

# **Developing Instructionally Sound Content with PowerPoint and Breeze**

*PowerPoint as an eLearning Authoring Tool*

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Not many eLearning developers or instructional designers think of PowerPoint as a tool for building online courses.

Surprisingly, PowerPoint is the second most frequently used tool for creating computer-based training applications<sup>i</sup> – Dreamweaver being number one. The truth is that PowerPoint, when used correctly, can help you create rich, compelling, and instructionally sound eLearning content.

Initial content from an SME in many cases is created in PowerPoint. ELearning developers and instructional designers often use PowerPoint to create outlines or storyboards – it's easy, convenient, and quick. Also most organizations have an enormous amount of information that already exists in PowerPoint format, which lives on servers and PCs all over the enterprise. Virtually anyone, whether tech-savvy or not, can quickly get up to speed using PowerPoint. In fact, most people have created some kind of presentation with the tool. It's not difficult.

Given these facts it's easy to see why leveraging PowerPoint in the development of online content and eLearning would make sense. It's a tool that SMEs already know how to use.

Using Macromedia Breeze and PowerPoint to create and deploy online courses also makes sense. With Breeze, anyone with basic knowledge of PowerPoint can easily add narration, animation, quizzes, and surveys to PPT content and publish that content efficiently over the web via Flash Player.

But can PowerPoint really be taken seriously as an authoring tool for online content and eLearning? This paper addresses these issues and suggests ways in which both engaging and instructionally sound content can be created with PowerPoint and Breeze.

## **PowerPoint and Instructional Design**

Let's define what we mean by instructional design. A typical definition might be: "The systematic process of translating general principles of learning and instruction into plans for instructional materials and learning." It's the process we go through to design materials or environments that will bring the learner from the state of not being able to accomplish certain tasks to the state of being able to accomplish those tasks.

Good instructional design facilitates understanding. If content is instructionally sound it has more chance of being easily digested by the learner. It's good to remember that instructional design is a process – PowerPoint is merely a tool. You can create poorly designed instruction with state-of-the-art authoring tools just as you can create well designed instruction with less complex tools.

So can PowerPoint be used to create instructionally sound content? And what level of instructional design is actually needed for delivering specific learning content? These are questions we need to look at before diving in and developing online content with PowerPoint.

## **What level of Instructional Integrity is Needed for My eLearning Content?**

With unlimited time and resources we can create learning content with a very high level of instructional integrity. We can invest time and money in content that has a well-designed structure, flow, and navigation with interactivity, animation, audio, video, and other media richness.

In the real world we have time and resource constraints. These need to be balanced with the type of knowledge transfer we require. Knowledge transfer in an organization most often falls within the following categories:

- a) **Broadcast of information:** The dissemination of facts, figures, data, notes, etc. to an organization. For example, a new pricing model or a feature list of a new software release -- information that is typically only read.
  
- b) **Critical knowledge transfer:** Quickly delivering key information and knowledge about a business, product, or service. For example, understanding a new pricing model and how it differs from the previous model. Slightly richer information and knowledge that might require quizzes or feedback.
  
- c) **Developing skills and competencies:** Detailed, time-intensive, and conceptual learning such as learning how to price complex products, learning management skills, or perhaps understanding how to master new software. Content that is more complex and richer than the previous types and may require the learner to read, listen, try out new skills, or get certified.

The level and type of instructional design should be a function of the type of knowledge transfer, its urgency, and the available resources. See Fig. 1.

When content urgency is low, we need to develop skills and competency training and have professional eLearning developers and instructional designers develop eLearning content—and in this case, PowerPoint may not be the best solution. Authorware, Flash, or Dreamweaver might be a better choice.

As we move to the right and into critical knowledge transfer content urgency increases, we may have less available resources and the level of instructional integrity needed for such projects is not so crucial. This is where PowerPoint and

Breeze become an appropriate solution. Content can be created quickly with minimal resources but still have an appropriate level of instructional integrity.

It's not that we don't have the time to develop better instructional design, it's that this type of knowledge transfer does not necessarily require it.

