

QUINNOVATION



Quality eLearning

Practical and Effective Process & Tool Improvements

A Quinnovation White Paper

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Executive Summary

Too often, eLearning is being developed using tools and processes that are focused on efficiency, not effectiveness. While the science of learning has recognized the necessary elements for design, they are not being reflected in eLearning either internally or for external markets. As a consequence, the resulting eLearning is lacking in impact.

On the other hand, there is a legitimate concern over impacts on costs and schedules. Current processes have been designed for efficiencies in scale, and are benchmarked against industry norms. While this has led to predictability, concerns for quality have lost out. Yet the outcry against the current learner experience and the lack of outcomes of this eLearning has been increasing.

The successful integration of improvements is both doable and practical. Quinnovation has led the improvement of tools and processes across a number of initiatives that have resulted in quality improvements with small and manageable increases in costs. The upside is learning that has a substantially greater likelihood of impact with a minimal increase in expenditure.

The Current Context

The eLearning industry has reached a relatively stable position over the past two decades. The migration from computer-based training to web-based training has been achieved. Tools exist that support the production of web-based training that has the potential for substantial complexity while supporting acceptable ease-of-use. As a consequence, eLearning is a vibrant industry supporting societies and multiple conferences, with revenues predicted to top \$107 billion dollars by the end of 2015¹, with the self-paced eLearning component representing almost \$50 billion of that total².

Yet there are concerns within the field that threatens the investment. Several prominent industry leaders (Michael Allen of Allen Interactions, Julie Dirksen of Usable Learning, and Will Thalheimer of Work-Learning Research) joined me in raising concerns for quality, banding together to create the Serious eLearning Manifesto³ documenting significant differences between what quality eLearning should be and what is currently seen in the industry. With support across the industry, we cite eight values that differentiate between what is and what could be:

¹ http://www.prweb.com/releases/distance_learning/e_learning/prweb9198652.htm

² <http://www.ambientinsight.com/Resources/Documents/Ambient-Insight-2010-2015-Worldwide-eLearning-Market-Executive-Overview.pdf>

³ <http://elearningmanifesto.org>

| typical eLearning | SERIOUS eLEARNING |
|-----------------------|----------------------------------|
| content focused | Performance Focused |
| efficient for authors | Meaningful to Learners |
| attendance-driven | Engagement-driven |
| knowledge delivery | Authentic Contexts |
| fact testing | Realistic Decisions |
| didactic feedback | Real-world Consequences |
| one-time events | Spaced Practice |
| one size fits all | Individualized Challenges |

At core, learning is about persistent change of behavior in specific contexts. And practically, the learning that is most likely to be of use to learners and organizations is new abilities to *do*: new skills. There is a role for knowledge, but it is only an accompaniment to the ability to *use* that knowledge appropriately. Yet this is not what's seen in practice.

The reality is that a number of practices contribute to the problems being seen. Barriers include:

- Tools optimized for content presentation and knowledge test
- Templates focused on extrinsic motivation
- Accreditation and compliance procedures that require obeisance to subject matter experts
- A lack of awareness of the limitations of subject matter experts
- Practitioners that respond to requests without an investigation of need
- Management for efficiency and subjectivity, not effectiveness
- Vested interests suggesting that the status quo is just fine

While these barriers make for a predictable process, they preclude any hope for a real impact of eLearning investment. The tools support making a consistent look and feel, and high production values are fairly ubiquitous these days. The problem lies in the quality of the learning design, not the production.

The unfortunate reality is that the differences between well-produced content, and well-designed *and* well-produced content are subtle. Stakeholders without sufficient knowledge can be impressed with the engagement of the offering without being able to discriminate the learning impact differences.

The situation is changing, and for the worse. The need for quality learning is increasing; the Corporate Executive Board found that stakeholders estimated that to achieve their goals, they would require an average yearly improvement in employee performance of 20-25%⁴. While the rate of increasing change suggests a need for continual innovation, the impact of learning investments still needs to be sufficient to justify the cost. And yet, industry surveys suggest that

⁴ Corporate Executive Board (2012). *Building High Performance Capability for the New Work Environment*.

L&D efforts are inadequate. For example, less than 35% of organizations agree that their instructional design efforts are effective in achieving organizational learning goals⁵.

This lack of effective eLearning design is a waste of time and money. While there is a marginal cost associated with doing better eLearning (certainly initially), it can be expected to be offset when eLearning is designed to achieve needed performance outcomes.

Practices

So how can we practically change our approach? While there are many nuances, I put it the steps into two main categories: tools and processes. For tools I mean templates or design guides. And for processes I mean approaches to design.

