus California State University (CSU) system recently sponsored an online faculty development institute to help college instructors learn how to create pedagogically sound online instruction. The Tools, Templates, and Training (T3) workshop was designed to foster immediate success and encourage incremental development of online course materials. This paper describes the genesis of the online workshop, outlines the underlying design principles, presents an overview of the workshop modules (introduction, connect, apply, reflect, and extend), and reviews the lessons learned from the project.

Institute for Higher Education Policy. (2000, April). Quality on the line. [Online]. Available: <http://www.nea.org/he/abouthe/Quality.pdf>

This report identifies benchmarks considered critical to ensuring quality Internet-based distance learning. The report is supported by the NEA and Blackboard.

Institute for Higher Education Policy. (1999, April). What's the difference? [Online]. Available: <http://www.nea.org/he/abouthe/diseddif.pdf>

This report is a review of the contemporary research on the effectiveness of distance education in higher education and what the research really tells us. This report was commissioned by the NEA and the AFT.

Kiser, K. (1999, November). 10 thing we know so far about online training. *Training*, 36 (11), 66-74.

Key lessons regarding online training are: 1. Bring technology savvy employees to the table during planning. 2. Do not dump data online and call it training. 3. The web can be used to teach soft skills. 4. Do not expect people to train on their own time. 5. Keep the lessons short. 6. Keep traffic moving. 7. Do not use plug-ins. 8. Make sure everyone knows the basics. 9. Do not forget the human touch. 10. The web will not put classroom trainers out of business.

Lamb, A. C., & Smith, W. L. (2000, February). Ten facts of life for distance learning courses. *TechTrends*, 44 (1), 12-15.

Key lessons regarding distance learning courses are: 1. Students are individuals. 2. Technologies change and evolve. 3. Technology fails. 4. Planning shows. 5. Students procrastinate. 6. Track them or lose them. 7. Students appreciate feedback. 8. Technology takes time. 9. Active learning is critical. 10. Students have great ideas.

Lohmann, J. S. (1998, September). Classrooms without walls: Three companies that took the plunge. *Training & Development*, 52 (9), 38-41.

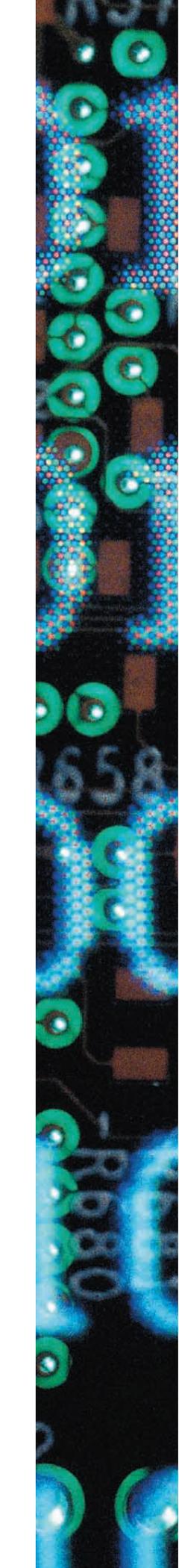
The lessons that three companies (Electronic Data Systems, The Tennessee Valley Authority, MCI) have learned from delivering training over the Internet or via live satellite broadcast.

Lucas, G., & Hoffman, B. (1997, June 2). Strategies and tactics for online teaching and learning. [Online]. Available: <http://EdWebiii.sdsu.edu/T3/Module1/Connect.htm>

Part of the T3 (Tools, Templates, and Training) Modules developed at San Diego State University's Center for Learning, Instruction, and Performance Technologies. The objectives of this module are: 1. Consider the role that online instruction might play in your own course. 2. Begin using tools and templates to develop an instructor page and a course marketing page for your own online course module.

MacFarland, T. W. (1998, April). Assessment of an Internet training program for distance education adjunct faculty. Paper presented at the Annual Conference of the National Adjunct Faculty Guild, Chicago, IL. (ERIC Document Reproduction Service ED 418 698)

A self-paced 12-week training program was developed by Nova Southeastern University (Fort Lauderdale, Florida). At the beginning of the 12-week training session, participants received an instructional videotape that identified online training activities and a script of



the videotape. Based on self-reported data, engagement in this program resulted in a 31% increase in skill with online utilities and other tools associated with the Internet. A summary of week-by-week activities is given, and two tables show the instructional video evaluation instrument results and pretest/posttest results. Recommendations are provided for improving the instructional videotape and training components. The Instructional Video Evaluation Instrument is included at the end of the document.

Mather, M. A. (2000, January). In-service to go: Professional development online. *Technology & Learning*, 20 (6), 18-24.

Highlights various professional development offerings available through the Internet for teachers to utilize at a time and location of their own choosing. Sidebars include thoughts shared by online learners and what to look for as a potential user of online learning services.

McGee, M. K. (1999, January 25). Train on the web. *Informationweek*, 718, 101-105.

Web-based training is an increasingly popular option for businesses. Depending on the solution, web-based courses, accessed over the Internet or intranets using browsers, can be taken anywhere, at any convenient time. Within technology-based training, web-based training is the fastest-growing segment. One reason companies implement web-based training is because they have the infrastructure to support it already in place.

Millichap, N. (2000, May/June). How using technology affects the learning process and faculty behavior. *The Technology Source* [Online serial]. Available: <http://horizon.unc.edu/TS/cases/2000-05.asp>

The Faculty Development Committee of the Indiana Partnership for Statewide Education asked Indiana faculty teaching with technology to consider the question "Using technology to enhance learning: How does it change what faculty do?" Many faculty responded and 24 articles were published online and in print under the title *Enhancements: How Using Technology Changes What Faculty Do?* This article summarizes the information found in those articles.

