

I. PROJECT PURPOSE

A. Defined Problem-- Easter Seals' Web Author Accessibility Project (WAAP)

Easter Seals, Inc., a national leader in job training, employment and assistive technology for people with disabilities, proposes a breakthrough Web accessibility project and job training program. The high unemployment rate among people with disabilities and the growing need for Web-related job skills makes this project extremely relevant for millions of people nationwide.

Only 32% of working-aged Americans with disabilities have jobs, compared to 81% without disabilities. Half of the people with disabilities surveyed are discouraged from looking for work because there were no appropriate jobs available and many find that accessibility issues stand in their way ("Executive Summary: 2000 NOD/Harris Survey").

At the same time, the Web is playing an increasing role in the workplace and has emerged as a key form of communication. The Economics and Statistics Administration and National Telecommunications and Information Administration found that 70-80% of people in professional occupations used a computer at work, compared to 20% of people employed as laborers ("A Nation Online", 2002). Yet, in the report "The Ever-Shifting Internet Population: A New Look at Internet Access and the Digital Divide," only 38% of Americans with disabilities say they use the Internet, compared to 58% of the general population – a disparity larger than any other subgroup (Lenhart, 2003). Likewise, software innovations are changing the way we post content and design Web pages, just like the advent of desktop publishing in the 1980s changed the way we produce print publications. With content management systems, people without technical skills can now author Web pages with a simple point and click. But for people with visual or mobility impairments, using these systems to build a Web page is not possible.

Workplace accommodations have been shown to contribute significantly to a person's employability and productivity. The National Council on Disability found that of those individuals with disabilities who "reported having paid jobs, 92% said AT enabled them to work faster or better---and 67% reported that the equipment had enabled them to obtain employment" (NCD, 1993, "Executive Summary", page 7). While 93% of public sector employers and 82% of private sector employers have made their *facilities* accessible (DOL, 2004), there has been virtually no effort to make Internet technologies accessible on the authoring side. Of the 25 most prominent Web development products currently used by nonprofits, none are accessible. Although Web site visitor accessibility is a growing concern, accommodating Web content publishers is consistently overlooked. This is a necessary workplace accommodation to make the electronic workplace accessible for all employees, regardless of their disability or the AT they use. In addition, if people with significant disabilities remain unable to develop Web content, they do not have a voice on the Internet.

B. Solution

Easter Seals will target two populations during this project; 1) people with disabilities limiting the use of a mouse who desire careers that include Web authoring tasks as duties, and 2) employers of dedicated Web development staff and other Web content publishers.

Easter Seals plans to partner with Convio, Inc., who will create new technology to enable people with disabilities to be employed as Web content publishers. Once the content management

systems are redesigned, they will be tested by Lighthouse International (see description on page 4), where representatives from the intended target population will evaluate usability. As the tools are in the final stages of testing, Convio and the project director will collaborate on the development of a training curriculum for the target group.

During the testing phase, project staff and Easter Seals' participating affiliate partners will finalize plans for an intern program, intended to serve ten interns. Easter Seals affiliates applied to participate and were selected based on their current Web site content, expertise in both job training and AT, experience supervising interns, and capacity to provide interns with work space, equipment and supervision at no cost to the project. Five affiliates were selected; Easter Seals Central Illinois (Peoria), Easter Seals Crossroads (Indianapolis), Easter Seals Miami-Dade, Easter Seals UCP North Carolina (Raleigh) and Easter Seals Utah (Salt Lake City).

The internship phase of the project will include recruitment, screening, selecting, assessing AT needs, training, supervising, and placement in permanent jobs. Easter Seals project staff will collaborate with affiliates to recruit candidates locally. We will develop an announcement to circulate at community colleges, universities, workforce development service providers, and disability service providers. We will scan the Office of Disability Employment Policy's database of qualified college students and recent graduates, and will post announcements on the multiple listservs and e-groups operating within the disability community.