Tools are job aids and checklists for content. We are talking about cognitive support about what constitutes good practice in designing content, including interactions.

Processes are the ways you interact with subject matter experts and team members. For example, there are ways to work with experts that overcome their lack of awareness of their own performance. Similarly, there are specific times when team members should be interacting to maximize both the quality and the creativity.

Neither tools nor processes are completely independent of each other, of course. Regardless, each can be done without full implementation of the other, or both can be done together.

Improved tools

As an example, one project was to develop a series of courses to assist high school students. Quinnovation, as a consultant to the coalition conducting the project, was to provide guidance on the design to ensure quality learning. We created a framework for the elements and principles around their design that were to ensure that the content followed good learning design principles.

The content authoring team had previous experience in the topic domains with textbooks, but not online learning. The production team was well experienced with online content, but not with deep instructional design. Quinnovation created this framework for the learning elements – introductions, concept presentations, examples, initial guided practice - that was used to design the main content for each section. The content developers supplemented this initial instruction with a suite of standard practices.

The principles embodied in the framework provided guidance for the content development process. Quinnovation provided spot-checking and refinement over time as a critical element that refined the output until the teams were generating reliably viable content.

⁵ American Society for Training & Development. (2010). *Instructional Systems Design: Today and in the Future*. Alexandria, VA: ASTD Press.

Improved processes

In another instance, the project was vocational content for a blend between online and face-to-face instruction. The existing processes involved taking content from subject matter experts and developing courses on that basis.

The first needed change was to get better information from the subject matter experts, as the basis for a meaningful course. Quinnovation devised an approach to work more effectively with subject matter experts to develop the course objectives.

In addition, Quinnovation also focused on improvements in the learning experience. In particular, developing practices aligned to the more meaningful objectives was coupled with a finer touch in media production, with an emphasis on developing more realistic dialog to increase engagement. This was accomplished through modeling and practice.

These processes were used on a limited set of content that then percolated through remaining content development efforts. The impacts were designed to be minimal to the existing workflow for the sake of efficiency.

Integration

In a third project, the existing content was designed using standard industry processes and typically resulted in eLearning that was content heavy supplemented with knowledge-level assessment. Quinnovation was asked to develop a more effective approach to top-level content in a large-scale development enterprise.

The goal was to pursue improved learning outcomes, and the investigation included both process and tools. The project scope extended from the upfront marketing research, through the design and development process, to testing.

Recommendations included new output from the marketing component, new processes for working with subject matter experts, new templates for content design, a switch in content/practice ratios, and more touchpoints for design and development teams to interact. These changes would take some time to implement, but the ultimate impact would be improved outcomes with only a marginal increase in effort and cost.

The New Vision

Most eLearning can benefit from improvements in development in both tools and processes. There are pragmatic steps that can markedly increase impact with a minimum effect on scope and resources. It is now unconscionable to continue to develop content in ways that preclude any sustained outcomes.

The case studies discussed here highlight only a few methods that can be used to create better eLearning and more effective outcomes. There are extensions to the content development processes and tools that can improve outcomes further, which in turn support new business models and customer relationships. The learning experience can be both extended *and*

augmented, yielding new business possibilities that increase the value proposition to the customer.

Our human cognitive architecture has strengths and weaknesses, and this is true in our design processes as well. Taking a systematic review of learning development with a focus on cognition and pragmatics yields opportunities for improvement. The costs can be constrained while the impacts are increased. A lightweight approach can make improvements, and a more detailed investigation can generate substantive changes.

Beyond the expected steps of process and product review, identification of opportunities for improvement, and a staged implementation of change, the critical issue to address is an awareness of the necessary elements. A deep understanding of learning design, as well as process design and our limitations, needs to be brought to bear on how we design and develop learning. Education of the stakeholders and participants is also required. The goal of balancing maximum impact on learning outcomes with minimal impact on design and development processes is challenging, but doable.

It is time to develop learning that achieves meaningful outcomes. It can be done, and should.

About Quinnovation

Quinnovation works with organizations looking to take their use of eLearning to the *next level*, strategically using IT to deliver performance improvement results. Quinnovation combines a deep cognitive background, strong technology experience, and sound business understanding to deliver innovative thinking with a track record of insightful strategic analysis and pragmatic and successful solutions. Quinnovation has been assisting organizations in developing advanced eLearning for over 10 years, and designing deep learning for over 35. Quinnovation services include design process review and strategy development. Internationally recognized in scholarship, presentations, and work, Quinnovation has delivered cutting-edge designs for Fortune 500 companies, business, government, education, and not-for-profits.