

Solving The Boring e-Learning Dilemma – And Living To Tell About It

A White Paper on Rapid Iterative Design of e-Learning

Written by

Ethan Edwards, Chief Knowledge Officer – Allen Interactions Inc.

Corporations continue to invest heavily in e-learning solutions for their training needs. These investments come in many forms: internal human resources for designing and developing courseware, infrastructure in the form of expensive LMS and other support systems, considerable contracts to outside vendors, and, most importantly, the time spent by employees who take the training. Perhaps as great a cost, though, is in the lost goodwill of employees who are forced to endure boring and ineffective e-learning efforts. While there remains great faith in the long-term potential payoff of these investments, many professionals remain frustrated with the inadequacies of most e-learning. This paper takes a look at the problem of failed expectations and suggests a design and development strategy that is focused specifically on creating engaging e-learning that creates valued performance outcomes.

When talking about the failure of e-learning, it is important to be specific as to what the actual failures are, because failures are only identifiable when one knows the intended goals. And part of the problem that has faced professionals working in e-learning is that the goals are not always clear.

Goals of e-Learning

The reasons for pursuing an e-learning strategy generally fall into one of two categories: organizational advantages and instructional advantages. These advantages are myriad and will be outlined briefly below. But the important thing to remember is that these benefits do not come automatically just by taking on e-learning. Every project must be designed specifically to capitalize on these potential strengths of the delivery medium. All too often, corporations act as if the advantages will come by default simply by “going online,” rather than working carefully to create the experiences desired.

The operational advantages that e-learning can bring to an organization are significant. It is fair to suggest that without the organizational value virtually no one would be pursuing e-learning as a core learning strategy. The following benefits make e-learning a very attractive solution in workplace learning settings:

E-learning can...

- Provide immediate and consistent learning to geographically distributed populations (saving much in travel and lost time)
- Provide 24/7 access to learning materials for global and extended shift situations (avoids problems of trainer availability)
- Be updated and distributed almost immediately (making learning more immediately useful)
- Be effectively documented for compliance training
- Generally take less learning time than comparable classroom training

In addition to the cost savings, e-learning also has the potential to engage learners in training in unique ways. Learning can be adapted and individualized to address the specific needs of each learner, through specific feedback and adaptive practice. All learners can be required to show mastery, so each individual must be actively engaged, rather than “hiding out” in a classroom environment. E-learning can provide a “safe haven” for learners to attempt things without fear of

public awareness, and learners can be much more in control of the pace and scheduling of e-learning than possible with group instruction.

While there are certainly exceptions, the general state of the field suggests that corporations are able to achieve the operational goals, but often, if they are even considered, fail to achieve the unique instructional benefits hoped for in e-learning. And without long-term, demonstrable performance gains that can be linked to effective training, the value of the benefits to the organization will disappear.

Why is most e-learning so boring?

The standard development process for e-Learning has the ADDIE instructional design process at its core. ADDIE is a linear process comprised of five stages:




This process has its roots in the military, initially a method for developing computer programs; it became a useful structure for creating training programs for standard mass delivery of instruction.

The components of the ADDIE process are not the problem. These activities need to be done – the problem is the way in which each component is typically completed fails to identify the unique opportunities for engagement and powerful instruction that e-learning might afford. The following table outlines the principal failings at each step.

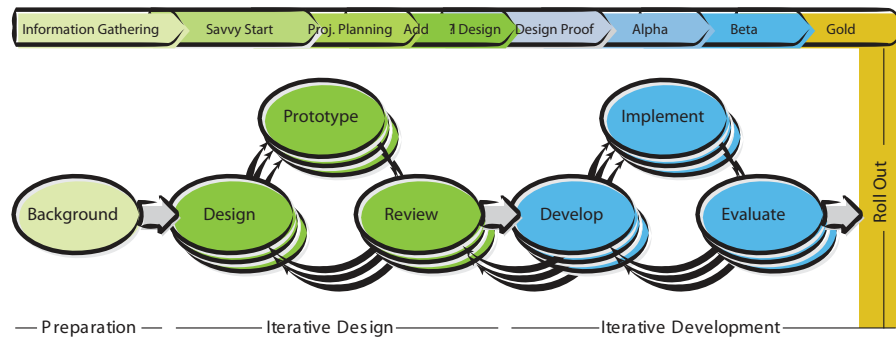
ADDIE Step	How it happens typically...	How this leads to boring e-learning...
Analysis	Content handed over to designer by subject matter experts	Assumes that content is all that matters. Designers cannot build meaningful interactivity around content that they have not been able to fully explore with fresh eyes.
Design	Designers create paper storyboards	Paper-based documentation fails to encourage unique capabilities for engagement; designers generally stick to standard uniform “testing” formats in place of true instruction.
Development	Developers or programmers implement the design in difficult-to-use programming tools (or developers use simple-minded template presentation engines)	Tools limit experimentation and creative approaches.
Implementation	Only put in front of end-users when all work is complete	All design features are developed without real world testing or validation.
Evaluation	Measures of effectiveness are done at the very end	It’s generally too late and too expensive to incorporate any lessons learned from evaluation into improving the instruction.

