Using Technology for Communication and Training

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PROJECT TEAM

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Note to HR faculty and instructors: SHRM cases and modules are intended for use in HR classrooms at universities. Teaching notes are included with each. While our current intent is to make the materials available without charge, we reserve the right to impose charges should we deem it necessary to support the program. However, currently, these resources are available free of charge to all. Please duplicate only the number of copies needed, one for each student in the class.

For more information, please contact:
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Web: http://www.shrm.org/education/hreducation
OVERVIEW

This unit is designed for graduate students studying human resource development. It investigates current technologies available to support training and communication within an organization. The use of technology for training is increasing, and the cost to generate these trainings is becoming a significant amount of the budget. Trainers need to be aware of technologies available, and more important, how to stay current with new technologies. Note: This is not a “how to use technology” module; rather, it is intended to increase awareness of and access to resources.
ASTD’s State of the Industry report.

In 2007, ASTD’s State of the Industry report announced that the percent of technology-based training increased to 30.28% in 2006, up from 11.47% in 2001. The Bench Marking Forum (BMF) companies reported 39.85%, and the BEST (determined by enterprise-wide success as a result of employee learning and development) reported 35.85%. The average direct expenditure per employee was $1,040, or 2.33% of payroll.

Within the training, the second most covered content was IT and systems skills.

The uses reported that work best include:

- Creating communities of practice and facilitate collaboration
- Developing knowledge management systems
- Reducing training costs
- Developing online documentation systems
- Providing easy access to standards and manuals

**Instructional Technologies**

“What technologies do you most commonly use for communication?”

“For learning?”

**Synchronous vs. Asynchronous**

“What is the difference?”

*Synchronous* communication occurs live, or at the same time. Two or more individuals are engaged in conversation in real-time. This may be face-to-face or supported by technology.

*Asynchronous* communication occurs when individuals can post their thoughts or comments at different times, from different locations. Other individuals can read or view those postings at a later date and respond. Asynchronous communication allows time for thought, reflection, and gathering of new information.
SYNCHRONOUS

Interactive Video
Interactive video allows for two-way audio and video communication. It is easy to make one-to-one connections if each user has a computer, Internet connection, microphone, and camera. To connect multiple sites in a professional conference, additional equipment is needed (such as a bridge, which will allow up to 30 connections). One company that provides the equipment is Polycom.

Voice Over IP (VOIP)
Skype is an example of a free telephone/conference call service making connections through the Internet. An unlimited number of people can participate in chat-based communication. Up to 10 can participate in conference calls. http://skype.com

Second Life
This is a virtual world where individuals create their own avatar, and can then travel around in the world communicating with others who are present. It is free for trial purposes, but many have spent quite a bit of money on Second Life. A number of institutions have purchased their own islands within Second Life ($2,000) to determine if instruction is feasible. http://secondlife.com

ASYNCHRONOUS

Podcast
Podcasts are digital media files that are shared over the Internet for reception on portable players and computers. It is similar to a broadcast, but can include audio and video. http://podcast.com

Blogging
A blog is a web site maintained by one or more individuals. They are typically topic-based, and regular entries and responses are posted. These might be commentaries, events, topic discussions, journals, etc. They can include text, graphics and video. The postings are dated so a reader can follow the conversation—similar to a threaded discussion. http://blogger.com

BOTH

Webinars
Example Webinars (related to classroom technology)
Tech Webinars (these are more business technology-based)

Learning Management Systems
Learning management systems provide an integrated place for hosting content, threaded discussions, chat, surveys, tests, posting assignments or projects, grades, etc. Blackboard; Open Source
OTHER

Web 2.0
Here is a site about Web 2.0 and other recent technologies.
http://www.web20workgroup.com

Aggregators
The purpose of an aggregator is to provide a single interface to widely dispersed, frequently changing information. It is the clear and clever window on the world’s hurricane of information. It’s not limited to RSS!
www.newsgator.com/individuals

Wikis
Google Docs;
Pmwiki (download and host);
Wikipedia;
Web-based wiki services pbwiki; social text; http://www.atlassian.com

Camtasia
Camtasia is a screen recorder that allows you to capture information on your screen while narrating the activity. The capture can then be streamed or podcast for access through a computer or handheld device.

