NPower's TECHNOLOGY GUIDE for Nonprofit Leaders

A mission support tool for

EDUCATION SERVICES

UNDERWRITTEN BY

Contents

NPower is a network of independent, locally-based nonprofits providing accessible technology help that strengthens the work of other nonprofits. NPower's mission is to ensure all nonprofits can use technology to expand the reach and impact of their services. We envision a thriving nonprofit sector in which all organizations have access to the best technology resources and know-how, and can apply these tools in pursuit of healthy, vibrant communities. For more information, visit our website at ***www.NPower.org***

UNDERWRITTEN BY THE SBC FOUNDATION

Welcome to...

"NPower's Technology Guide for Nonprofit Leaders: A Mission Support Tool for Education Services." This is one of four "Technology for Leaders" guides published by NPower, a national organization devoted to bringing free or low-cost technology help to nonprofits, and funded by a grant from the SBC Foundation, the philanthropic arm of SBC Communications Inc.

These papers highlight technology innovation in four nonprofit sectors: arts and culture, health and human services, education, and community development. The goal is to inspire nonprofits about ***the possibilities of technology as a service delivery tool***, and to provide nonprofit leaders with real-world examples that demonstrate that potential.

Each of these papers offers a roadmap for nonprofit leaders on how to integrate technology into their organizations ***confidently and fearlessly***. The roadmap covers the best practice steps involved in deciding how technology can support and enhance direct service delivery, and how a nonprofit executive can evaluate and select the appropriate tools for the job and ***implement those tools successfully***. It also provides examples of program-specific solutions, tools and resources that are available to expand the reach and impact of nonprofits' direct services.

Each paper is meant to be a stand-alone resource for the specific nonprofit sector mentioned. However, leaders in one sector may also find it beneficial to read the papers covering other sectors, as they contain many inspiring anecdotes and case studies.

There are a number of people to thank for their contributions to the Education guide. Leyla DeSilva Newton contributed hours of research and writing time. Patrick McWhortor, Executive Director of NPower Arizona, and his staff added their expertise. In addition, NPower Arizona staff garnered feedback on this paper from the education organizations they serve, helping to shape the final drafts. A list of all the contributors to this guide is available in the appendix.

In summary, the information contained in these papers reflects the core of NPower's mission: to ensure all nonprofits can use technology to expand the reach and impact of their work. We hope that you find this information valuable, and we welcome any comments or questions you may have.

Sincerely,

The NPower Network

Defining the Education Services Sector

Education has been called the great equalizer in a democratic society. If people are denied a quality education, it limits their potential for becoming productive members of their communities.

Disadvantaged populations use education to improve their circumstances and to move from dependency to self-sufficiency. Education also stimulates economic growth, development and entrepreneurship, providing individuals with the opportunity to improve their economic status. For these reasons, educational access is one of the most relevant civil rights issues of our time.

Not surprisingly, technology is playing an increasingly important role in this access, influencing how and where people learn. It is also creating a new learning curve for the education nonprofit sector, now faced with implementing technology initiatives such as online learning, computerized class registration and testing, class record databases and donor management software.

This guide will explore the potential and possibilities of using technology as a service delivery tool for nonprofits engaged in educational programming. The guide was designed to reflect NPower's overall mission of ensuring that all nonprofits – regardless of size, scope or geography – can use technology to expand the reach and impact of their work.

As you read this guide, keep in mind that education services offered by nonprofits target both youth and adults. At times, certain strategies discussed in this paper will apply to one of these populations, while other strategies will apply to both. When the population is important to the strategy, it will be noted.

Education services offered by nonprofits target both youth and adults.

The community-based education sector is so broad, it is often difficult to encapsulate it. Nearly all nonprofits are engaged in some sort of educational service, from informal information transfer to formal training. These services range from newsletter articles that educate community stakeholders to after-school programs that instill in youth a love of learning.

For example, agencies that assist the disabled will often include specialized educational services, such as computer-based training using assistive devices for the blind and visually impaired. Many arts organizations now offer arts education programs for youth as a way to garner broader funding support. In short, education is widespread in all nonprofits that have a core purpose of providing public benefits.

Nonetheless, some nonprofits have a more concentrated educational focus in their service models, and this guide is primarily addressed to those agencies. The information presented here is designed to assist nonprofits leaders who wish to serve more people in the community or reach new populations with an educational service. Any agency seeking to implement a creative education program should find this guide useful.

The guide was written as a cooperative effort, combining the experience and expertise of NPower Network staff with the perspectives of staff from education organizations with which we work. Our goal is to help education nonprofits in their endeavors to inspire and enhance people's lives, meet learners where they are, and use the power of technology to accomplish educational goals much more efficiently than ever possible without technology.

In this paper, we first examine education services in a community-based nonprofit context. Next, we present our perspective about where the education sector is now and how technology relates to its challenges and opportunities. We end the paper with an in-depth look at e-learning. In particular, we examine how e-learning can enhance the ability of nonprofits to provide more access to education and also deliver the benefits of educational services in new ways that increases the impact and reach of these services.

Our intent is to educate nonprofit leaders about how technology can assist them in developing flexible programs that respond to the unique needs of each community, and also to help organizations identify promising practices for future technology investments. In this document, we have featured organizations that have successfully integrated technology into their service delivery.

We present our perspective about where the education sector is now and how technology relates to its challenges and opportunities.

Details about the education nonprofit sector

The nonprofit sector is well known for providing relief and temporary assistance to those in need. However, most organizations that help others see their primary mission as fostering self-sufficiency in the populations they serve. This is especially true of programs that are primarily educational in nature, such as Girl Scouts or adult workforce development programs. Nonprofits offering education services are dedicated to assisting individuals with intellectual enrichment, often with the objective of opening new opportunities for those individuals to succeed and improve their lives.

This emphasis on the tailored needs of the learner distinguishes nonprofit educational programs from more traditional programs that are built upon standardized curriculum and public standards of achievement. While nonprofits are not alone in their desire to produce salient outcomes for their learners, their focus on the client often sharpens the results.