Intern screening criteria are: 1) comfort with use of the Web, 2) writing skill, 3) stated career goals, and 4) experience with word processing software. Intern candidates will submit their applications and will be interviewed locally for selection. The selected intern will be assessed for AT needs. Depending on expertise, the affiliate will either assess the candidate or will request help from project staff. Although most interns will most likely be eligible for vocational rehabilitation, some funds are designated for AT if another funding source is not identified.

Selected interns and their supervisors will be trained by the project director onsite, anticipated to last an average of three days. A consultant skilled in AT may accompany the project director to ensure that training proceeds without access issues. Interns will work an average of 20 hours per week developing Web content for their host affiliate. Internships will last an average of nine months. Interns will be in communication with each other and project staff through a listserv and monthly teleconferences, as will their supervisors. Project staff will help address issues as they arise, documenting those important to project outcomes. As interns become well versed in tasks, the supervisor and intern will work with affiliate job training and employment staff to seek placement. ES Miami-Dade has already indicated an interest in hiring a qualified candidate.

The project director will use information and materials developed for the intern program to create a toolkit that encourages potential employers throughout Easter Seals and the nonprofit community to hire people with disabilities, including project interns, in Web administrator jobs. The toolkit will be disseminated as described in Section V, F, page 8, and will include 1) project results and intern profiles, 2) the importance of Section 508 and Web site access, 3) recruitment strategies for candidates with significant disabilities, 4) non-traditional work arrangements that allow people with significant disabilities to work, and 5) AT service providers and vendors.

C. Project Outcomes

We anticipate that the **Web Author Accessibility Project** will achieve the following outcomes:

- 1) The electronic workplace will be made accessible to employees with significant disabilities of the more than 250 nonprofit employers using Convio tools.
- 2) Involved interns will demonstrate feasibility of people with significant disabilities in jobs that include Web content authorship.
- 3) Interns who successfully complete their internships will be permanently placed in jobs.
- 4) Awareness that Web author access is an important job accommodation will increase within the employer and disability communities.

Replicability of this project is ensured by Convio's commitment to offer the accessible tools to existing customers at no extra charge. We also expect that news of the project will encourage vendors selling products to the nonprofit, for profit and public sectors to take accessibility issues more seriously.

II. INNOVATION

Our proposed **Web Author Accessibility Project** is distinguished from previous Web accessibility efforts because it focuses on *Web content authors* rather than *Web content consumers*. Section 508 of the 1998 amendments to the Rehabilitation Act of 1973 requires the federal government to buy and develop accessible information systems and remediate existing systems. In response, many software publishers have rushed to add accessibility evaluation and repair features to their products. Although only government agencies must conform to Section 508 requirements, and they don't yet mandate author access, there are indicators that expansion is coming. According to NewArchitect.com, research firm "Forrester predicts that within three to five years, the government will extend the Section 508 accessibility requirements to companies in the private sector" (Kuchinaskas, 2002, para. 9).

Previous Web access efforts have focused on Section 508 and similar *content* guidelines by the World Wide Web Consortium (W3C). This project's technical approach is based on the W3C's Authoring Tool Accessibility Guidelines, compliance with which has rarely been demonstrated. For instance, the TOP project conducted by the University of Pittsburgh School of Health and Rehabilitation Sciences aims to create an accessible Web gateway for people with vision impairments, but does not address providing Web content authoring. Additionally, our project will create job opportunities for people with disabilities. Clearly, new technologies and methods are required if people with disabilities are to be able to secure and keep positions in the new digital economy. Finally, the project will raise the bar for the approximately 25 software companies who market Web authoring tools to the nonprofit sector, comprised of approximately 750,000 501(c)(3) organizations in the United States. This proposed project could very well transform the understanding and provision of access to the Web overall.

III. COMMUNITY INVOLVEMENT

A. Partners and their Roles

Convio, Inc., one of the nation's largest providers of Web content management systems to the nonprofit sector, has a demonstrated track record and expertise in online accessibility, and developed the Web content "Accessibility Checker" that was recently nominated for a New Freedom award for creating breakthroughs for people with disabilities by using technology.

