

A Systematic Approach to the Design of Blended Learning

By

Frank Troha

If Time, Money and Reputations Matter, So Should Instructional Design

I hope you'll never hear an outside consultant tell you that it will take a remarkable amount of additional money or time to complete your e-learning or blended learning project. By blended learning I simply mean e-learning combined with another venue, typically face-to-face classroom instruction.

Blended learning is popular and understandably so, combining the best features of online learning (e.g., 24/7 accessibility) with the best features of classroom instruction (e.g., live, instructor-facilitated and face-to-face). **But why do so many blended learning initiatives turn into frustrating boondoggles, often consuming far more time and money than anyone anticipated?** The answer -- just as with many other troubled business initiatives -- can be found in poor planning (or design), the consequences of which often appear *after* substantial amounts of time, money and enthusiasm have already been expended.

Regardless of whether you and your staff have experience designing e-learning or blended learning, it's vitally important that you at least attempt to define the major aspects of your project before consulting with any outside service providers. The rationale is simple. By deliberately thinking through, specifying in writing and confirming -- *with all internal parties involved* -- who your audience is, their learning objectives, the exact content to be covered, constraints, etc., you'll be better positioned to: 1) understand the true scope and nature of your project 2) gain the support of all internal stakeholders early in the process 3) efficiently and accurately communicate project scope and requirements to potential outside providers 4) hire the best provider for the job and 5) confidently manage and monitor project tasks to ensure success.

The Recommended Model

The model I recommend can safely guide you and your team through the process of blended learning design. By virtue of its checks and balances, you are essentially assured a successful outcome.

Accompanying the model is a list of sections for an instructional design document (Figure 1), which -- as it's developed and fine-tuned -- provides an indispensable discussion document and focal point for all parties involved in the project.

Note: The following design model presumes a performance analysis has indicated the need for training, as opposed to another type of performance improvement intervention (e.g., business process reengineering).

Design Steps:

1. Gather standard background information on the training need, just as you would if designing a course for classroom delivery. Consider: the title(s) and function(s) of audience members, their geographic locations, total number to be trained and the time frame for doing so, their level of interest in the subject matter, likes/dislikes concerning learning methods experienced in the past, what they need to come away with as a result of the training (i.e., specified knowledge, skills and attitude), known and potential constraints affecting any aspect of the classroom training from design