Education nonprofits provide a range of educational services, from English as a second language (ESL) instruction to after-school tutoring programs; from GED programs to computer skills training for seniors; from life skills training for parents transitioning off welfare to language programs for refugees. In all of these diverse programs, nonprofits seek to accomplish one or more of the following goals:

Inspire individuals and enhance people's lives

Educational opportunities benefit individuals of all ages and in all stages of life. These include early childhood enrichment and school readiness programs for pre-kindergarten youngsters, after-school programs and continuing education for senior citizens. One example of a nonprofit organization focused on educational services is the Chai Center of Greater Seattle. This nonprofit Jewish Public Library and Multimedia Educational Center is committed to ensuring that the rich history and culture of the Jewish people can be made available to everyone. It illustrates that not all learning is built around traditional academics (reading, writing and arithmetic) but should also include enrichment and cultural awareness.

Offer remedial/supplemental education

Educational opportunities that focus on basic skills or fill education gaps are designed to help people reach their potential. They include adult literacy classes in reading, writing and computer use; classes to enhance literacy skills in school-age children; continuing education courses such as high school completion/GED, and life skills education in areas like job searches, interviewing skills and resume-writing.

Reach individuals with special needs and other barriers

Some people find it difficult to learn for a variety of reasons, and these nonprofit education services are well positioned to focus on innovative ways of reaching out and including learners. Clients include individuals who are homebound (i.e., senior citizens and the disabled), have learning disabilities, face language barriers, are isolated geographically from any type of educational facility, or who are without access to technological advances such as wiring for computers and the Internet.

For example, the Community Cyber Connections Project is dedicated to teaching the basic navigation of computers and the Internet to the disadvantaged, elderly, disabled and all other interested residents of the Denver Metro area. CCCP uses specialized software tools to help both the visually impaired and the learning disabled acquire valuable technology literacy skills. Services such as these demonstrate the potential that technology has to reach out to special-needs populations.

Another category of services involves education in more traditional learning environments, including K-12 public and private schools, community college and university classes, certificate programs and teacher training courses. Because this category has its own extensive and unique set of needs and challenges, it is not directly addressed in this guide.

The role that education nonprofits play is increasingly important when you consider national education statistics. The high school dropout rate is climbing, especially among minority populations. Classroom sizes are increasing, and schools nationwide are being forced to cut music and art enrichment programs. Tenured teaching professionals are retiring faster than recent college graduates can replace them. This mass exodus of institutional knowledge and expertise will have to be replaced by a new generation of educators in both traditional and non-traditional learning environments.

The bar is being raised for the basic skills an individual must possess in even the most entry-level positions, and at the same time the cost of living continues to increase. Now more than ever, people need alternatives and opportunities to upgrade, build and improve their skills in order to survive and thrive in the 21st century.

Educational opportunities benefit individuals of all ages and in all stages of life.

Challenges and Opportunities

At the same time that nonprofits are seeing a growing demand to provide educational services, they also are facing increasing challenges. These include

- Adapting education methods to different learning styles
- Tracking results and demonstrating outcomes
- Recruiting, retaining and engaging learners
- Making education venues more flexible, accessible and scalable

In the following sections, we will look at the opportunities and challenges faced by education nonprofits and will examine the ways in which technology can serve as a tool to meet these unique challenges and opportunities.

Adapting education methods to different learning styles

In 1983, Howard Gardner published a book, *Frames of Mind,* on the theory of multiple intelligences. At the core of this theory is the idea that every person is capable of learning but that each of us learns in a different style or manner. It further emphasizes that there are many different forms of "smart." Thus, Gardner asserts that every individual possesses a unique learning style, as well as certain preferences regarding the manner in which he or she absorbs and processes new information.

This book was integral in changing the way educators view intelligence. For example, some people learn best from verbal cues or written instructions, while others learn best through kinesthetic cues (physical action). Some people are musically inclined and are especially sensitive to sound patterns and tone, while others are mathematically inclined and have a natural ability for manipulating numbers.

In a traditional learning environment, where there may be one instructor for 35 students, it becomes very difficult to try to teach to 35 levels of aptitude and ability. The traditional class curriculum emphasizes verbal/linguistic and logical/mathematical intelligence, and curriculum is developed to enhance and build upon these intelligences. Addiionally, standardized tests are designed to measure aptitudes in these specific areas.

Technology is a tool that can be used to mitigate the disparity between dominant intelligences (verbal/linguistic and analytical/mathematical) and intelligences that have not often been addressed in mainstream curriculum (example: musical/visual/physical). Nonprofits have the freedom to experiment with different methods of instruction. Multimedia tools can teach basic concepts using sound, visuals, simulations and

activities that incorporate hand-eye coordination. Technology also addresses the need to provide activities both for those who learn best on their own and those who learn best working in groups.

Education nonprofits have the flexibility to scale a learning environment to a specific population.

Tracking results and demonstrating outcomes

Like all nonprofits, education organizations are under increasing pressure from funders and donors to be accountable for the money they receive. One way nonprofits are meeting this challenge is to use technology as a tool to help track the outcomes of the services they provide. Automated client tracking systems can support the work of education nonprofits by providing the organization with important information about the people they are servicing and the impact of their services. Client tracking can:

- Organize information that needs to be captured.
- Capture information consistently.
- Automate routine tasks and make good use of teamwork.
- Assist analysis of capacity, effort and effectiveness.
- Enable easy communication and sharing of the service delivery process.

For more information on implementing a client tracking system, see *NPower's Technology Guide for Nonprofit Leaders: A Mission Support Tool for Health and Human Services*.

In addition, education programs can use technology to develop assessment tools that measure whether learning objectives are being met. Once learning objectives are clearly defined, there are ways to test for the acquisition of a skill (i.e., proficiency in using word processing software, increased scores on literacy tests or comparisons between pre-tests and post-tests).

Recruiting, retaining and engaging learners

Offering educational programs would have little impact if the intended audience didn't know these programs were available, or if participants disengaged before getting the desired results. Education nonprofits use every method available to seek out participants and keep them involved in their learning.

Technology is just one more tool to help nonprofits get the word out and keep the educational experience relevant. This is especially true in a world where a growing number of learners – youth as well as adult – participate in rapid, highly visual video games. As a result, educators are increasingly aware of the need to match their technology to the sights and sounds learners are used to experiencing recreationally.

Websites serve as critical billboards for services on the Internet. However, many individuals and families who need education services are not yet finding the information online because they lack access to technology. Education nonprofits can still reach these audiences by making their websites accessible to colleague organizations or advocates who can in turn refer clients with education needs.