Put in one simple statement, ADDIE generally fails to create compelling e-learning because it does not adequately account for the unique qualities for interactivity, powerful media, and engaged learning presented by e-learning.

 **You can do better!**

A switch of perspective and some tweaking of the ADDIE process can completely transform this development hurdle. Instead of viewing the various tasks necessary for training development as distinct linear phases, structuring the process in an iterative approach creates opportunities to capture powerful interactivity but still deliver within timeframe and budget. The Savvy Process, used by Allen Interactions, has validated this process through countless projects over the last 13 years.

In an iterative approach to design, the focus, at least in the early phases, is on experimentation rather than specification to arrive at solutions to training inadequacies. It also is founded on the realization that interactive media treatments can not be effectively designed in a non-interactive medium (such as static print).



In iterative design and development, the initial steps are comparatively small, but very quickly illustrate the most salient parts of a design. Because each step is questioned regularly before extensive investment in any part of the solution, it is easy to discard ideas that prove unproductive. However, in traditional design, by the time any evaluative data is gathered, it is really too late to make changes, and more significant, individual team members have already invested so much personally in the solution at hand that it is nearly impossible to discard the work.

The main hallmarks of the Savvy process are outlined in the following table:

Savvy Aspect	How it happens...	How this leads to engaging e-learning...
Iterative Design and Development	Design occurs in small steps and evolves through a controlled “what if” process with frequent reviews and evaluation.	Creating engaging instructional interactivity is the goal. Iterative design ensures that the design and development always stay in sync with this overall desired outcome.
Rapid Prototyping	Design ideas are created very quickly in online tools using temporary content and graphics to validate interactive elements of the design.	Online prototypes are absolutely necessary to experience the power and effectiveness of proposed interactivity, media, and animation. Prototypes almost always foster creative approaches to teaching content that would not have arisen through a design process of specification.
Full team involvement	All members of the team—subject matter expert, instructional designer, developer, project leader, graphics resources—are included in early analysis and design discussions.	All contributors take at least some ownership of all aspects of the solution. This builds group responsibility and dramatically reduces the contention between team members that is common to many development projects. It also expresses the value that all team members can make significant contributions across traditional role boundaries.

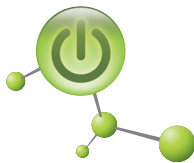
Typical user testing	Prototypes are validated by actual end users early in the design process.	Nothing can take the place of actual experience with end users and a product. Very quickly during design and development, team members get “too close” to a design to assess it objectively. User experience with a design, even in prototype form, uncovers the strengths and weaknesses of an approach that remain hidden otherwise.
Continuous monitoring of breadth vs. depth	Design is done in small steps, which allows more flexibility in redirecting resources and schedules to match priorities.	Good ideas and design insights can be evaluated and weighed against other factors to make informed decisions regarding how resources should be focused on development.

References

Allen, M. W. (2006). Michael Allen’s e-learning library. Creating successful e-learning – a rapid system for getting it right first time, every time. San Francisco, CA: Pfeiffer.

Allen, M. W. (2003). Michael Allen’s guide to e-learning – building interactive, fun, and effective learning programs for any company. Hoboken, NJ: John Wiley & Sons, Inc.

To learn more about the effective application of the Savvy iterative rapid design process and workplace learning performance enhancement, please contact us at:



Allen Interactions Inc.
 1120 Centre Pointe Drive, Suite 800
 Mendota Heights, MN 55120-1277
 P (651) 203.3700 F (651) 203.3799
www.alleninteractions.com