Building a Maritime eLearning Platform - Where Does the Learning Content Come From?

By Murray Goldberg

Introduction

As many of you are aware, I work for a company which creates technology (a Learning Management System - or LMS) to deliver training and assessment specific to the maritime industry. I write frequently about this type of technology and its application. However, the LMS is only part of the planning and deployment. The other critical component is the learning content itself - the lessons and the assessments that are delivered by the technology. This article continues the series of articles which collectively answer the question "how do we create or procure the best lessons and assessments for our officers and crew"?

This discussion was begun in three previous articles (here, here and here) which concentrated on the use of CBTs in the maritime industry and how best to take advantage of the content and assessments provided by them. In this article, we begin by looking at the importance of getting content "right", and then move on to concrete advice on the use of PowerPoint slide presentations as sources for eLearning content.

Before jumping in, let me mention that the next article is going to look at other content sources such as videos, MS Word documents, and PDF documents. It will also look at the role of instructional designers and the increasingly important difference between industry-specific, company-specific and vessel-specific content. If you would like to be notified when that article and subsequent articles are ready, and have not already done so, please feel free to sign up here for notifications. But now - on to content.

The Importance of Your Training Content

Most would consider the importance of training content to be self-evident. I believe it was best articulated to me by Jeff Joyce, the Director of Fleet Operations at one of our largest customers, British Columbia Ferry Services Inc. (BC Ferries). Their comprehensive training program, the SEA program, has standardization as one of its core goals. In fact, "Standardization" is the "S" in SEA. According to Jeff, the move to blended learning at BC Ferries was, in large part, the result of a desire to ensure that standardized best practices are taught to all BC Ferries operational employees.

Technology-assisted learning enables standardization because it ensures that all trainees receive the same training materials and are assessed to the same standards. This is very positive in that you can be confident that your organization retains very tight control over what, exactly, is being trained. However, as Jeff has in the past indicated, content now becomes increasingly important because it is not being "interpreted" or "improved" by an instructor as it is being delivered. So standardization is achieved, but care must be taken to ensure that the content is complete, understandable, and truly represents company best-practice information on routines, knowledge and skills. Therefore, it is important that your training and content truly do reflect best practice, and that the content is not only maintained, but also continually improved upon (please check here, here and here for a series of articles on continuous improvement in maritime training).

Once we have created or procured high-quality content and made it available on-line, we are able to free up the instructor's time for what they do best - interact, provide motivation, assist with problems, provide demonstrations, and so on. The point of making the learning content available on-line is that it relieves the instructor from wasting time doing what can be done equally well (or even better) using

an on-line approach, and therefore freeing up their time to perform the more "high value" learning. This approach is sometimes referred to as the "flipped classroom" approach and was covered in a previous article which can be found here.

So - with an understanding that content and assessments are important, where do we start in developing or procuring content for our organization's move toward blended learning? Two of the most popular choices are CBTs and Powerpoints. CBTs were discussed in the previous articles, so now on to PowerPoint slide presentations.

PowerPoint Training Presentations

A discussion of training content could not be complete without discussing the use of PowerPoint (slide) presentations as a source of training content to be placed into an LMS. E-learning experts have long held a strongly ambivalent love/hate relationship with PowerPoint because:

- PowerPoint slide presentations are often readily available as a source of eLearning content; most organizations already use them for classroom training, and therefore they often represent a great source of eLearning content to bootstrap an eLearning content population program

BUT ...

- They are often the source of some of the worst eLearning content ever seen.

Slide presentations used by instructors as an in-class training tool can indeed be a good and ready source of on-line content for a blended learning program. You already have them available, they are often nicely targeted to your organization (company and equipment-specific), and you've invested in them. Why not use them?

My short answer is that you *can* use them - but not without a bit of careful consideration. The problem lies in the fact that when they were designed, they were probably designed with the idea that they would not be used by the student in isolation. Instead they were designed to be used by an instructor who would go through the slides in class and supplement the information contained therein with more background, deeper explanation, and relevant stories and examples. Therefore, this preexisting "slide show" is typically very incomplete when used without an instructor to provide the necessary background and additional information.