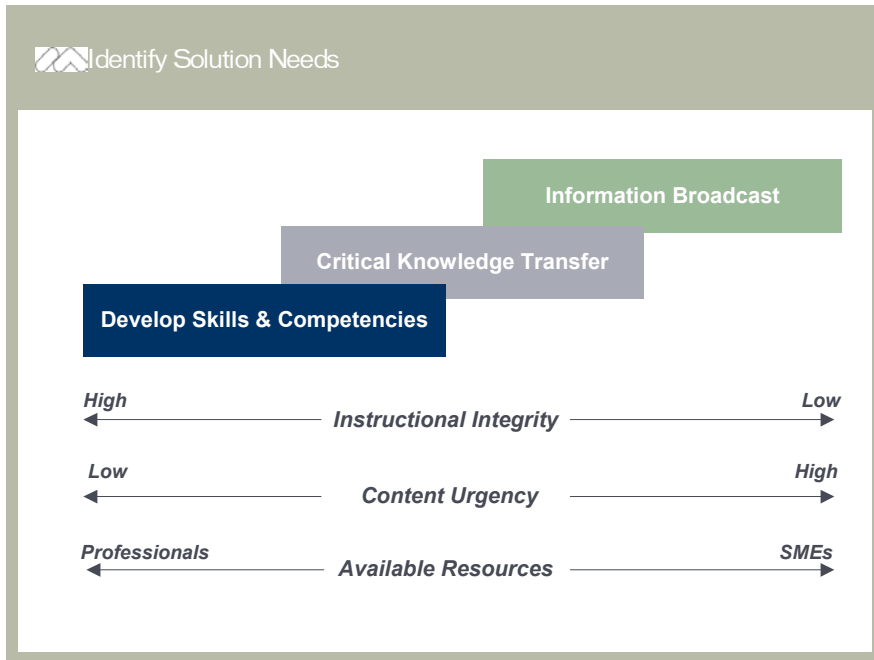


Figure 1. Learning Categories and Needs

Moving on to the far right, we have information broadcast where the urgency of the content is very high, we have limited resources (just the SME), and the need for instructional integrity is even less.

PowerPoint plus Breeze is a good fit for this scenario. The more critical or urgent the information, the more suitable the Breeze solution. This type of online learning is termed "Rapid eLearning" and Breeze is designed to facilitate this kind of eLearning.

## Typical Concerns about using PowerPoint for eLearning

Many of the concerns people have with using PowerPoint as an eLearning tool revolve around the issue of tool capabilities and instructional design. The two main issues usually raised are, "Can PowerPoint be used to create rich, compelling eLearning?" and "Do we sacrifice good instructional design when a SME rapidly creates training with PowerPoint?"

### 1. Can PowerPoint be used to create rich, compelling eLearning?

As mentioned previously, if we are talking about developing skills and competencies and we have the luxury of an extended timeframe, then eLearning development in PowerPoint might not be the best option. However, for broadcast of information and critical knowledge transfer, PowerPoint can be used to create rich, instructionally sound learning content.

PowerPoint was designed primarily as a tool to develop presentations and is typically used by speakers or trainers as a means of assisting their in-person presentations. Because of this the slideware that is created is often very basic and bullet points prevail. These fairly basic sets of slideware are generally adequate for a presentation as the whole idea of the slideware is to support the speaker's presentation – not to dominate it. The quality of the slideware is usually outweighed by the knowledge and effectiveness of the speaker. Great presentations and informative training sessions, as you well know, can often be accompanied by poorly designed PowerPoint slideware.

Because of the over abundance of very basic PowerPoint slideware and the tedious overuse of bullet points, the term "PowerPoint presentation" conjures up a particular image: a very basic set of slides with numerous bullet points and a few stock graphics to attempt to spice up dull content. Therefore when someone talks of creating rich, instructionally sound eLearning with PowerPoint there's usually a disconnect. People immediately think of the quality of the PowerPoint presentations they have experienced and find it a stretch to imagine that the tool could create engaging eLearning.

The truth is, PowerPoint can be used to create compelling eLearning content. Just as most Word users typically use about 1% of the available features and functions, PowerPoint users typically only use a very small subset of the capabilities of the tool. PowerPoint with Breeze can be used to create any type of content using graphics, animations, sound, video, and embedded Flash movies. Richness of content limitation is a reflection of its use — not of the tool itself.