Adobe
Adobe provides products for web development such as DreamWeaver, animations and capture such as Flash, creation such as Photoshop Elements and Premiere, and capture software such as Captivate.

Social bookmarking
Users save links to web pages that they want to remember and/or share. These bookmarks can be saved privately, shared with specified people or groups, shared inside intranets, or another combination of public and private domain.
http://Del.icio.us

http://docs.google.com from Google—log on anywhere to read, review, or edit documents simultaneously.

http://www.popfly.com from Microsoft—supports creation of “mashups”—constructs that let users work together to combine data from different sources.
Advantages and Disadvantages

Brainstorm what these might be:

Advantages:

Disadvantages:

Activity

If you were considering adopting or recommending a technology, what information would you need?

Assignments:

1. Reading

Select two articles and be prepared to discuss during the next class session.


Top-Ten Teaching and Learning Issues, 2007

2. Activity

From the list generated in class or your own experience, select a technology, product or specific company. Investigate it’s capabilities and associated costs.

Write a one-page/double-sided report to post or distribute. This report should include:

Company, contact information, cost (purchase, lease, per person, per month), number of people who can communicate or use at a time, support services, product description, uses, and advantages and disadvantages.
Briefly share your findings from the technology/company report and turn in to the instructor. (If using a learning management system (LMS) or other digital form of communication such as a blog, post for all to read. If not, provide a one-page/double-sided summary for each student.)

**Activity**
Break up into small groups and discuss articles for 10 minutes. Report out on key points discussed.

**Staying Current**
Staying current with instructional and communication technologies is important for a number of reasons. Technologies can reduce the costs of training or cost and time required to travel for meetings. It can increase an organization’s ability to share information quickly and efficiently, and to stay current in their particular field. It can also shorten the time required to bring a new employee up to speed in an organization.

**HOW TO STAY CURRENT:**

**Organizations**
- Society of Human Resource Management (SHRM), national and regional; [www.shrm.org](http://www.shrm.org). “The Society for Human Resource Management (SHRM) is the world’s largest professional association devoted to human resource management. Our mission is to serve the needs of HR professionals by providing the most current and comprehensive resources, and to advance the profession by promoting HR’s essential, strategic role. Founded in 1948, SHRM represents more than 250,000 individual members in over 125 countries, and has a network of more than 575 affiliated chapters in the United States, as well as offices in China and India.”

- American Society of Training and Development (ASTD), national and regional; [www.astd.org](http://www.astd.org). “ASTD (American Society for Training & Development) is the world’s largest association dedicated to workplace learning and performance professionals. ASTD’s members come from more than 100 countries and connect locally in almost 140 U.S. chapters and 25 Global Networks. Members work in thousands of organizations of all sizes, in government, as independent consultants, and suppliers.”

- Association of Educational Communications and Technology (AECT), international; [www.aect.org](http://www.aect.org). “The mission of the Association for Educational
Communications and Technology is to provide international leadership by promoting scholarship and best practices in the creation, use, and management of technologies for effective teaching and learning in a wide range of settings.”

- **International Society for Technology in Education (ISTE); [www.iste.org](http://www.iste.org).**
  “The International Society for Technology in Education (ISTE) is the trusted source for professional development, knowledge generation, advocacy, and leadership for innovation. A nonprofit membership organization, ISTE provides leadership and service to improve teaching, learning, and school leadership by advancing the effective use of technology in PK–12 and teacher education. Home of the National Educational Technology Standards (NETS), the Center for Applied Research in Educational Technology (CARET), and the National Educational Computing Conference (NECC), ISTE represents more than 85,000 professionals worldwide. We support our members with information, networking opportunities, and guidance as they face the challenge of transforming education.”

- **American Association for Adult and Continuing Education (AAACE); [www.aaace.org](http://www.aaace.org).**
  “The American Association for Adult and Continuing Education (AAACE) is dedicated to the belief that lifelong learning contributes to human fulfillment and positive social change. We envision a more humane world made possible by the diverse practice of our members in helping adults acquire the knowledge, skills, and values needed to lead productive and satisfying lives.”

