using e-learning to train youth workers

The BELL Experience

A national provider of afterschool and summer programming plans to expand quickly into new regions, bringing its successful model of out-of-school learning to more children in disadvantaged schools and neighborhoods. A large number of staff members must be trained in the provider's program model in a short window of time.

The organization needs to maintain its high training standards while reserving the bulk of its funds for the education of the children it serves.

For BELL (Building Educated Leaders for Life), the answer to this conundrum was e-learning—or, more precisely, a blended learning solution combining web-based learning with traditional classroom-based training. In 2007, BELL's summer training for teachers and teaching assistants consisted of three consecutive ten...
hour days of classroom training. That summer, BELL served three regions: Baltimore, Boston, and New York City. In the summer of 2008, BELL expanded to two additional cities: Detroit and Springfield, Massachusetts. The organization trained over 800 instructional staff and their managers in all five regions using the new blended training format.

BELL had three goals in launching the e-learning program (Marquart, 2008):
- To improve outcomes for the children served by BELL—called scholars—by providing world-class standardized training to the staff so that they could provide the highest quality tutoring possible.
- To cut the cost of training so that a higher percentage of BELL funds could be directed toward scholars.
- To enable BELL to expand quickly to new regions or to partnerships so that as many children as possible could benefit. Nimble training that could serve a rapidly growing number of staff in a number of regions was key to this expansion.

The pilot met all of its goals, resulting in strong outcomes for BELL scholars served by staff trained in the new format, a reduction in training costs to roughly one-third of the cost of classroom-based training, and a smooth training experience for staff in the two new BELL regions.

Why E-learning?
Founded in 1992, BELL is a rapidly growing nonprofit organization that provides summer and afterschool tutoring in order to enhance the educational achievements, self-esteem, and life opportunities of elementary school children in low-income, urban communities. BELL served over 7,000 scholars in the 2007–2008 academic year and over 4,000 scholars in five cities in the summer of 2008.

One key to BELL’s growth is its strong training program for both the instructors who work directly with scholars and the site managers of the tutoring locations. Because BELL training is standardized, the organization can grow into new regions with confidence that the new sites will be equipped to implement the program model even when staff have no prior experience working with BELL.

Prior to 2008, BELL’s training was conducted exclusively in a classroom-based format. BELL’s four training department staff traveled to manage three-day classroom training events in each region. This training configuration was a potential bottleneck in BELL’s plans for aggressive expansion. Therefore, the organization’s board and senior management charged the training team with developing an e-learning program for site instructors and managers. By reducing the amount of classroom time, the training team could become more nimble and efficient in support of BELL’s strategic goals.

As an initial step, BELL needed to decide what form of e-learning to develop. E-learning comes in many constantly changing forms; the American Society for Training and Development (2009) continually updates its E-learning Glossary webpage. Though e-learning can include such modes as, for instance, online classes, digital collaboration, podcasts, and information distributed via CD-ROM, BELL chose to develop web-based asynchronous e-learning modules. These are stand-alone learning content and activities that individuals complete on their own, without the guidance of a human facilitator. Completion of the online modules is a prerequisite to classroom training. BELL’s staff training is thus an example of a blended learning solution: It combines e-learning and classroom-based training. For its site managers, BELL offers synchronous (“real-time”) webinars using conference calling and web conferencing. The blended e-learning we discuss in this article is for instructional staff as well as site managers.

Initial Challenges
In developing its e-learning program, BELL faced a number of challenges that are relevant to any afterschool program considering e-learning, including unknown computer technology, a wide variety of learner expertise and computer skill levels, and other challenges that seem to be inherent in e-learning.

Unknown Technology
Because administering computer technology is not central to BELL’s mission, BELL did not provide computer labs or computer technology for staff. Staff members completed the e-learning on computers in their homes.
at libraries, at school computer labs, and in other people’s homes. The e-learning therefore needed to run on almost any computer and had to be useable even on a dial-up Internet connection. BELL could not assume that users would have expensive graphics cards, video cards, or a variety of software, so the e-learning could not include a lot of animation or other features that draw heavily on computer resources. In fact, learners might not even have CD drives or the ability to install new software on computers that did not belong to them. The e-learning thus needed to be web-based.