Does this mean that the SMEs and others in an organization that create rapid eLearning will take advantage of all the rich features of PowerPoint to create truly compelling learning content? Probably not. In many cases, where delivery speed is critical, a standard PowerPoint presentation will be used with a narrated audio track. However, in cases where more sophisticated online training is needed and time permits, an eLearning developer or instructional designer can take the core materials and enhance them. And this enhancement can be done in PowerPoint - the native format of the content. Rather than convert the SME's training presentation over to another tool, the instructional designer or developer can augment and improve the original within the same tool using the same format.

This means an SME's PowerPoint presentation can be used "as is" with narration added in Breeze if the delivery need is immediate. If more time is available the original materials can be enhanced to add richer media, interactivity, quizzing, and improved instructional design. Links can also be added to slide content to

provide non-linear navigational design. Materials can also easily be enhanced by inserting pre-existing Flash movies or software simulations directly into a PowerPoint slide.

One of the advantages of authoring content in the native format the SME uses is that the level of richness of the eLearning content can be incrementally increased according to the time available. This is in contrast to traditional eLearning tools where specific rich-media elements are being developed and the content is unavailable until these elements are finished. See Fig. 2

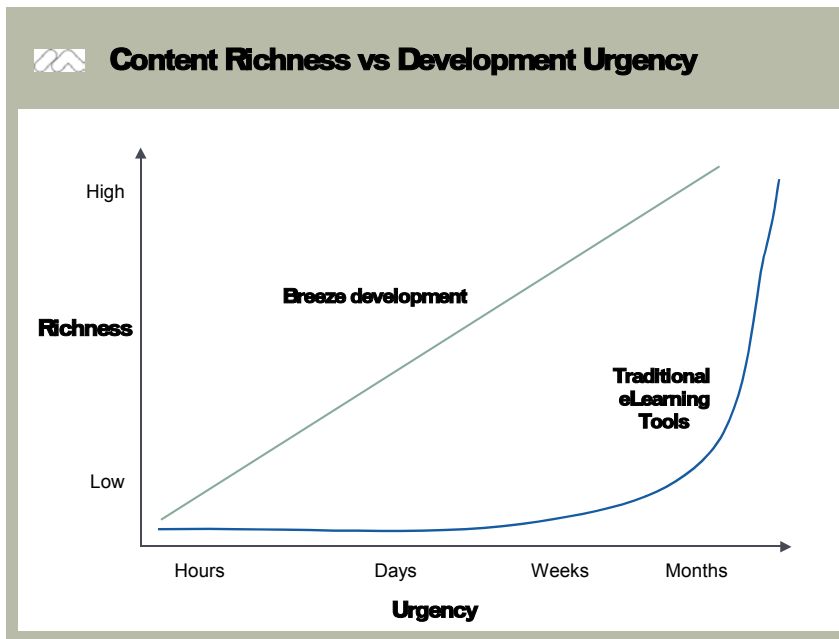


Figure 2. Content Richness

## 2. Do we sacrifice good instructional design when a SME rapidly creates training with PowerPoint?

Again, consider the category of learning needs before answering such a question. If we are talking about complex skills and competencies training, having SMEs alone use PowerPoint to design instruction would not be appropriate.

However, as we saw previously, the majority of information transfer in an organization is critical knowledge transfer and information broadcast. Here, the instructional design needs are less critical and the level of instructional design is a function of the urgency of the content.