Education nonprofits can engage learners by clearly defining outcomes and objectives in terms that their clientele can understand. For example, instead of simply offering a word processing class, consider offering a course to displaced workers that teaches them how to write and format a standard resume and cover letter. Clients will become more engaged and the chances for retention will increase if you make the connection between the skill they are going to acquire and how they can use it. Relevancy is what learners demand in their 21st century educational experiences.

Making education venues more flexible, accessible and scalable

Education nonprofits play a vital role in delivering educational resources and options to the community by providing supportive learning environments that are non-threatening and readily accessible. These organizations are often focused on tearing down barriers to learning, such as poverty, addiction, disabilities and teen-age pregnancy. Unlike more traditional classroom settings, education nonprofits have the flexibility to scale a learning environment to the needs of a specific population.

In a traditional learning environment, for example, a teacher may have 35 students in one classroom and must adhere to a standardized curriculum. Teachers in education nonprofits, however, are often able to break down the lessons into more manageable parts, or group learners according to skill level and needs.

Technology can play a major role in helping education nonprofits overcome learning barriers. Education is no longer limited to schools and classrooms but is expanding into community centers, libraries and households across the country. After-school programs are being developed to expand and build upon the traditional “learning day” for children.

By using technology as a service delivery tool, education nonprofits can reach out to a larger population, facilitating education in places where there is limited access (rural areas and low-income communities) and among individuals who no longer have access to traditional learning environments (adults, immigrants, people with disabilities and senior citizens).

Technology can help education nonprofits overcome learning barriers.

CASE STUDY: Technology connects youth with mentors

Achieve! Minneapolis (*www.achieveminneapolis.org*) is a nonprofit organization with a mission to galvanize community resources to help all Minneapolis Public School students succeed in school and become productive citizens. Achieve! Minneapolis designed a successful e-mentoring program that connects over 1,000 students from the Minneapolis Public School with mentors from local businesses and community organizations. In the program, one student is matched with one mentor and the two exchange weekly email messages.

Teng Vang, an eighth-grader at Olson Middle School, and Ed Luterbach, an account executive at Minneapolis-based Cargill, are in the third year of their "e-relationship." "Most people would love to do something for the community," Ed says. "From the convenience of your desk, you have an impact on somebody's life." "You get advice without judgment," says Teng.

The e-mentoring program between Olson and Cargill pairs 300 students with corporate volunteers through email technology. It engages almost half of the Olson students and approximately 10 percent of Cargill's Twin Cities, workforce. The program's focus is academic. The four-year-old partnership addresses parallel skills needed for school and work. But relationships underpin the program's success. When students and mentors meet twice yearly, it's an "electric experience," says Olson teacher and program coordinator Mike Dronen.

Through their experiences with the e-mentoring program, Achieve! Minneapolis has also developed an e-mentoring manual to help others create their own e-mentoring programs. This manual is available for a small cost at *www.achieveminneapolis.org/programs_manual.htm*.

The Internet is a 24-hour source of information, allowing online learning to occur whenever it is convenient for the user. People of all ages are exploring new frontiers of knowledge in an era of global learning, as children in a science class converse real-time with NASA scientists and pen pals on different sides of the globe exchange ideas through email.

To reach new audiences as well as engage existing participants in the learning process, many education nonprofits have implemented computer-based training, otherwise known as e-learning. These initiatives range from static informational content that can be studied anytime to an interactive online classroom with a "real-time" instructor.

E-mentoring is an emerging outgrowth of e-learning technologies, with the potential to connect a multitude of participants with individuals who can support and help guide them through their learning process. It is also an excellent avenue for professional networking and information sharing. Mentoring programs can be used to match youth with adults who are professionals in occupations they have a future interest in pursuing or to match new computer users with veteran users.

E-mentoring puts the personal element back into a program, and is particularly appealing to individuals who need and desire interaction with those who have common interests and backgrounds.

Summing It Up:

Technology can be a support tool for educational organizations in many ways – from increasing efficiencies to supporting direct services to providing new and innovative methods of meeting needs. Here are some possibilities to consider:

Adapt education methods to different learning styles

Challenges	Strategies	Tools
Students may prefer either self-paced learning or group learning.	A classroom can offer a blended learning environment.	▮ Use a scanner to create digital version of handouts for reference and self-paced follow-up by students. ▮ Use an online creation tool such as Meeting Place iCreate (***www.latitude.com/prod_svc/icreate***) to prepare PowerPoint presentations for Web-based format.
Difficult to teach to different aptitudes and abilities in traditional learning environment.	By using a blended approach, an instructor can use technology in his/her classroom to teach to various aptitudes and abilities.	Using an e-learning solution, such as ViewletBuilder (***www.qarbon.com***), Authorware (***www.macromedia.com/software/authorware***) or WebCT (***www.webct.com***), allows educators to present varying levels of course content to students in one classroom.
Standardized testing focuses on verbal/ linguistic and logical/ mathematical intelligence and does not capture other non-traditional types of intelligence.	Develop methods of testing non-traditional intelligence to assess students' grasp of content and style of learning.	▮ Create a Web-based testing tool that incorporates music, color, motion and spatial relationships, as well as text-based questions in the content. For a creative example suited for youth, see StarGazerNet (***www.stargazernet.net***). ▮ Use an interactive online assessment that tests for multiple intelligences, so that students can assess their own learning styles. (See the free tool at ***www.bgfl.org/bgfl/muscat_notes/580pks3.htm***)
Different people have different learning styles.	▮ Create courses with multiple tracks adapted to various learning styles. ▮ Utilize products designed to provide e-learning solutions for building course content around the needs of your organization.	▮ Use Web-based courses that would enable students to navigate through a track best suited to their style of learning, while maintaining standard content across styles. ▮ Use a learning content management service (LCMS) by enterprise-level firms such as Blackboard (***www.blackboard.com***) or KnowledgeNet (***www.knowledgenet.com***) to adapt courses to various learning styles.