- to development to delivery, etc.
2. Answer, in writing: "What exactly do we want our audience to *know*, *do* and *feel* as a result of the training?" The list of specific, carefully worded outcomes or learning objectives should be prefaced by: "*As a result of completing the training, participants should:*" (You may be wondering about the use of "should" instead of ubiquitous "will". The fact is, there's no guaranty the audience will attain all – *or any* -- of the objectives, regardless of how expertly the learning experience is designed and delivered.) Before proceeding to the next step in the process, be sure to confirm the list of learning objectives with project decision makers, influencers, all design team members (including any subject matter experts) and any other parties involved. If the objectives are inaccurate, there surely will be inaccuracies committed in the steps that follow.
 3. Based on the confirmed learning objectives, outline the topics, subtopics and key points that must be addressed in the course. Essentially, you and your team (including any subject matter experts) should answer this question for each learning objective: "*If the audience is to be in a position to accomplish this objective, what exactly needs to be covered?*" The output of this step should look a lot like the table of contents in a thick textbook, i.e., highly detailed, comprehensive and logically sequenced.
 4. Next to each item listed in the content outline, note the type of learning activity (e.g., brief lecture, demonstration, case study, role play, game, quiz, etc.) that is best able to convey the item of content to your audience *in a traditional classroom setting*. The premise for noting only in-class learning activities at this point in the design process -- instead of both classroom activities and online activities -- is two-fold: 1) By working within the context of the classroom -- a venue with which you're probably very familiar -- you're establishing on paper the "ideal" learning experience: *live, face-to-face, instructor-facilitated (or led) and peer-collaborative*. 2) By virtue of having designed the "ideal" learning experience, you have a tangible blueprint ("Content / Learning Activities Outline") that you can -- later in the process -- deconstruct as much or as little as your particular circumstances indicate.
 5. Develop a transfer of learning strategy, outlining what can be done *before*, *during* and *after* training to make it "stick". At this point, having produced a "Content / Learning Activities Outline", you and your team would have a sense as to how, for instance, the manager of a participant might encourage his/her on-the-job application of the content specified. This step is crucial, yet often neglected despite the obviousness of this fact: *If learning is not adequately transferred from the place of learning to the place of work, there can be no return on investment*. Prior to training, the manager could review the course's learning objectives with the participant and discuss their relevance to his/her particular developmental needs. After training, the manager and participant might discuss, fine tune and commit to implementing an action plan drafted by the participant during training. Additionally, a second look at the "Content / Learning Activities Outline" -- from the standpoint of ensuring learning transfer -- might reveal additional opportunities for skills practice and the inclusion of quick reference tools (e.g., checklists, process maps, pocket guides and other memory joggers) for subsequent on-the-job use. The transfer of learning strategy, which often warrants methods well beyond those mentioned (e.g., linkage to performance review criteria and special rewards), is captured in writing before proceeding.
 6. Develop an evaluation strategy, outlining how the effectiveness of the training can be determined. A look back at the learning objectives and the "Content / Learning Activities Outline" can help answer these types of evaluation questions: After confirming the accuracy of course materials with subject matter experts and other reviewers, will you test the relevance, value and appeal of course materials (in their final draft stage) by conducting "walk-throughs" with a sampling of your target audience? Will you conduct a dry run so decision makers, influencers, training personnel and others can assess the course "in action" prior to rollout? How will you measure the target audience's degree of learning and behavioral change? Given the nature of the training, can its impact on the organization be sufficiently determined? If so, which metrics will you use? How long after the delivery of training should you wait before measuring its impact on the organization? Answers to these (and other) types of evaluation questions are documented.
 7. Identify and catalogue any existing informational and learning resources that may later be used to facilitate course development (and thereby avoid "reinventing the wheel"). In addition to detailing all topics and subtopics to be addressed, the "Content / Learning Activities Outline" represents a sort of shopping list for *directly relevant* materials that may already exist in your organization or

elsewhere. Do your best to locate pertinent reports, articles, books, videos, CDs and training programs that can potentially save time, money and effort by reducing the need to create your course from scratch. Pre-packaged e-learning lessons related to a number of your training's topics/subtopics may well be available and can easily be searched via the Internet. In addition, any subject matter experts working with you and your staff should prove especially helpful in locating and assessing the potential value of existing materials. Certainly, by virtue of their own expertise, subject matter experts (SMEs) should be able to close any content gaps left un-addressed by your search. However, this particular contribution should wait until after approval of a blended learning design has been received and the go-ahead for *instructional development* (i.e., creation or preparation of courseware needed to deliver the training) has been given. Here, in step 7 of the blended learning design process, *only a detailed listing of what content is available and what is lacking needs to be prepared.*

8. Organize all outputs of the process thus far into an instructional design document (i.e., a well-organized discussion document) that will be used later (in Step 10) to communicate your preliminary design. See *Figure 1*.

I. Course Title
II. Purpose Statement
III. Audience Description
IV. Duration
V. Prerequisites (if any)
VI. Learning Objectives
VII. Constraints
VIII. **Content / Learning Activities Outline**
(For each item of content to be addressed, indicate how it would be conveyed to audience members and the estimated time required.)
IX. Transfer of Learning Strategy
X. Evaluation Strategy
XI. Content Sourcing
(What We Have vs. What We Need)
Add any other sections that are needed to clearly and comprehensively communicate your design, including project management documentation.