**Learners’ Familiarity and Comfort with Technology**

In addition to the normal variety of adult learning styles and needs, BELL was aware that staff using the e-learning had a wide range of experience with education and with computer technology. For example, while BELL’s teaching assistants are frequently college students with limited classroom teaching experience, the teachers are often experienced educators with graduate degrees. Yet because elementary school teaching does not usually require daily use of a computer, many BELL teachers have limited experience with computers. At the other end of the scale, many teaching assistants grew up playing video games and are inseparable from their mobile devices. Even among teachers, there is often a split between newly certified teachers, who are familiar with the latest educational theories and may have taken an online class in graduate school, and veteran teachers, who have decades of practical teaching experience but may not have used computers at all when they were in school. These divides meant that the e-learning needed to include detailed directions to help learners who were new to computers, but it needed to do so in a manner that would not frustrate digital natives.

Recent research has shown that barriers to teachers’ use of computers and the Internet are falling. School-based educators, at least, are already using online tools in both their professional and personal lives. For example, a recent survey of 1,000 educators (edWeb.net, MCH Discover, & MMS Education, 2009) found that 61 percent of them were members of social networking websites as shown in Figure 2. A survey by Teacher Magazine (2009) found that 62 percent of teachers use the Internet to get teaching ideas at least once a week, as illustrated in Figure 3.

Teachers who participate in online learning may find themselves participating more fully than when they attend traditional professional development sessions. One reason may be that they like the anonymity of the online world, where they may feel they can be more open about their concerns and frustrations and can talk freely about what they aren’t doing as well as what they should. As Chris Dede, a professor of learning technology at the Harvard Graduate School of Education, put it in an interview, “The online format provides a layer of distance that helps people feel more willing to share things that are a little bit risky than they might in a face-to-face environment” (Rebora, 2009, p. 8). Teachers may also enjoy sharing professional knowledge and communicating with colleagues.

**Inherent Challenges**

BELL also needed to tackle, from the outset, several challenges that are inherent in the model of e-learning the organization chose. For instance, since learners were to complete the e-learning on their own time, BELL needed to build in accountability for learning the content. Users had to log in with a username and password, and then they had to complete all of the activities in the e-learning. The activities were not considered complete until every question was answered correctly and every possible action, such as viewing a video or posting to a discussion
Building the E-learning Site

BELL began the process of building its e-learning by going through a request for proposals (RFP) process. In drafting the RFP and reviewing it with senior managers, the training team clarified the e-learning project’s objectives and laid out expectations regarding interactivity, technology, and look and feel, so that the organization was on the same page about what the e-learning project needed to accomplish.

E-learning inherently has the potential to be isolating for learners, de-motivating, and dull. BELL needed to build in balances against these challenges. For instance, as outlined below, the learning was designed to be interactive and motivating whenever possible.

As with any training program, BELL’s goal was to increase program quality by providing a superior training experience. Every year, BELL scholars have strong outcomes. The dramatic change in staff training was a potential risk to program quality. Staff needed to be as well or better prepared by the new format as they had been in previous years.

Another challenge is inherent whenever organizations implement change: staff resistance. BELL’s previous classroom training was highly interactive and engaging. BELL summer staff are trained each year so that they can start powerfully and make every program day count. Thus, many staff were familiar with the previous classroom training, and some were not pleased to see classroom time cut by two-thirds to be replaced by e-learning.

BELL’s communications with staff about the e-learning program had to persuade staff of its value and emphasize that it was mandatory.

BELL’s E-learning Program

In response to the e-learning project’s goals and challenges, BELL created an e-learning program that led into the classroom training. The e-learning introduced BELL’s program, policies, and curricula. It was structured in 13 modules that provided information and then challenged learners to apply the learning.

Over two dozen e-learning vendors from around the world responded to the RFP; some had been invited to respond due to their reputation in the field while others saw the RFP on industry discussion boards. Finalists were invited to do in-person presentations for a cross-functional committee representing BELL’s management, finance, technology, and training teams. After the committee selected a vendor, a rigorous background check had to be conducted. Because the e-learning field is relatively new and volatile, BELL needed to be confident that its e-learning investment would not be lost.