Track results and demonstrate outcomes

Challenges	Strategies	Tools
Funders require that you demonstrate a positive impact on the community as a result of the program or service funded.	Track the initial baseline assessments and the outcomes of the services you provide.	▮ Implement a tool such as Survey Monkey (***www.surveymonkey.com***) or Zoomerang (***www.zoomerang.com***) that allows pre- and post-service assessments. ▮ Use an existing database program or create a custom database using Access, Filemaker or SQL to track the results of pre- and post-service assessments. ▮ Build reports within a database to present the data required by different funders.
Your balance sheet gives an overview of your organization's financial picture. However, your staff needs to track various funding sources and program allocations for various audiences.	Track your income, expense, grants, donations and other important financial information with nonprofit fund accounting software that allows you to generate the reports you need.	Use financial management tools such as QuickBooks, NonProfitBooks, or SQL Ledger, and fundraising management tools such as eTapestry or Raiser's Edge. Check out NPower's website (***www.npower.org***) in the tools and resources section for the latest consumer guide on financial management tools.
You need to assess the experience of the communities served by your program or service, to analyze both the qualitative and quantitative results.	Implement a survey that asks your customers or clients to describe the service received from your agency. Use this information to hone your service delivery AND show stakeholders how you are making a difference in the community.	▮ Create a survey with a word processor and mail it to your customers. ▮ Create an online survey with tools such as ***SurveyMonkey,*** PHPSurvey, or ***Zoomerang.***

Make education venues more flexible, accessible and scalable

Challenges	Strategies	Tools
Many of your students cannot attend traditional classes because they are in rural areas or are working during class times.	▮ Create online classes that are accessible to anyone with Internet access. ▮ Coordinate with rural community centers and libraries to provide services in rural areas.	▮ Many state governments partner with small businesses and nonprofits to offer state e-learning resources to the community. Most states will have agencies that function as a clearinghouse for this type of information. ▮ Use an e-learning solution such as Isoph Blue (***www.isoph.com***) that can be accessed over the Internet, allowing students to take courses at home, a community center or a public library. ▮ Use a service such as ***www.tutor.com*** to supplement both in-class and online content with one-on-one help over the Internet.
Some students may be perfect candidates for e-learning, but are not computer literate.	▮ Encourage collaboration among students to support each other and share computer skills. ▮ Set minimum technical skills needed for e-learning participation so that you can accurately assess the readiness of new e-learning students and provide them with the specific training they need before getting started.	Work with public facilities, such as community technology centers or public libraries, that allow small groups of students to access Web-based classes together (see ***www.ctcnet.org*** to find community technology centers in your area).

Recruit, retain and engage learners

Challenges	Strategies	Possible Tools
Your organization's message is reaching your current communities, but you need to find better ways to contact underserved groups.	▮ Create a website (or use your existing site) to publicize services, location and hours. Note: Potential clients may not yet use the Internet to look for assistance, but other nonprofits searching for resources often do. ▮ Ensure that your website contains relevant key words so search engines can place it in appropriate search results ▮ Create a newsletter or other marketing materials to spread the word about your agency mission and service. ▮ Create press releases in periodicals that target specific communities and cultures, such as minority-focused newspapers.	▮ Create a website using Web-editing tools such as FrontPage or Dreamweaver or subscribe to a Web service that provides the tools and templates you need. ▮ Include a free Yahoo or Google search tool on your website to help visitors find information. ▮ Work with program managers to come up with key words and place them in the "keywords" section of the code for your website. ▮ Use desktop publishing or word processing software to prepare a newsletter or mailing. ▮ Use an email client, such as Outlook, to create distribution groups for various groups. You can create electronic press releases and email them to various publications. This saves postage and time.
You need to encourage program participants to stay involved in a program that offers long-term assistance and not quick results, such as emergency assistance.	Give clients realistic timetables and outcomes for your programs and services, providing some short-term benchmarks through the entire process.	Use a database to maintain information about every client served, including those who terminate their relationship with your organization. From this information, create some standard reports that you can use to assess the outcomes of your programs.
You need to educate your service recipients about your programs and services, and convince them they need the services offered.	▮ Use press releases to give examples of circumstances or individuals who needed your services. Present it as a challenge that your client solved with your assistance ▮ Clearly define the outcomes and objectives in terms the client can understand.	▮ Use distribution lists in an email client, such as Outlook, to send out your press releases to the media, social clubs, senior centers or other organizations that may already have contact with your communities. ▮ Develop a section on your website that allows clients to access a comprehensive description of your services.

Technology solution close-up

The emergence of information technology and the Internet has enabled the ordinary person to have access to never-ending quantities of information and knowledge. In the same way that technology has transformed our ways of communicating and doing business, it also promises to impact the way we learn. Technology and the Internet can empower individuals and facilitate a more active role in the educational process. Evolving e-learning technologies are poised to transform the educational sector.

E-learning refers to using the Internet, a network or a stand-alone computer to learn. E-learning applications and processes include Web-based learning, computer-based learning, virtual classrooms and digital collaboration, with content being delivered via the Internet, intranet/extranet, audio or video tape, satellite TV and CD-ROM.

E-learning is not intended to replace face-to-face instruction or direct interaction with clients. In fact, research has shown that e-learning is most effective when it is combined with more traditional forms of instruction, often called a "blended approach." E-learning offers the instructor or client a whole new set of teaching tools that include online tutorials, multimedia simulations and assessment tools.

Models of e-learning

There are five models of e-learning:

- **Synchronous** (also called "live") – Synchronous learning is a real-time, instructor-led online learning event in which all participants are logged on at the same time and communicate directly with each other. In this virtual classroom setting, the instructor maintains control of the class, with the ability to "call on" participants. In most platforms, students and teachers can use a whiteboard to see work in progress and share knowledge. Interaction may also occur via audio or video conferencing, Internet telephony, or two-way live broadcasts.

- **Asynchronous** (also called "self-paced) – Asynchronous learning does not occur in real-time, which allows students to work at their own pace and at their own convenience. In general, an instructor is available to respond to questions via email or discussion board. Examples are self-paced courses taken via the Internet or CD-ROM-based courseware, simulations and reference ware.

- **Knowledge management/databases** – Knowledge repositories also are a form of e-learning, although they are less interactive. Most of us have experienced using a knowledge database when reading the "help" section of a software program. This static model uses definitions, explanations of concepts and step-by-step instructions for performing tasks, indexed by topic. This technology can be implemented to create archives of learning guides or step-by-step instructions for more complex procedures. Knowledge management tools can also provide an opportunity for collaboration across multiple organizations to capture, organize and reuse information.

A blend of traditional classroom methods and e-learning activities provides a richer, more comprehensive educational approach.