Mory, E. H., Gambill, L. E., & Browning, J. B. (1998). Instruction on the web: The online student's perspective. Paper presented at SITE 98: Society for Information Technology & Teacher Education International Conference, Washington, DC. (ERIC Document Reproduction Service ED 421 090)

The purpose of this study was to examine the experiences of two university graduate students while taking an online course over the World Wide Web, in order to identify issues of design, implementation, and motivation from a user's perspective. The online course was a graduate class on the methods and techniques of training and development. Data collection included descriptions of course content, page design and presentation, assignments and tests, communication techniques, schedule of events, and student/student and instructor/student interactions. Experiences were documented through questionnaires, interview data, and students' annotated experiences during the semester. Results indicate ways designers designing a web course, instructors teaching a web-based course, and students taking a course online can employ instructional strategies to ensure the greatest probability of success.

Nash, S. S., & Dougherty, R. J. (1999). Building creativity in the online classroom. Syllabus, 13 (2), 72.

One of the keys to success in web-based instruction is creativity. This article includes several suggestions on how to achieve it.

National Education Association. (1999). Technology briefs. [Online]. Available: <http://www.nea.org/cet/briefs/16.html>

A checklist for quality distance education developed by the NEA Professional Standards and Practices Committee and recommended by the NEA Representative Assembly.

OnlineLearning. (2000). Is online learning for me? [Online]. Available: <http://www.onlinelearning.net/ole/holwselfassess.html?s=029.f030y401m.016l121w11>

A questionnaire designed to assist students in evaluating their potential success in taking online courses.

San Diego State University. (1997, June 2). Building an online community. [Online]. Available: <http://EdWebiii.sdsu.edu/T3/Module4/Connect.htm>

Part of the T3 (Tools, Templates, and Training) Modules developed at San Diego State University's Center for Learning, Instruction, and Performance Technologies. Topics covered in this module are: 1. The nature of learning. 2. Increasing interaction. 3. Online communities.

San Diego State University. (1997, June 2). Online student learning activities. [Online]. Available: <http://EdWebiii.sdsu.edu/T3/Module3/Connect.htm>

Part of the T3 (Tools, Templates, and Training) Modules developed at San Diego State University's Center for Learning, Instruction, and Performance Technologies. This module presents various ways to engage students in active learning in the eLearning environment.

Schaaf, D. (1999, September). Bandwidth basics. Training, 36 (9), 23-27.

Included in this article are recommendations for streamlining the graphics and html pages used in delivering online training.

Seymour, M. (1997). Heritage OnLine: Online professional development courses for teachers. Paper presented at the National Educational Computing Conference, Seattle, WA.

An overview of the key aspects of Heritage OnLine, a program of university credit courses for K-12 teachers. The basic concept of Heritage OnLine, technical and course designs in the HOL model, major learnings from the first year of operation, and strengths and weaknesses of this kind of program are covered in this presentation.

Southern Regional Education Board. (2000, Fall). Essential principles of quality: Guidelines for web-based courses for middle grades and high school students. (Available from SREB, 592 10th Street NW, Atlanta, GA 30318)

This document is intended to assure states, school districts and schools that courses complying with the principles will be high-quality courses that effectively get students to meet academic goals. The principles are also intended to ensure that the characteristics of good teaching and learning are addressed during the development and use of electronically delivered courses.

Terra Community College. (1997, May 4). How to succeed in distance learning courses. [Online]. Available: <http://www.terra.cc.oh.us/detips.html>

This guide provides suggestions and tips covering subjects like study skills, course organization information, and scheduling suggestions for distance learners.

Thiel, J., & Hoffman, B. (1997, June 2). Document preparation for online courses. [Online]. Available: <http://EdWebiii.sdsu.edu/T3/Module2/Connect.htm>

Part of the T3 (Tools, Templates, and Training) Modules developed at San Diego State University's Center for Learning, Instruction, and Performance Technologies. This module covers the principles of document preparation (readability, printability, smart structure, flat structure, rapid display, simplified revision), and the I CARE system (Introduction, Connect, Apply, Reflect, Extend).

University of Illinois. (1998). Tips for online success. [Online]. Available: <http://illinois.online.uillinois.edu/model/tips.htm>

This article lists 10 tips for success that should be shared with eLearning students:

1. Take full advantage of online conferencing.
2. Participate!
3. Take the program and yourself seriously.
4. Make sure you have a private space where you can study.
5. Become a true advocate of distance learning.
6. Log on to your course every single day.
7. Take advantage of your anonymity.
8. Be polite and respectful.
9. Speak up if you are having problems.
10. Apply what you learn.

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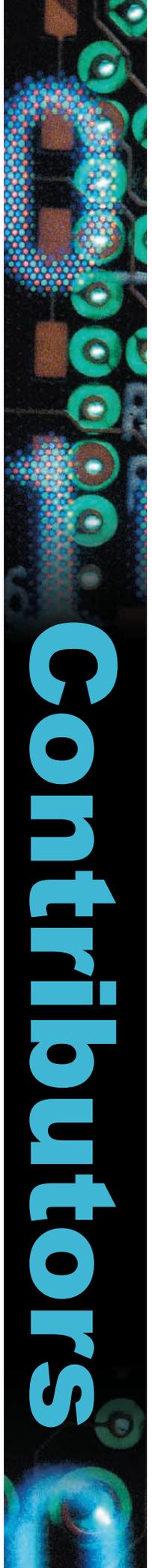
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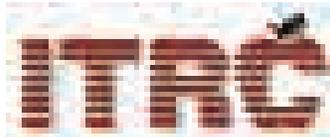
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