Because of Convio’s commitment to accessibility and full realization of Section 508, they will dedicate \$75,000 in labor, even though we are the only customer requesting accessibility. Convio has also committed to offering this version of their product at no charge to their present and future customers (Appendix B). Convio will remediate their existing suite of software tools, and will assist in project dissemination.

New York Lighthouse Vision Rehabilitation Services, a leading resource on vision impairment and vision rehabilitation, will provide software accessibility assessments. At the start of the project, Lighthouse will review the Convio administrative interfaces in preparation for remediation. Their appraisal includes evaluation by experts from the disability community who use AT in their daily work. Lighthouse will provide a report to Convio that itemizes the accessibility issues in accordance with the W3C’s Web Authoring Tool Accessibility Guidelines. Business consultants working on the project will translate the issue report into an organized software specification document, which will be used to direct Convio’s remediation. Lighthouse will again review the Web interfaces once reconfigured to ensure that they comply with accessibility requirements listed in the software specification document. Lighthouse has agreed to contribute 25% of their usual fee for product evaluation in-kind (see Appendix B).

Easter Seals affiliates listed on page 2 (and Appendix D) will participate as placement sites for interns. These affiliates all currently operate intern programs for other fields, four of the five have extensive expertise in job training, and two are considered experts in AT. Affiliate intern host sites have committed (letters in Appendix B) to the tasks described in Section I, B, page 2.

B. Support for End Users: Training – Please refer to Section I, B, page 2.

C. Stakeholder Involvement

Project stakeholders include Easter Seals staff and the larger national community of people with disabilities. One of our top technical assistance experts for *Easter Seals Project ACTION*, (cooperative agreement with the Federal Transit Administration) is blind, and she cannot author Web content without assistance. Affiliate intern sites have already identified 29 potential intern candidates from their combined client pools (without *any* recruitment campaign), underscoring the enthusiasm and need for this project. “Blind Webbies,” an online community, were surveyed and indicate that inaccessible Web tools are a barrier. Most of these Web authors have resorted to marking up Web content by hand, a disadvantage when compared to job applicants who can author more quickly using today’s more sophisticated authoring tools. Nearly all respondents indicated that the proposed internship program would strongly increase their professional marketability.

IV. EVALUATION

A. Evaluation Strategy

Easter Seals implements both process and outcome evaluation to ensure optimal completion of objectives, detailed in Section C below. Evaluation will include product evaluation, as described in Section III, A, Lighthouse’s role.

B. Evaluation Questions

Product evaluation – these are sample questions that will address Objective 1:

- 1) Are people from the defined target population able to use the remediated Convio tool?
- 2) Is tool usage feasible for high performance on the job?
- 3) Are end users pleased with ease of use?

Program evaluation – sample questions for Objectives 2 – 4:

- 1) Are selection criteria sufficient to match skills with intended task? – Objective 2
- 2) Do trained candidates perform at a par with non-disabled peers? – Objective 2
- 3) Are program participants placed and retained in jobs? – Objective 3
- 4) Is there increased awareness within the disability and nonprofit communities that administrator access is now available? – Objective 4

C. Data Collection and Analysis Plans

Objective PWD = people with disabilities	Process Indicator	Data Source/ Timeframe	Outcome Indicator	Data Source/ Timeframe
Electronic workplace will be accessible	Tasks are completed on time; adjustments made	Regular team mtg. notes	Optimal usability by people with visual and mobility impairments	External evaluator report of test results
Demonstrate feasibility of PWD as Web content publishers	Satisfactory progress during training	Intern supervisors monthly reports	Intern supervisors and employers report a high rate (85%) of satisfaction with performance	Interviews of intern supervisors at midpoint and end of internship, employers after 6 months
Interns are placed and retained in jobs	60% of all interns are involved in job seeking	At end of 3 mos. /intern supervisor	80% placed at end of internship; 90% of those placed retained at least 6 months	Every 6 months starting end of second year; intern transition records
Increased awareness that Web admin. access is an important job accommodation	Disseminate toolkit to 92 affiliates and 250 Convio clients; Press releases to key audiences	Team meeting notes in quarters 3, 4, year 2	80 % of affiliates with Web admin. openings use toolkit; 80% of affiliates in job training share toolkit with employer networks; conf. attendees report interest in hiring PWD	Emailed reports returned as provided by toolkit; at conclusion of project Conference presentation session evaluations

D. Funds for Evaluation

The project budget includes a total of \$30,000 for product evaluation, \$6,000 of which is donated by Lighthouse. Project evaluation is budgeted at \$18,000.