- **Online collaboration** – Online collaborative learning is primarily based on time-delayed communication between a group of learners and the instructor. Examples of online learning tools include forums, debates, seminar, chat rooms, online bulletin boards, threaded discussions, Web logs or group projects. Slightly more interactive than knowledge databases, online collaboration offers the opportunity for more specific questions and answers, as well as more immediate responses.

- **Blended learning** – Blended learning combines one or more of the e-learning categories discussed above with classroom-based learning. There is a growing body of evidence that suggests that a blend of traditional classroom methods and e-learning activities provides a richer, more comprehensive educational approach and engages a wider variety of learning styles.

Advantages and challenges of e-learning

While e-learning has significant advantages, such as increased accessibility to training, there are challenges that can pose potential threats to the success of any e-learning program:

Advantages

- **Availability** – Helps eliminate both time and geographic barriers.
- **Flexibility** – Accommodates different learning styles and allows for self-paced training and tracking of individual student's progress. E-learning can also help mitigate the impact of certain disabilities on a student's ability to learn through the use of adaptive technology.
- **Continuity** – Eliminates the problems associated with different instructors teaching slightly different material on the same subject.
- **Scalability** – Can be easily managed to accommodate the needs of large numbers of learners.
- **Cost and time savings** –Greatly reduces the facility and travel costs associated with instructor-led training. Students in e-learning can cover material up to 50 percent faster than in traditional courses. This is partly because the individualized approach allows learners to skip material they already know and understand and move on to the issues in which they need training.

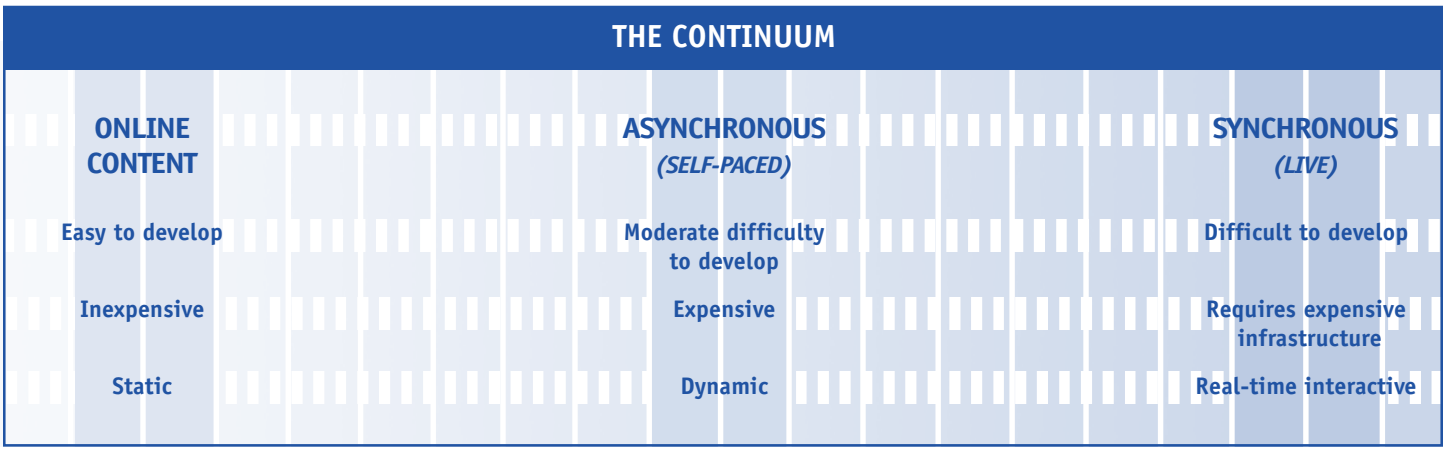
Challenges

- **Technology proficiency** - Both students and facilitators must possess a minimum level of computer knowledge to function successfully in an e-learning environment. In addition, the organization hosting the e-learning program will need to navigate complicated issues of software, hardware, Internet connectivity and network infrastructure.
- **Bandwidth requirements** –E-learning programs that incorporate features such as video conferencing, graphic simulations, or web-based tutorials rely on high-speed Internet connections, which can be costly and may not be available to all learners.
- **Initial costs** – Establishing an e-learning program is often significantly more expensive than developing conventional training. Additional costs related to e-learning course development include graphic and animation development, scripting, video and audio production, hardware costs, and software and user testing.
- **Limits interaction** – E-learning, when not properly done, can eliminate or greatly reduces student interaction with the facilitator or other learners. Extra effort is needed to ensure that e-learning tools and methods are engaging and interactive.
- **Client access** – Clients who can't access the Internet can't take advantage of the benefits gained through e-learning.
- **Identity verification** – Because e-learning can eliminate face-to-face interaction, it is not always possible to know with certainty the identity of the end user. This is of particular concern for online certification programs.

How nonprofits are using e-learning

In the book, *Making E-Learning Work in the Nonprofit Sector*, authors Jacques LeCavalier and Bill Tucker note that "the use of e-learning in the nonprofit sector goes well beyond just staff training. Innovative organizations are designing and implementing e-learning and blended learning programs to educate clients and donors, train volunteers and develop new sources of funding." Education nonprofits are using online learning programs to teach clients about everything from how to submit an electronic resume to how to set up and use an email account. They are also partnering with industry to offer their clients access to online certification programs.

Although some e-learning solutions may be unattainable for many nonprofits, there are several things nonprofits can do that are relatively easy to implement. The continuum of e-learning contains a multitude of possibilities, ranging from inexpensive and simple solutions to those that are more expensive and complex.



Solutions along The Continuum

Online Content: static

- Create a basic website with learning materials in their native format (Word, PowerPoint, etc.) available for download. ***Tools:*** FrontPage, Dreamweaver.
- Scan paper documents to convert them to digital format for use on the Web. ***Tools:*** scanner, optical character recognition (OCR) software.

- Convert online content to more shareable formats that don't require the student to have specific software installed on their computers, such as Acrobat PDF or HTML. ***Tools:*** Acrobat, FrontPage, Dreamweaver, MeetingPlace.
- Provide links to other online learning and information websites, such as National Geographic or MyHero.com. ***Tools:*** FrontPage, Dreamweaver.
- Add interactive elements to your website that enable students to conduct online searches. ***Tools:*** Yahoo! or Google search link.
- Create online surveys for students to answer questions online and submit responses directly to the instructor. ***Tools:*** Survey Monkey or Zoomerang.