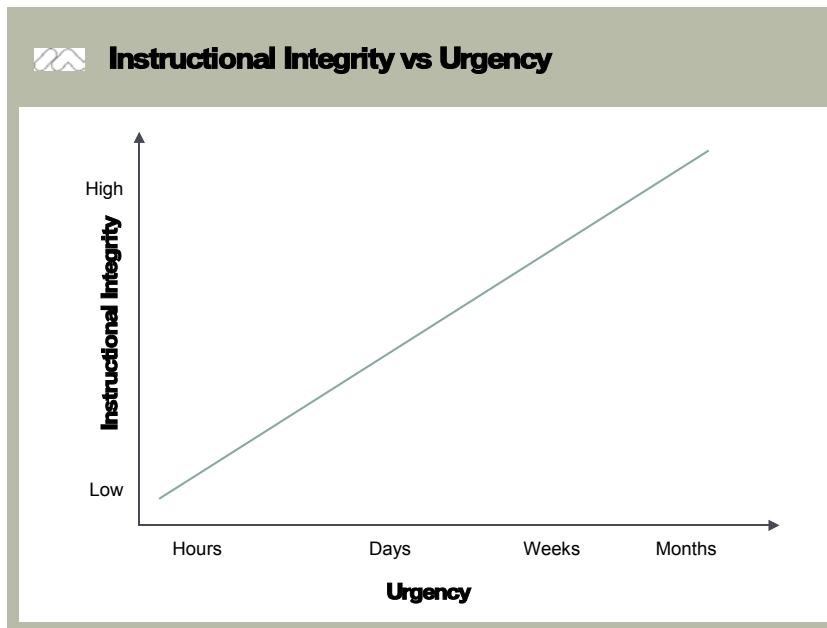
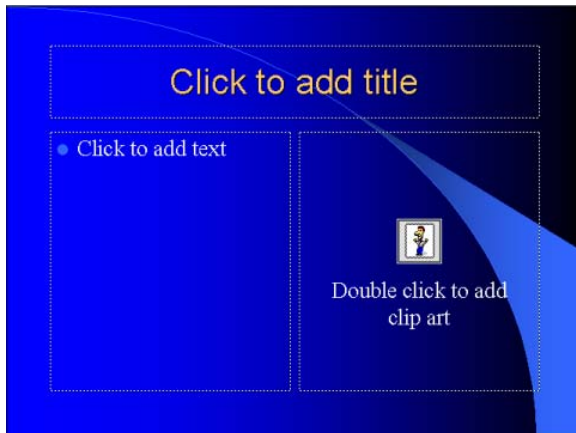


Figure 3. Instructional Integrity vs Urgency

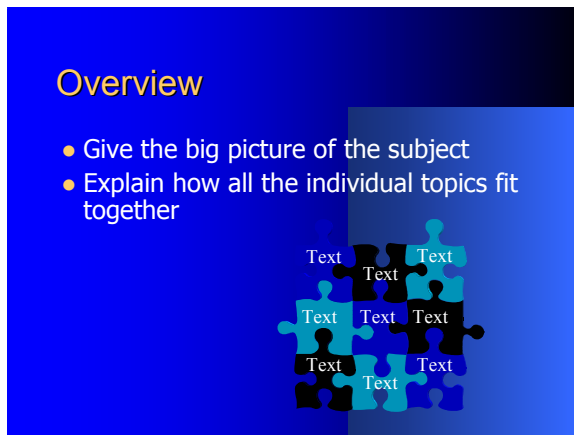
And this is exactly as it should be. Information that is of an urgent nature generally is not the type of content that needs a high level of instructional design. However, if there are specific instructional design standards that must adhere to a particular project, then Breeze can often reach these standards more quickly than a standard eLearning authoring tool because the content is being manipulated in its native format. What's more, Breeze content will always be in a "releasable" form should there be an urgent need to get it published. This cannot be said of standard eLearning development where content will typically only be in releasable form towards the end of the development timeframe.

### **Using PowerPoint Templates**

When creating rapid online content with PowerPoint you won't be starting from a blank screen. PowerPoint comes with numerous design and presentation templates. The design templates get you started with the graphical look and feel and the presentation templates provide a skeleton for arranging and outlining your actual content.



*Figure 4. PowerPoint Design template*



*Figure 5. PowerPoint Presentation template*

A standard set of design and presentation templates are included with PowerPoint. For a more stylish look and feel there are numerous companies all over the web that offer thousands of PowerPoint template designs that facilitate more elegant designs.

A template for instructional design is a different animal. PowerPoint comes with numerous templates that can be used to guide a user through creating different types of content. Examples include:

- Company Meeting
- Employee Orientation
- Managing Organizational Change
- Presenting a Technical Report
- Products and Services Overview

- Training

These provide basic guidance and help on creating well-formed content.

## **Creating Custom Instructional Design Templates**

Most organizations will have their own approach to presenting instructional content and instructional design guidelines so they can establish a brand “look and feel” for all their courses. Existing PowerPoint templates can easily be edited to reflect the type of content delivery structure and design you need. These “Rapid eLearning” templates can include an assortment of different types of pages for presenting various types of content and media. They can include guidance on when and where to add Breeze quizzes, tests, and surveys.

Once you have customized a template for your particular content needs you can send this to all the SMEs that create content for you. This will not only help create well organized content that has instructional integrity but will reduce the time that the SME needs to spend on creating the content. Instead of wondering how to structure and organize the information, the SME will have step-by-step direction.