E. Evaluator

Product evaluation will be conducted by Lighthouse, and their tasks are described in Section III, A, page 4. Project evaluation will be managed by the National Results Council (NRC) to ensure valid and reliable program evaluation. NRC is a leading provider of independent, third party performance evaluations, providing services to organizations nationwide. NRC’s specific project role will be to create rules for measurement that assure accurate and comparable information, design and conduct satisfaction surveys and interviews of participants and intern supervisors, and

help project staff interpret data for continual improvement of the project. Jim House will be the NRC Project Lead (resume in Appendix B).

F. Final Evaluation Report

Lighthouse and NRC will report on the answers to the evaluation questions above. The report will recommend strategies that may impact expansion of Web administration access based on lessons learned.

V. PROJECT FEASIBILITY

A. Technical Approach

Interface with other networks -- The project's main technical dependency is in the provision of Web content authoring tools that are accessible to people with disabilities including blindness, low vision, and upper extremity impairments. The World Wide Web Consortium's Web Accessibility Initiative has created a set of Authoring Tool Accessibility Guidelines which will be used as the basis for accessibility remediation. Lighthouse will review Convio's authoring tools to be sure that they interoperate with the following assistive software: Freedom Scientific JAWS for Windows, GW Micro WindowsEyes, Synapse Adaptive ZoomText, and IBM Homepage Reader.

Alternative approaches --Convio's Internet software was chosen for this project for several reasons. First, it is one of the few reasonably priced, all-inclusive Web suite of Web software applications designed specifically for nonprofits. It includes administrative interfaces for content management, fundraising campaign management, email communications, advocacy, and constituent management. Second, the Convio Internet software has already been configured to enable authors to produce accessible Web content. It includes an "accessibility checker" which validates page's attributes and identifies problems that might place barriers to users of AT. Third, the Convio Internet software employs a standard Web interface that is accessed via Internet Explorer, ensuring that program participants can use the software from any geographic location, and do not need to install any special software on their personal computers. The prerequisite requirements are low. Users merely need access to a computer running Windows 98 and Internet Explorer 5.5 or newer (compatible with most AT software) or Netscape version 6 or newer.

Alternative approaches included alternative content management products, open source projects, and custom solutions. Convio provided a better fit for this project for several reasons. First, Convio's system is mature. Convio has been providing its service for five years and currently has over 250 nonprofit clients. Its clients include some of the nation's largest and most respected nonprofit groups, including the National Trust for Historic Preservation, Special Olympics, and Dean for America. Other open source projects and content management systems do not provide the complete package of features that are integral to the Convio system. It was important to the project's goals that all functions be resident in a single application with a single administrative interface to facilitate use for those with disabilities.

Maintaining system and/or future upgrades and accommodating growth and geographic distribution --Convio provides its software as a service, and provides all hosting, maintenance, and technical support required for its operation. This means that neither end users, nor program partners need to be concerned with software installation, configuration, or customization. Convio provides the configuration management for the entire system and deploys software upgrades to

all clients at once. Upon deployment for this project, the product will be available to over 250 nonprofit organizations. In addition, Convio has shown that it can quickly add new users as new organizations select their software. There is no limit to the number of users who can use the system and because the software is entirely Web-based, there are no geographic barriers.

B. Applicant Qualifications

Easter Seals is one of the nation’s largest providers of job training and employment services for people with disabilities with over 60 years of experience, serving 33,739 clients annually. Our national public Web site (see Appendix D) is part of an integrated network with Easter Seals affiliate, program and event sites throughout the country, with 109 Web sites launched and 15 more forecasted to be “live” by August, 2004. Easter Seals’ Web sites are regarded as a model nationally for public Web site accessibility by meeting and exceeding all the requirements of Section 508. Visited by over 2000 people daily, our headquarters site was recently named one of the “Top Nonprofit Web Sites” nationally by *The Nonprofit Times*. Easter Seals national headquarters and affiliates employ more than 13,000 staff. We have extensive grant management experience and a history of successful project outcomes. Easter Seals’ fiscal year 2003 total revenue is projected to be \$715 million with \$302 million from government sources.