Once the contract was awarded, the design phase kicked off with a week of meetings for creating detailed user profiles, running focus groups, brainstorming potential designs, exploring ideas, introducing the potential and limitations of particular e-learning design tools, laying out project expectations, and discussing work and communication styles among the team members who would be working on the fast-paced project. Feedback from instructional staff, site managers, senior managers, trainers, and e-learning experts helped determine which information should be emphasized. Focus groups with instructional staff provided insight into the learners’ needs and helped guide decision making. For example, younger instructional staff confessed that they would be tempted to get through the e-learning as quickly as possible, even though they actually wanted to learn the content; this led to the decision to lock the “next” button on slides until questions were answered correctly. In another example, managers emphasized that they wanted the e-learning to maintain the classroom training’s focus on BELL’s mission and values; this led to the decision to have learners memorize BELL’s mission early on and to infuse the mission throughout the e-learning.

After the project kicked off, internal staff collaborated daily with the e-learning vendor, Kineo, on scripting, selecting images, planning, and reviewing designs. With the tight deadline and ambitious goals, frequent communication and feedback on early drafts were key. In addition, internal staff needed to quickly learn simple e-learning authoring software such as Hot Potato, Audacity, and Moodle. Their ability to create straightforward, basic e-learning modules in-house allowed BELL to allocate expensive and limited consultant time to the more complex components of the e-learning.

Throughout the design process, BELL emphasized interactivity to engage learners, a variety of activities to prevent monotony, relevant images and scenarios to help learners understand that the training was applicable to their jobs, practical information that would raise the qual-
FIGURE 4. A drag-and-drop activity. Learners match potential activities with the learning styles and needs of scholars introduced in an earlier activity.

FIGURE 5. Another drag-and-drop activity. Learners must put the phrases of BELL’s mission statement in order.

FIGURE 6. A crossword activity. The material on the left is used immediately to fill out the crossword on the right, making the presentation more engaging. The crossword questions focus on key learning points.

FIGURE 7. An assignment posted to a discussion forum. Learners are directed to apply what they have just learned about graphic organizers to create a graphic organizer showing how differentiated instruction is built into BELL’s program design.

FIGURE 8. A scenario screen. The outlines of scholars in graduation caps and gowns indicate the number of questions left in the scenario. As questions are answered correctly, the outlined images are filled in with a photo of a scholar in a cap and gown.
E-learning Features

The e-learning home page shown in Figure 1 (page 29) illustrates the numbered steps and clear directions that allowed BELL’s users to navigate the e-learning easily. On the home page, BELL’s CEO contributed a blog that emphasized the value of training to prepare staff to serve scholars and that expressed appreciation for their contributions to BELL’s mission. This visible buy-in from the highest level of management added to the staff’s perception of the importance of the e-learning.

In addition to the home page and the learning modules, the e-learning system included a Help area and five regional information modules, each of which contained information specific to one of the cities BELL served. The system also featured downloadable resources that learners could use at their sites, such as lesson plan templates and job descriptions. The e-learning itself was a resource, as learners could access it for reference after they began their jobs.

In order to engage learners and to overcome some of the inherent challenges of e-learning, the e-learning modules featured:

- Interactive activities
- Text written in a conversational style
- Photos, as well as limited video and audio, of real BELL scholars and staff rather than models
- Graphics that matched the look and feel of classrooms
- Feedback from virtual coaches that explained why users’ answers were correct or not

Depending on the user’s experience with teaching and expertise with technology, the e-learning took 10–15 hours to complete. The BELL e-learning took advantage of one of the most positive features of asynchronous web-based learning: it was available 24 hours a day, seven days a week.

In the e-learning modules, interactive activities included drag-and-drop images that put learners in the context of a classroom, as well as puzzles, polls, wikis, discussion forums, audio, video, and scenarios. Samples of these activities can be seen in Figures 4–8.

In the classroom training that followed the prerequisite e-learning, trainers built on the participants’ prior knowledge from the e-learning. They provided opportunities for participants to demonstrate their learning, clarify questions, create learning communities, and put their learning into context. Staff members were trained in the same room with their coworkers for the summer, including the site managers. All learners were provided with a participant workbook. Workshops were standardized through highly structured leaders’ guides, a slide-show for each workshop, and a train-the-trainer workshop conducted by BELL’s director of training.

Evaluation and Results

BELL conducted an extensive evaluation of the e-learning program, with assessments starting while the e-learning was in use and stretching to nearly a year afterward. The Evaluation Data box (page 34) details the 12 types of data BELL collected.