By using this approach SMEs will be able to create content that will need only a little massaging before being published to the rest of the world.

## **Using PowerPoint and Breeze features to create rich, compelling eLearning**

Most PowerPoint users exploit very few of the available features of the tool. Some of these features can be very useful in the design and development of eLearning projects. PowerPoint eLearning content does not have to be static page-turning – using some of the features below you can create rich, compelling online learning content. Remember, the richer the elearning content the higher the retention rate.

### **Hyperlinking**

Hyperlinks can provide extended navigation options as well as access to other learning content. Hyperlinks can be added to any element or object within PowerPoint — text, graphics, buttons, etc. These links are honored when you publish through Breeze and as such, gives you considerable flexibility. These hyperlinks can be of three basic types; file, web-page, and bookmark.

File links enable you to link from your PowerPoint content to a local Word, Excel, PDF, or other file.

Web-page (URL) links give you the flexibility to link to any page or any document locally or across the web. This allows you to provide links to external reference materials, glossaries, documentation, or related websites.

Bookmark links let you link to any slide in your presentation. This lets you create non-linear navigation within your content.

- 1. Select the text or object**
- 2. Choose Insert > Hyperlink**
- 3. Choose the link type (File, Web Page or Bookmark)**

### **Adding buttons**

To add more navigational choices to your Breeze presentation you can use PowerPoint Action Buttons. These are easily added to a slide and behave similar to HTML "push-buttons" when published. Just like hyperlinking, the buttons can be used to link to files, web pages, bookmarks, and also sound files.

- 1. Choose Slideshow > Action Buttons**
- 2. Choose a button**
- 3. Drag out the button on the slide and release**
- 4. Use the Action Settings menu to configure the behavior needed**

### **Adding Flash simulations**

Simulations and demos can be extremely useful in eLearning to teach users how to use software. You can embed existing Flash movies\*, simulations and demos directly into a slide. Any sound and narration in Flash simulations will be played back through Breeze. With the PowerPoint Breeze plug-in installed, adding Flash movies is very simple.

- 1. Choose Breeze > Insert Flash Movie...**

(eHelp's RoboDemo or Qarbon's ViewletBuilder are excellent ways of creating rapid demos and simulations. Both of these support SCORM so that interactive simulations and quizzes in these Flash movies can send scoring data to Breeze.)

### **Creating Animations**

Textual explanations with static graphics don't always cut it. PowerPoint can be used to create some basic animation that can be very helpful in communicating concepts, ideas, and processes. You can quite easily build animations with elements that have transition builds and movement. As well as providing a depth of understanding, animations engage an audience to a much greater extent than static graphics, which means better retention.

- 1. Select a graphic element**
- 2. Choose Slideshow > Custom Animation**

(Take a look at PowerPoint Help for extensive information on animating text and graphics.)

### **Adding Quizzes and Tests**

Interactivity in any form of eLearning greatly enhances both the appeal and the effectiveness of learning. The PowerPoint Breeze plug-in makes it very easy to add quizzes, tests, and surveys to eLearning content. (The scores and data from these can be sent directly to your AICC/SCORM LMS.)

- 1. Go to a blank page**
- 2. Choose Breeze > Quizzes and Surveys...**
- 3. Configure you quiz, test or survey**

The dialogs under each of the tab menus are easy to follow. Click the dialog Help for detailed guidance.

### **Adding Narration**

The Breeze plug-in simplifies the addition of audio narration. Adding narration to online training content has been proven to increase retention rates. In most cases it is also the learner's preferred mode of receiving instruction or information.

- 1. Go to a blank page**
- 2. Choose Breeze > Run Wizard...**
- 3. Follow the wizard instructions**

You can also choose Breeze > Record when you get familiar with the process.

### **Summary**

Very often the simplest approaches to a problem are the most effective. Tools designed specifically for Elearning authoring can be used to produce some wonderful online content, but only if time permits — and usually it doesn't. By utilizing PowerPoint you can significantly increase the speed of development of elearning by using an authoring tool that your SMEs are already familiar with. Using a few customized PowerPoint templates to guide content organization and content creation you can rapidly create online content that is engaging, effective and instructionally sound.

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<sup>i</sup> Bersin and Associates study March 2003.