Asynchronous: interactive

- Use email to communicate with students, allowing them to submit assignments or ask questions to which instructors respond at a different time using email. ***Tools:*** Free email such as Hotmail; email client such as Outlook.
- Use an e-learning authoring program to create interactive lessons with both content and assessment instruments. ***Tools:*** ViewletBuilder, Authorware.
- Use a learning management system (LMS) to create a complete self-paced learning environment for students. ***Tools:*** Isoph Blue, KnowledgeNet.
- Use Web logs to create collaborative study groups among students. ***Tools:*** Type Pad, Blogger.

Synchronous: real-time interactive

- Deploy an online conferencing environment that allows students and instructors to see and share content simultaneously on the Internet. ***Tools:*** Blackboard e-Education Suite, NetMeeting.
- Deliver lessons through video conferencing online, allowing students to see and interact with instructors and other students in real time with compressed video. ***Tools:*** LearnLinc, WebCT.
- Use chat rooms and instant messaging to connect students and instructors online in real time. ***Tools:*** Yahoo, ICQ, AOL

Steps for developing an e-learning program

E-learning programs vary greatly in complexity, intended audience, and incorporation of the various technologies discussed in the preceding overview. The remainder of this section provides steps for developing an e-learning program. To better frame our

discussion, we have focused on e-learning that an education nonprofit would use to directly serve its clients. To provide more specific examples and resources, we have outlined the steps necessary for an education organization to take a course or seminar it has already created and tailor it for e-learning.

STEP 1 Envision

The success of any nonprofit technology initiative depends heavily on strategic planning. In this phase of the project, make sure that the goals and objectives of your e-learning initiative are clearly aligned with the mission of your organization, and that they address some important problem or opportunity you are facing.

STRATEGIC PLANNING QUESTIONS

- How does e-learning support our mission-related objectives?
- What e-learning strategies and objectives do we plan to use?
- How does this e-learning strategy address a real and currently unmet need?
- How does e-learning help meet our direct service goals and outcomes?

At this phase in the project, it is also important to assemble your e-learning project team. This team should include members of your board, leadership, IT staff and relevant program staff. Involving members from across the organization will ensure a wider team perspective. In addition, your team should include both technical and non-technical staff members. The success of your e-learning initiative will depend on having a team member who understands your network configuration as well as a member who understands the best methods of outreach to your clients.

At key phases in the project, you should also take steps to involve other stakeholders or clients who represent the intended participants. Seeking feedback throughout the process will ensure that the end product meets your clients' needs and will save time and money by avoiding revisions once the project is complete.

Step 2 Assess

The next phase of the project requires that you know your agency, your audience and your community. This step will help to identify key opportunities and will also assist you in planning for and mitigating the key challenges and risks for the project. Spending time up front to assess and plan for implementation and usage problems can have a huge impact on the success of your e-learning initiative.

A worksheet of specific assessment questions is available in Appendix A.

INTERNAL ASSESSMENT

Evaluating your organizational readiness to tackle e-learning is critical to the project's success. You should assess the following areas:

- Technology infrastructure
- Staff capacity and skills
- Organizational culture
- Financial readiness

It is helpful to remember the key strategic attributes of innovation identified by Everett Rogers in his book, *"Diffusions of Innovation":* Innovations should 1) hold relative advantage over existing alternatives; 2) be compatible with existing values, past experiences or needs of potential users; 3) be simple to use; 4) include a period of trial, or pilot testing and 5) show results that are observable to those undecided about the value of the innovation. These attributes will be especially important to decision makers in your organization who may be uncertain about the value of investing in e-learning.

TARGET AUDIENCE ASSESSMENT

Gathering demographic data about your audience, as well as information on their access and familiarity with technology, will be helpful as you assess possible barriers to your e-learning program and develop strategies to overcome these barriers. One key factor to consider when evaluating your audience is the balance of e-learning and other modes of learning that may be required by your participants. Some populations may be able to rely primarily upon e-learning, while others may need to use e-learning as a supplement to traditional modes. Finding the right balance between e-learning and other types of learning is essential to success with your population, and it requires a thorough understanding of the audience.

COMMUNITY SCAN

E-learning provides an excellent opportunity for collaborative efforts within communities. Universities, community colleges, K-12 schools, private industry and government agencies nationwide have already made considerable investments in this new technology. These organizations are often willing to partner with nonprofit programs in e-learning initiatives that increase options for their constituents or improve the community.

Research the current e-learning options available in your area and determine if any of these efforts would meet the needs of your clients. Because e-learning is so scalable, it may be possible for another organization that has already made the initial investment in e-learning to accommodate the needs of your clients. Working with groups in your community who are using e-learning can also provide you with valuable lessons learned from their planning and implementation experiences.

Resources outside your community may also prove useful in your search for e-learning content. The following two online resources are worth exploring:

- Content Bank (***www.contentbank.org***) – The mission of Content Bank is to spur the development of online content and tools produced for and by low-income and other underserved communities, including staff and program participants at community-based organizations.
- Web Junction (***www.webjunction.org***) is an online community of libraries and other agencies sharing knowledge and experience to provide the broadest public access to information technology.

E-learning provides opportunities for collaborations, partnerships and resource sharing. Other nonprofits in your sector may have similar content needs and service-delivery goals around e-learning. For example, an online course that trains volunteer tutors to work with kids could be used by multiple organizations. Given the cost involved in creating an e-learning program and the scalability that e-learning provides, partnering with other nonprofits to share the expense and planning of e-learning projects is an attractive option.

Step 3 Design your program and select appropriate technologies

After you have completed an assessment of the risks and opportunities involved in tackling your e-learning project, it is time to address how you will design your program and the tools you will need to move your content into the e-learning realm.

INSTRUCTIONAL DESIGN

Content and curriculum must be tailored to the needs of e-learning. In a classroom setting, student questions or challenges can be addressed immediately, while in e-learning there is often a time delay that can cause student frustration. Informal questioning by instructors to monitor students' comprehension of materials is also difficult in e-learning.

Factors such as these make it important to carefully consider the instructional design for e-learning. Good instructional design helps to ensure that content is both effectively presented and that learner interaction with course materials is fostered. See the appendix of this guide for additional resources on e-learning instructional design.