- **Association for the Advancement of Computing in Education; [www.aace.org](http://www.aace.org).**
  “The Association (founded in 1981) is an international, educational and professional not-for-profit organization dedicated to the advancement of the knowledge, theory, and quality of learning and teaching at all levels with information technology. This purpose of AACE is accomplished through the encouragement of scholarly inquiry related to information technology in education and the dissemination of research results and their applications through publications, conferences, societies & chapters, and inter-organizational projects. Join with fellow professionals from around the world to receive AACE benefits of membership and to share knowledge and ideas on research and applications in information technology and education. AACE’s membership includes researchers, developers, and practitioners in schools, colleges, and universities; administrators, policy decision-makers, trainers, adult educators, and other specialists in education, industry, and the government with an interest in advancing knowledge and learning with information technology in education.”

- **EDUCUSE: Transforming Education Through Information Technologies, national; [www.educause.edu](http://www.educause.edu).**
  “EDUCUSE is a nonprofit association whose mission is to advance higher education by promoting the intelligent use of information technology.”

**Refereed or Research Journals**

- **TechTrends** (AECT): “TechTrends is a leading publication for professionals in the educational communication and technology field. As such its major purposes are: to provide a vehicle for the exchange of information among professional practitioners concerning the management of media and programs, the application
of educational technology principles and techniques to instructional programs, corporate and military training, and any other kinds of information that can contribute to the advancement of knowledge of practice in the field.” Published by Springer for AECT.

**International Journal of eLearning**: Advances in technology and the growth of e-learning to provide educators and trainers with unique opportunities to enhance learning and teaching in corporate, government, healthcare, and higher education. IJEL serves as a forum to facilitate the international exchange of information on the current research, development, and practice of e-learning in these sectors. Published by AACE.

**Educational Technology, Research and Development** (AECT): “Educational Technology, Research and Development is the only scholarly journal in the field focusing entirely on research and development in educational technology.

The Research Section assigns highest priority in reviewing manuscripts to rigorous original quantitative, qualitative, or mixed methods studies on topics relating to applications of technology or instructional design in educational settings. Such contexts include K-12, higher education, and adult learning (e.g., in corporate training settings). Analytical papers that evaluate important research issues related to educational technology research and reviews of the literature on similar topics are also published. This section features well documented articles on the practical aspects of research as well as applied theory in educational practice and provides a comprehensive source of current research information in instructional technology.

The Development Section publishes research on planning, implementation, evaluation and management of a variety of instructional technologies and learning environments. Empirically-based formative evaluations and theoretically-based instructional design research papers are welcome, as are papers that report outcomes of innovative approaches in applying technology to instructional development. Papers for the Development section may involve a variety of research methods and should focus on one or more aspect of the instructional development process; when relevant and possible, papers should discuss the implications of instructional design decisions and provide evidence linking outcomes to those decisions.” Published by Springer for AECT

**American Journal of Distance Education**: “AJDE is the internationally recognized journal of research and scholarship in the field of American distance education. Distance education describes teaching-learning. For teachers in schools, colleges, and universities; trainers in corporate, military, and professional fields; adult educators; researchers; and other specialists in education, training, and communications.”

**EDUCAUSE Review**: “EDUCAUSE Review is the association’s award-winning magazine for the higher education IT community. Published bimonthly in print (21,000 distributed copies) and online, the magazine takes a broad look at current developments and trends in information technology, how they may affect the college/university as an institution, and what these mean for higher education and
society. In addition to EDUCAUSE members, the magazine’s audience consists of presidents/chancellors, senior academic and administrative leaders, non-IT staff, faculty in all disciplines, librarians, and corporate staff/leaders. The magazine has won numerous editorial and design awards including APEX Awards for Publication Excellence, Magnum Opus Awards, Ozzie Awards, and a Tabbies Award, as well as being named Publication of the Year by the Colorado Society of Association Executives.”

- **Training and Development** (ASTD): Available to national members. Focuses on current activities and examples.

**Free Monthly Journals**
- Technology and Learning; [www.techlearning.com](http://www.techlearning.com)
- T.H.E., Technology in Higher Education; [thejournal.com](http://thejournal.com)
- Campus Technology; [campustechnology.com](http://campustechnology.com)
- eLearn; [www.elearnmag.org](http://www.elearnmag.org)

**Wrap-up**
It is important to stay up to date. Take out a piece of paper and write down an initial plan you will use to stay current. Keep this for future reference.
SHRM members can download this case study and many others free of charge at [here](#).
If you are not a SHRM member and would like to become one, please visit [www.shrm.org/join](http://www.shrm.org/join).