C. Project Implementation and Completion

Project milestones are:

Project Tasks	In quarters: Year 1									Year 2			Year 3		
	1	2	3	4	5	6	7	8	9	1	1	1	0	1	2
C= Convio; L=Lighthouse; ES=Easter Seals															
L- Perform accessibility compliance audit of the existing administrative user interface															
L/C- Write accessibility requirements for software remediation															
C- Customize Convio software to meet accessibility requirements															
ES- Hire project director and orient															
L- Test tools and advise on adjustments															
C- Make adjustments as necessary															
C/E- Develop training curriculum															
ES- Final planning for internships with affiliates															
ES- Job descriptions for interns/supervisors done															
ES- Create intern recruitment tools and disseminate															
ES- Screen and hire interns, assess for AT needs															
ES- Train interns															
ES- Implement internship program / listserv															
ES/C- Notify 87 ES affiliates, 250 Convio clients															
ES- Hone outreach and dissemination strategy															
ES- Demo product/release Toolkit at ES conference															
E- Dissemination of toolkit to WIBs & employers															
ES- Support ES affiliates – Web content publishers															
E- Announce and demonstrate product and release Toolkit at conferences; route media announcements															

Shirley Sexton, Easter Seals' director of Internet marketing, will serve as project manager the first year, overseeing implementation of the work plan and budget. David Hart is the lead engineer on the project, employed by Convio. In years two and three, Reenie Kavalar, vice president of program and provider services will manage the project, supervising a project director to be hired half time to lead the internship and dissemination activities. We anticipate that Bridget Houlihan will assume this role, depending on the course of her career in the intervening months. Bridget is particularly suited for this role, since she has a successful career in Web content development and is a person with significant disabilities. Brad Turner, assistant vice president for workforce development, will advise the project director and affiliate intern supervisors on placement. Easter Seals is contributing all staff time, with the exception of the project director. Resumes and the job description for project director are in Appendix C.

D. Privacy and Security – not applicable

E. Sustainability

The Web site management tools Easter Seals uses (developed by Convio, Inc.) are also used by more than 250 other nonprofits nationally. Although none of these organizations has yet recognized administrator accessibility as a critical need, the proposed technology innovation along with an awareness campaign will make it feasible for them to recruit and hire Web content staff members with significant disabilities. The Osteogenesis Imperfecta Foundation and Special Olympics have expressed interest in the proposed tools. Convio plans to offer the new product to all other nonprofit clients at no additional expense to them, and provide it in such a way that the configuration can be turned off and on as needed by each user. The toolkit will be maintained indefinitely on the Easter Seals public Web site.

F. Dissemination

Our main goal through project dissemination is to dramatically increase awareness that Web administrator access is a serious issue and must be universally addressed. Our 92 affiliates throughout the country will receive the toolkit (described in Section I, B) to attract skilled candidates with disabilities. Second, we will announce the availability of this new product to Convio clients. We plan to inform business leaders, through multiple press releases to the technology and nonprofit management communities, that Web administration is a viable career path for people with significant disabilities by announcing our experiences and sharing the toolkit with them. Additionally, many affiliates are involved in job training and employment for technology fields, and will share the toolkit in meetings with Business Advisory Councils, local One Stops and Workforce Investment Boards (WIBs).

The project director, at Easter Seals' expense, will travel to at least five conferences throughout the project period to report on the project and encourage efforts to upgrade access and hire qualified candidates with disabilities. Relevant conferences are Closing the Gap, California State University at Northridge's AT conference (CSUN), and the annual meeting of the Rehabilitation Engineers Society of North America. Potential employers will be reached through the Nonprofit Technology Conference and the Direct Marketing Association's Nonprofit Days.