E-LEARNING STANDARDS

Although e-learning is still an emerging field, steps have already been taken to define and adopt standards and specifications in the design of e-learning courses that enable courses to be accessible, reusable and compatible. Below are three widely recognized e-learning standards. (See the appendix for additional resources on these standards.)

- SCORM – Sharable Content Object Reference Model
- IMS - Instructional Management Systems project
- AICC - Aviation Industry Computer-based training Committee

INCORPORATING CONTENT

Determining whether to build your own online course or to buy an off-the-shelf e-learning program is the next and pivotal step in implementing e-learning. If you want to provide training in computer skills or basic business skills, you can easily find an already-created online course to meet your needs. Research several off-the-shelf options and then evaluate them based on the cost, effectiveness and the amount of time and effort they will take to implement.

If your course content is not available in an already existing product, you have options for creating a custom online course.

Build

Most nonprofits will need to enlist the help of an outside developer to build a custom-designed e-learning course. Having a developer build your online course may be expensive but it will provide a much higher degree of customization than an off-the-shelf product.

A lower-cost option that groups can explore is using a course creation service. These services are set up to enable instructors to add an online component to traditional classes or to teach an entire course on the Web. They provide templates for creating your own course website to bring learning materials, class discussions and tests online, but are limited in their use of multimedia and simulations. Many of these services provide free trials and have annual fees of under $500 per course. Examples of course creation services include Blackboard.com's Coursesites and WebCT (***www.webct.com***).

E-learning provides opportunities for collaborations, partnerships and resource sharing.

Implement a Learning Content Management System (LCMS)

According to *"Making E-Learning Work in the Nonprofit Sector,"* a Learning Content Management System provides a shell "where developers can create, store, reuse, manage and deliver learning from a central object repository, usually a database." These systems are sophisticated tools that require a high degree of technical proficiency both to use and to integrate into your technology infrastructure.

The goal of an LCMS is to automate much of the programming and time-intensive work that goes into authoring, approving and publishing an e-learning course. These systems are best implemented in large e-learning projects that need to create multiple online courses. Examples of LCMS products include Centra, Evolution, LogicBay and Vuepoint.

CREATE A REQUEST FOR PROPOSAL

After you have decided how you will go about incorporating content and have developed a list of possible vendors, you will want to create a Request for Proposal (RFP). An RFP is a formal, written document that provides information about your organization, your goals and your objectives. It clearly defines the services or products needed and also the requirements that vendors must meet in order to win the contract. The RFP is an invitation for providers to bid on the right to supply a product or service. By inviting vendors to bid on the project, an RFP helps to increase competition for your project and also creates the basis of a formal working agreement between you and your vendor.

CONSIDER LICENSING ISSUES

If you decide on a custom-built e-learning solution or software package, it is important to consider licensing issues – essentially, who owns the finished product. Most software is considered intellectual property and therefore is subject to copyright laws. As a result, restrictions are often placed on how software can be copied, modified and distributed. There are different ways that software can be licensed. If your e-learning program is licensed as proprietary software, its distribution and modification may be limited or prohibited. So be sure to read the fine print. A good reference article called *Making Sense of Software Licensing* can be found on the TechSoup website (***www.techsoup.org***). Additional resources for learning more about a new type of licensing can be found at the Creative Commons website (***www.creativecommons.org***).

Make sure you have an efficient way to track which students are taking which courses, and that you also have the ability to measure their success.

EVALUATE LEARNING MANAGEMENT SYSTEMS

Many e-learning programs struggle with low course completion rates. In deploying an e-learning program, make sure you have an efficient way to track which students are taking which courses and also have the ability to measure their success. This information will be crucial to evaluating the overall success of your e-learning program.

One software solution is a learning management system (LMS), software that enables a group to register students, track their progress, monitor course participation and completion, and provide overall program reports. LMS systems vary in complexity and cost. When deciding whether to implement such a system, it is important to consider how it will interact with your course content software. Examples of LMS products include Saba, Docent, Click2learn and TopClass.

Many of the issues that LMS systems address are similar to those handled by nonprofit client tracking systems. For more information about developing and managing client tracking systems, see *NPower's Technology Guide for Nonprofit Leaders: A Mission Support Tool for Health and Human Services*.

INVESTIGATE HOSTING OPTIONS

Another important question to consider is whether you plan to host online courses on your network or enlist an outside service provider to host them for you. Hosting courses yourself will incur certain costs in terms of infrastructure, server configuration, application support and training, but will also give you full control over your environment.

Hosting courses through an outside service provider may be the fastest way to get up and running. When using an outside hosting service, make sure that your organization's firewall doesn't cause any problems when your users access the hosted course, and that your users have adequate Internet bandwidth.

Step 4 Implement

The fourth step is implementation. The initial implementation phase should involve a pilot program designed to test the e-learning program with a small group of users before it is fully integrated into the organization.

Determine a concrete timeline for the beginning and end of your pilot project and select participants who represent a cross section of your users. Build in time and mechanisms for evaluation and feedback from pilot participants and establish a deadline for incorporating necessary changes prior to the project rollout.

If the pilot project meets your expectations and you have addressed any technical issues or content changes that arise in the pilot, it is time to move forward with a complete implementation of the project.

Step 5 Evaluate/revise

Program evaluation is a vital part of any program or service, especially if organizations want to achieve sustainability. Grant makers want to fund effective and useful programs, and this can only be demonstrated through comprehensive evaluation. The goal of any evaluation process should focus on improving the quality of program deliverables.

Deciding the measures and outcomes you will use to evaluate the success of your e-learning program are choices that need to be made at the outset of the program. Fortunately, technology is a helpful evaluation tool and many of your data collection tools, such as satisfaction surveys and assessments of student learning, can be built into your e-learning program.

Assessment and evaluation are usually focused on learners (i.e., did they learn what they were supposed to). It is just as important to continually evaluate the quality of the e-learning program. Your evaluation plan should outline how you will incorporate student comments and experiences into continual improvement and development of course resources. It should also explain how you will continue modifying and testing curriculum to make sure that the most current and up-to-date information is available.