The evaluation found that according to the e-learning platform’s learner tracking, 100 percent of staff who worked at summer sites were trained through the blended e-learning and classroom training. Of almost 800 staff, only three did not complete 90 percent or more of the e-learning; these three did complete at least half. These e-learners were well prepared to work with BELL scholars. For example, after completing classroom training, 90 percent of teachers and teaching assistants (TAs) said on the paper survey that the e-learning gave them a good understanding of BELL’s program model; 80 percent said that the e-learning was interesting and easy to understand. At the end of the summer program, on the staff survey, 95 percent of teachers and TAs “strongly agreed” or “agreed” that the blended training prepared them to affect scholar development. At the end of the summer, 87 percent of site managers said on their survey that they “strongly agreed” or “agreed” that the blended training had prepared staff to implement the literacy curriculum; 88 percent “strongly agreed” or “agreed” with a similar statement about the math curriculum.

The project cut the classroom training time from three days to one. The largest training expenses—trainers, space rentals, catering, printing, and so on—were reduced to roughly one-third of the previous year’s cost. However, organizations considering building an e-learning program from scratch should know that it’s an expensive proposition. Development costs include significant time for many levels of staff, e-learning vendor costs, outsourced secure e-learning hosting, outsourced technical support for users, outsourced videography, focus groups, and software licenses for developing e-learning modules and materials in-house. Though there is potential for future revenue through licensing the e-learning to other organizations, and the savings in classroom training costs
EVALUATION DATA
BELL collected 12 types of data on its summer 2008 e-learning pilot (Building Educated Leaders for Life, 2009).

1. Web-based surveys from each participant about each e-learning module immediately after completion

2. Paper surveys from each participant at the classroom training, which allowed staff members to provide opinions on the e-learning training after time had elapsed and to assess their preparedness to work after completing the full training

3. Focus groups with staff members several weeks after they began their BELL jobs, which asked how effectively they felt the blended training had prepared them for the work

4. “Lessons learned” meeting with the internal training team

5. Two “lessons learned” meetings with BELL’s e-learning consultants

6. “Lessons learned” meeting with the recruitment team, who hired staff members and explained the e-learning program to them as part of the hiring process

7. Feedback meeting with BELL’s senior management and cross-functional team, which gathered data about whether the project met the expectations of BELL management

8. Questions on BELL’s post-program staff survey at the end of the summer about the effectiveness of the e-learning in preparing staff members for the jobs they had just completed

9. Questions on BELL’s post-program manager survey regarding the staff’s level of preparedness after the training

10. Comparison of BELL’s program results from the summer of 2007, before e-learning was implemented, with those from the summer of 2008, after e-learning was introduced

11. Focus groups with managers of staff who were trained via the e-learning, conducted six months after the program ended

12. Anecdotal feedback collected throughout the entire data collection period

are important, the up-front costs are significant. Ongoing costs include maintaining the e-learning platform, developing new content, site hosting, and outsourced technical support.

The e-learning project positioned BELL to expand rapidly and cost-effectively to new regions. Cutting the amount of classroom training time was key. Summer programs across the United States begin at approximately the same time, so that summer program staff in all regions must be trained at the same time. Cutting the in-person training to one day enabled the BELL training team to handle the expansion to two additional cities without adding staff.

In addition to the scalable logistics, the e-learning supported the quality implementation of BELL’s program model in new regions. For example, during summer 2008, all of the approximately 150 teaching staff in Springfield, Massachusetts, were new to BELL. The majority of staff members were fully engaged in teaching until 10 days before the program began, so there was an extremely short window of time in which to wrap up their academic year jobs, complete the hiring process with BELL, and get fully trained. The BELL curriculum, behavior management systems, parent engagement strategies, and holistic approach to summer learning are dramatically different from typical summer school models. However, staff were trained well enough to successfully implement the BELL program and achieve significant results.

Student Outcomes
According to an evaluation of BELL’s pre-tests and post-tests using the Stanford Diagnostic Reading and Math Tests, during the six-week summer program the Springfield BELL scholars gained nine months’ worth of both reading and math skills. Older scholars showed the greatest gains: eighth-grade scholars showed 16 months’ gain in literacy and 14 months’ gain in math. See Table 1 for a comparison between students’ academic gains in 2007, when training was strictly classroom based, and 2008, when the blended training including e-learning was piloted.