Figure 1. Major Sections of an Instructional Design Document

9. Using the instructional design document, identify elements within the "Content / Learning Activities Outline" for potential online delivery. Since the intent is to combine the best of both worlds -- the 24/7 availability and efficient global delivery offered by online with the live, face-to-face human interaction of the classroom -- elements of the outline that obviously lend themselves to effective online delivery should be highlighted by you and your staff. *Such elements tend to include basic, straightforward content, e.g., key terms, process overviews, guiding principles, lessons learned, self-assessments, etc.*
10. Brief all internal people involved in the project on your design, elicit their feedback and gain approval to proceed. Getting buy-in from project sponsors, decision makers, content experts and

others at this point in the process is essential for several reasons. First, this meeting should confirm whether you're on track in terms of what the target audience needs and *what management wants*. Second, by virtue of providing the opportunity for all involved to weigh in on the design, their continued support is better ensured. And, third, you (and they) can feel confident that you're ready to begin talking with blended learning experts who -- after being thoroughly briefed by you -- can offer their views on how they would take your design to the "next level". *Note: Because questions may be raised about the technical requirements for delivering certain parts of the course online, it's recommended that your organization's IT function be represented at the aforementioned briefing.*

11. Meet with blended learning providers with an eye toward: increasing learning efficiency through 24/7 accessibility, fully optimizing precious classroom time and ensuring optimal return on investment. Using the design document as a roadmap for your meetings with providers, your intentions and questions can be systematically addressed. Key outputs of your meetings should include: 1) a clearer understanding on your part as to what should be delivered online versus offline *and why* 2) a decision as to which provider seems most appropriate for the job 3) which aspects of the project going forward can be accomplished using internal resources and 4) a *revised* instructional design document ("Blended Learning Design Document"), specifying in the "Content / Learning Activities" section how each element of content would be addressed, including the venue to be used and estimated time required. Other sections of the design document (e.g., Duration [*total online time vs. total classroom time*], Constraints, Evaluation Strategy, Transfer of Learning Strategy, etc.) should also be adjusted, depending on decisions reached. *Note: As in the preceding step, it's critical that your organization's IT function be included in each of your meetings with outside providers. Many of their recommendations about what should (or should not) be delivered online need to be informed by a clear understanding of your organization's current technological capabilities and limitations.*
12. With your selected outside provider on hand, present the blended learning design to all in-house stakeholders (as in Step 10), elicit their feedback, gain approval and identify next steps. A key part of this briefing is comparing and contrasting the first approved design document (based on the live, instructor-led classroom venue, but including the highlighting of certain elements for *possible* online delivery) with the second design document (based on the optimal blending of online and classroom venues within the context of your organization's particular circumstances). *By doing so, the full extent of paring back (or extraction) of certain content / learning activities (deemed suitable for online delivery) from the classroom-based design document can be clearly seen, explained and discussed. In the end, the potential benefits to be derived from a blended approach should be made apparent to all.* Typical benefits include: reaching large numbers of learners "anywhere, anytime" and usually much faster (and cheaper) than multiple classroom deliveries alone could; reducing yet optimizing in-classroom time by limiting its use to instances where the presence of a live instructor and face-to-face interaction among participants is truly needed; automating training administration via a Learning Management System; and reducing overall training costs. Once the blended learning design is approved, the creation of courseware (i.e., instructional development) can begin, using the Blended Learning Design Document as a blueprint.

An Ounce of Prevention...

A review of this systematic model for the design of blended learning reveals a number of checks and balances that are especially apparent within steps 2, 10 and 12. Consequently, this model -- *when diligently applied* -- lays the foundation for a successful outcome.

Too often, corporate learning and development professionals delegate the process of designing blended learning to outside providers -- only to later discover the high cost of doing so. Perhaps some L&D pros believe they lack the instructional design skills, time or awareness of the latest learning technologies needed to design blended learning. The step-by-step design model explained here requires only basic instructional design skills to successfully implement; has built-in opportunities to learn first-hand about the most relevant, leading-edge technologies (step 11); and fosters *ongoing* efficient and effective communication among all parties involved. With so many of today's important (and complex) learning initiatives involving live, face-to-face, in-class learning coupled with ever-advancing online instructional

technologies, the need for genuine commitment, active involvement and a systematic approach to the design of blended learning should be abundantly clear.

Frank Troha, a current member of the IACET Council on Standards Development (ICSD), has over 26 years of corporate instructional design experience, is former Adjunct Associate Professor of Instructional Design at Fordham University Graduate School of Education and is currently working as an instructional design consultant at the United Nations.

Copyright 2002, 2009, Frank J. Troha