Specifically, try to answer the following questions in your evaluation, which measure both efficiency and outcome elements of your e-learning initiative:

- What are the costs of e-learning compared to the costs of programs before e-learning?
- How much do you spend for knowledge transfer?
- Rate the consistency of knowledge transfer, with e-learning and without e-learning.
- Where and when does the lack of 24/7 access to learning pose a barrier to learning?
- What is the value of the learner's experience, with e-learning and without?
- How many large "chunks" of time are required for the learner, with e-learning and without?
- How interactive are learning experiences, with e-learning and without?

The rapidly changing and emerging technology of e-learning and the need to keep course content current demand that any e-learning initiative plans for revision. Incorporating a strategy and timeline for how your organization will improve and modify your e-learning is essential to maintaining a successful program.

Conclusion

Increasingly, adult and youth learners will expect e-learning as a companion to traditional modes of educational services. Tech-savvy, video-game-playing students will demand the same interactivity, ubiquitous access and flexibility that educational organizations once considered a luxury.

Nonprofit education programs can maintain the relevance of their services and further enrich the benefits of their offerings if they adopt appropriate e-learning strategies. Even without advanced e-learning systems, nonprofits will find that technology can offer efficiency and flexibility in the way they deliver their services.

With this guide in hand, we hope that education nonprofit leaders are inspired to integrate these technologies into their programs and develop new ideas that will lead to educational innovation never seen before. The nonprofit sector is one of the most creative and innovative members of the community. With the tools and strategies offered here, we are confident that communities and individuals will find new ways of learning and succeeding through the programs and services offered by education nonprofits.

Nonprofits will find that technology can offer efficiency and flexibility in the way they deliver their services.

Appendix A
E-Learning Guide Assessment Questions Worksheet

Internal Assessment:

- Technology infrastructure (see ***www.techatlas.org***)
- Staff capacity and skills (see ***www.techatlas.org***)
- Organizational culture
  - Is your staff familiar with or willing to learn about the instructional design elements that are involved e-learning?
  - Does the leadership of your organization support e-learning?
  - Can you demonstrate the benefits that e-learning will have for your organization?
- Financial readiness
  - What will the return on investment be for your e-learning?
  - What will the total cost of ownership be for the technology involved in your e-learning project?

Target Audience Assessment:

- How familiar are your clients with using the Internet? Web browsing? Email?
- How much access do clients have to the Web, email and computers (unless you will be providing access)?
- Rate the "digital literacy" of your audience, including familiarity with online research, browsing and evaluation of information, and the ability to incorporate digital information into other applications of learning.
- What are possible barriers to use by your audience and how will you overcome these?
- How will you successfully market your e-learning program to your audience?

Community Scan:

- What community locations offer Internet access for your audience?
- What potential community partners could be involved to support the development of digital literacy skills for your audience?
- Do you have potential community partners who are already working with your audience and who could possibly incorporate e-learning into their programs?
- What potential community partners are already delivering e-learning, and could work with you to adapt their system for your audience and needs?

Evaluate Your Readiness for Collaboration:

- What is your organization's self-interest in the collaboration?
- What outcome do you seek from the collaboration?
- What resources can you offer to the collaboration?
- What is your organizational readiness for the collaboration?
- What results would cause you to terminate the collaboration?

Evaluate the Other Organization(s) in the Collaboration:

- Is there a common mission, or synchronicity of mission, with that of your organization?
- Is the organization serving the same or similar population(s)?
- What outcome does the organization expect from the collaboration?
- How much of a priority is this collaboration to the organization?
- What resources does the organization offer to the collaboration?
- What is the organization's readiness for the collaboration?
- What is the organization's history with collaboration?
- What is the organization's financial condition (due diligence)?
- What is the organization's reputation with its customers, funders and other key stakeholders?

Evaluate the Collaboration:

- Who are the key staff from both organizations whose support is necessary to make the collaboration successful?
- What is the timeline and timeframe for starting, evaluating and continuing the collaboration?
- How do you measure results of the partnership?
- How do you evaluate whether the collaboration should continue?
- What is the process for terminating the collaboration, if it is necessary? What is a "step-down" process that minimizes risk and harm to the organizations?

Instructional Design Resources

http://www.elearnmag.org/subpage/sub_page.cfm?section=4&list_item=10&page=1

Standards Resources

http://www.ecc.org.sg/cocoon/ecc/website/standards/stdbodies.standards

IMS: ***http://www.imsglobal.org/***
SCORM: ***http://www.adlnet.org/***
AICC: ***http://www.aicc.org/***

For more information on integrating SCORM, visit ***www.wmdla.com/pages/914803/index.htm*** for a step-by-step SCORM implementation guide.

APPENDIX B
Resources and Additional Information

Tools for Managing E-learning Implementations (Large Scale Implementations):

Learning Management Systems/Learning Content Management Systems

www.learn.com: A provider of e-learning solutions to organizations of all sizes, offering a management system, course library, a course-authoring suite, and technology to help with branding.

www.knowledgenet.com: E-learning solution suite comprised of a blended learning library, management system and content system.

www.knowledgestorm.com: A directory and search engine for business technology. Compare solutions and hardware, examine service offerings and view research and white papers.

www.syberworks.com: An online training site with a learning management system, e-learning course authoring software and Web audio ability.

www.skillsoft.com: An e-learning solutions company offering a range of learning and technology and custom solutions for the workplace.

Where to turn for additional information on e-learning:

www.brandonhall.com: A website dedicated to providing organizations with independent, objective information about using technology for learning so that they can make the right decisions. Information on trends, best practices, tools and vendors, all without bias.

www.compasspoint.org: CompassPoint Nonprofit Services is a nonprofit training, consulting and research organization. Through a broad range of services, it provides nonprofits with the management tools, concepts and strategies necessary to shape change.

www.isoph.com: Website and software to enable the creation of Web communities driven by learning. Instructional and graphic design, application development and data integration to help mission-driven organizations achieve their fundamental goals.

www.isophinstitute.com: Sponsored by Isoph.com, an online institute of courses, Web conferencing and nonprofit learning resources.

www.developmentgateway.org: A nonprofit helping those in development. The aim is to increase knowledge sharing, enable aid effectiveness, improve public sector transparency and build local capacity to empower communities.

www.imsproject.org: IMS Global Learning Consortium, Inc. - "Open Specifications for Interoperable Learning Technology" creates standards for online learning and assists in finding online learning solutions.

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