External Recognition
The recognition BELL’s blended training has garnered from outside the organization is further evidence of its success. Most notably, Training Magazine awarded BELL its Technology in Action (TIA) award for the category
of 2008 Blended Learning and Performance Project of the Year. The caliber of this award is indicated by the other four TIA winners in different categories: Accenture, Microsoft, Realogy Corporation, and the U.S. Joint Forces Command Joint Warfighting Center. In giving the award, the judges cited their appreciation for specific features of BELL’s e-learning solution: its interactivity, the interesting combination of tools used, the clear cost savings, the extensive evaluation, and the fact that the program targeted the “least common denominator” desktop environment (Weinstein, 2008).

In 2009, BELL’s e-learning has been received positively at demonstrations for educators at the National Afterschool Association Convention and at Johns Hopkins University National Center for Summer Learning Conference on Summer Learning. It has also been well received at demonstrations for e-learning and training professionals at the International Conference on E-Learning in the Workplace, the eLearning Guild’s New England Regional Instructional Design Symposium, the eLearning Guild’s Online Forum on Best Practices in eLearning Instructional Design and Management, and at a webinar hosted by InSync Training. It has been written about in the *International Journal of Advanced Corporate Learning* (Marquart & Rizzi, 2009) and discussed in a guest expert interview on the Accidental Trainer (www.theaccidentaltrainer.com).

**Lessons Learned**

The six key lessons BELL learned in launching the e-learning program may help other programs that want to implement their own e-learning projects.

1. **Run a limited pilot.** Before launching a full-scale pilot, BELL implemented a limited pilot, replacing BELL’s annual in-service classroom training with two e-learning modules for a small number of staff. The pilot, which ran in only two regions, provided feedback on BELL’s first e-learning offering; the results could be compared with the feedback from previous classroom trainings with the same content. Feedback from the pilot informed improvements to the full summer e-learning. For example, learners in the limited pilot did not appreciate creatively designed homepages with animations and graphics. They preferred simple course homepages in which everything was numbered and directions were included in the headings for every task.

2. **Over-communicate with internal stakeholders.** Implementing a new e-learning project requires teamwork across all functional areas, including the site managers. BELL’s training team provided managers and the staff recruitment team with frequent reports on their staff’s e-learning progress. Both groups followed up with staff to assure 100 percent completion of the e-learning. The training director provided regular project updates to cross-functional organizational leaders in order to build awareness of and support for the project. The internal stakeholders’ support made it much easier for the training team to over-communicate with the staff about e-learning requirements and progress.

3. **Create ways for learners to help themselves with technical questions.** The recruiters who hired staff gave learners a one-page flyer introducing BELL e-learning and a FAQ document. This material was also emailed to learners with their e-learning account information, and managers had additional copies. The training team also created wallet-sized cards for staff that included e-learning log-in information and a few points about the value of the e-learning. A system checker on the homepage allowed learners to see whether their computers needed to disable pop-up blockers or update software to run the e-learning

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*Source: Building Educated Leaders for Life (2008)*
modules. In addition, a Help forum allowed BELL learners to access the answers to commonly asked questions or to post new questions. These tools significantly cut down the volume of technical support calls.

4. **Plan how to handle remaining requests for technical support.** Learners who could not help themselves using these tools frequently needed significant hand-holding and multiple phone calls. BELL training team members initially tried to handle technical support calls and emails but quickly realized that they needed to outsource this function to a technical support call center. The call center was selected with the help of the e-learning vendor.

5. **Keep directions simple and explicit.** Basic but thorough instructions will help learners without much experience with technology. More experienced learners can easily skim the directions. Assume that learners don't know computer language, and keep the language user-friendly and basic.

6. **Keep it real.** A number of features of the e-learning modules made the material relevant and realistic. For example, BELL displayed images of real scholars and teachers rather than using models or stock photographs. Learners loved seeing the realistic images.

Because an e-learning project can be so exciting, filled with potential benefits for organizations that are strapped for time and resources, it can be tempting to jump right into creating learning modules. However, developing e-learning is an expensive and complicated proposition. BELL's example demonstrates the worth of allocating significant time up front to set clear goals, establish ways to measure effectiveness, develop internal expertise about e-learning design, and plan how to meet anticipated learner and stakeholder needs. This up-front time pays off when expensive pitfalls are avoided and business objectives are achieved on time and within budget. Most importantly, the time spent in planning demonstrates its worth when e-learning produces youth workers who are trained to serve children well.

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**Works Cited**