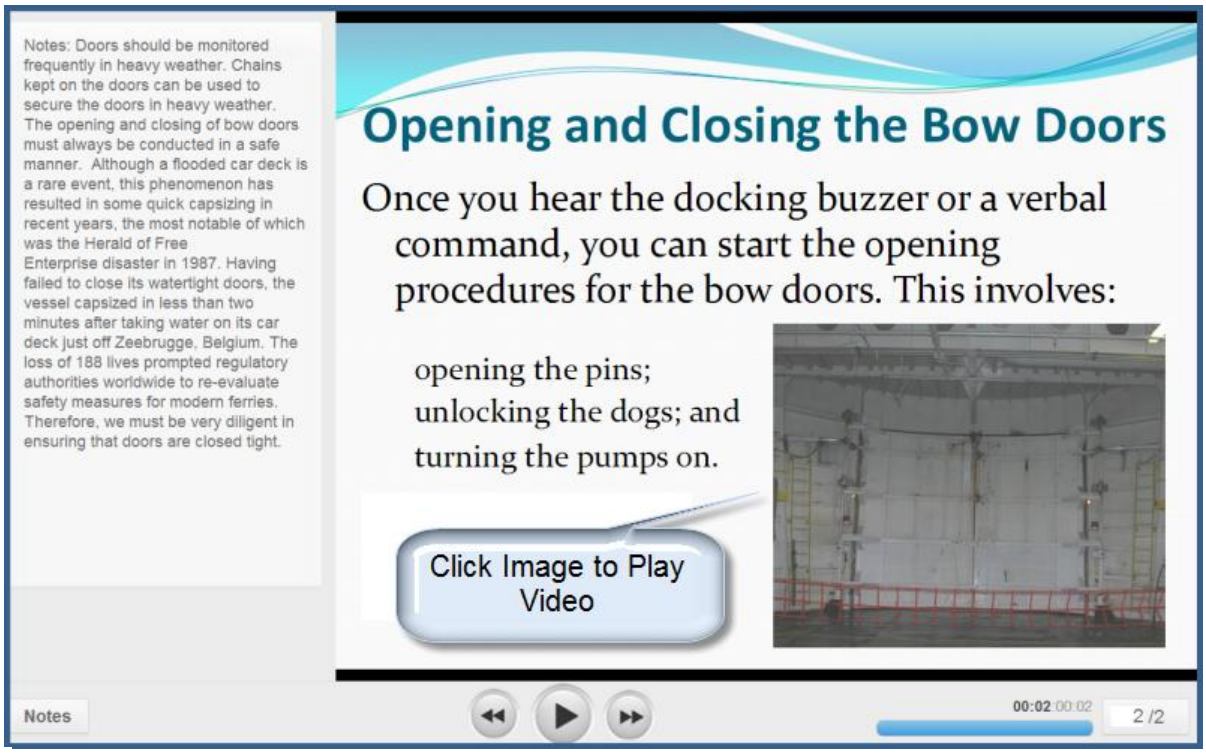
Having said that, PowerPoint slides have real advantages. As already stated above, they are often readily available and represent a real investment by the training organization. In addition, PowerPoint slides are already "electronic" and therefore are usually pretty easily converted for use in an LMS. Taking these two facts together, slide presentations often do represent a good training framework - a starting point that can indeed be used as a source of eLearning content and get your training transformation off to a quick start.

Ideally, then, the answer is to use the slides as a beginning and engage both a subject-matter expert (your best trainer) alongside an instructional designer (an eLearning content and tools expert) to transform the slides into a solid and complete learning experience. We will discuss the merits of engaging instructional designers in upcoming articles. But what if, like many organizations, you do not have ready access to this type of expert? We find this to be a very common situation among our customers - especially our smaller ones. Fortunately, there is still much you can do.

What we often recommend in this case is that the customer look critically at the slide presentations they have and ask themselves “what is missing"? That is - if these were being delivered in a classroom setting, what additional information would the instructor be providing for background, motivation,

clarity, and so on. This "missing" information needs to be a part of the presentation. So - how, specifically, can this information be made a part of the eLearning content?

Once the additional learning framework and background information is written down - what do we do with it? There are many possibilities - depending on the tools you use. In the case of MarineLMS, our PowerPoint conversion tool can make the “slide notes” accompanying each slide appear alongside the slide when it is viewed in the LMS. Therefore, the background information, stories and motivational content are all added to the slide notes of each slide. When viewed by the learner, the effect is that the slides themselves retain a solid focus on the key points, but the additional reading available alongside the slides provide the necessary supplementary information to ensure a complete understanding of those key points.



This technique has the nice property of getting the eLearning program up and running quickly and effectively with existing materials and a minimum of investment. The key points in the slides retain emphasis on the main learning points, and the adjacent notes provide the necessary content and background. Both the key message of the slides and the additional reading in the slide notes can evolve progressively over time, continually improving the training presentation. This technique is being used very thoughtfully and to great effect by one of our (favorite) customers, Resolve Maritime Academy. It is also being used to equally great effect, with an emphasis on flipping their classroom training, by another of our (favorite) customers which is a very large and growing simulation training center in Europe, and by a local customer called Island Tug and Barge (again - as expected, also a favorite).

Other Sources of Readily Available Learning Content

If yours is like most organizations, even if you do not have PowerPoint slide presentations, you likely have some form of learning materials that are used to support the classroom training that you would like to convert to a blended approach. This content may come in the form of PDF documents, Microsoft Word documents, videos or other forms of content. These, like slide presentations, may

also represent excellent sources of blended learning content. But as with PowerPoint slides, great care must be taken when making them available on-line to ensure they create a high quality learning experience.

The first part of ensuring that they provide quality on-line training is to analyse them the same way described for slide presentations, above. Since these other materials were likely created for use in a different context (in class), they will likely need some analysis and re-work to repurpose them for independent on-line training. As above, if they are simply placed on-line as is, they may end up being one of those "worst" examples of on-line learning. So have your best trainers look at them and add all the necessary background and additional information required to create a great learning experience.

The second task is to convert their format for on-line use. This conversion varies according to the original format of the materials and according to the desired form of on-line use. As such, I will leave it for the next article in this series.

Conclusion

This series of articles covers some of the basic mechanical eLearning questions such as - where does my learning content come from, how do I get it on line, and what resources exist to help me do so? The next article is going to look at other content sources such as videos, MS Word documents, and PDF documents. It will also look at the role of instructional designers and the division between industry-specific, company-specific, and even vessel-specific content.

If you would like to be notified when that article and subsequent articles are ready, and have not already done so, please feel free to sign up here for notifications. Until then, thanks for reading, and keep safe!

About The Author:

Murray Goldberg is the founder and President of Marine Learning Systems (www.marinels.com), the creator of MarineLMS - the learning management system designed specifically for maritime industry training. Murray began research in eLearning in 1995 as a faculty member of Computer Science at the University of British Columbia. He went on to create WebCT, the world's first commercially successful LMS for higher education; serving 14 million students in 80 countries. Murray has won over a dozen University, National and International awards for teaching excellence and his pioneering contributions to the field of educational technology. Now, in Marine Learning Systems, Murray is hoping to play a part in advancing the art and science of learning in the maritime industry.