LEARNING TECHNOLOGIES 2015

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DEVELOPING A MOBILE LEARNING STRATEGY

Community Manager, Learning Technologies
Justin Brusino

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IMPROVING FORMAL LEARNING WITH SOCIAL MEDIA

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The use of social media has been on a meteoric rise for several years. According to statistics portal Statista, there will be an estimated 2.13 billion social network users worldwide by 2016. Facebook remains the leader for tools used, with LinkedIn, Instagram, Twitter, and other platforms also getting significant traffic, per Statista. But social media is not just for friends and relatives to share pictures of their kittens. The plethora of tools also presents many opportunities to improve your formal learning—not only classroom training, but any type of formal learning process.

Each type of social media tool presents different ways to improve formal learning. Creating communities, as well as finding and sharing ideas, is much easier to achieve in 2015 than ever before. If you use the tools well, you can make formal learning more effective and efficient, increasing learners’ motivation and adding longevity to the learning process.

In this issue of TD at Work, you will learn:
• the opportunities and benefits of social media
• strategic approaches to using social media in formal learning
• when and how to use today’s social media tools
• potential obstacles to avoid and keys to success.

OPPORTUNITIES AND BENEFITS OF SOCIAL MEDIA

Formal learning is defined here as any intentional, structured learning moment. Created by instructional designers, trainers, and learning managers, such initiatives aim to create effective, efficient acquisition and implementation of required knowledge, skills, and attitudes. Social media tools can support these initiatives. Note that when we talk about social media tools in this TD at Work, we’re referring to any online tool or platform that allows users to create and share content and ideas.

If you are developing and delivering formal learning programs, social media tools can help you better prepare your learners for the classroom. For example, by delivering packets of knowledge before a training session or creating discussion around learner attitudes, you can add value and improve in-class efficiency.

Social media is equally valuable when creating a formal learning process without classroom training. Social media tools make it easier to communicate with learners, create community spaces for discussion, and conduct surveys or tests.

The learning world also talks about social learning—getting people to learn together, often with no formal structure. For example, daily work narration is a great way for employees to share their ideas and problems in a way that is more user-friendly and efficient than traditional knowledge-sharing platforms. However, this issue of TD at Work will focus on structured, intentional learning moments, although those can be more social than ever before.

It will be useful to think of the function and direction of your learning process. Tools such as YouTube and inklewriter (see sidebar on tool descriptions for explanations of social media tools mentioned in this issue) allow you to distribute content and ideas to learners (one-to-many). Other tools such as Socrative, designed to help trainers and teachers gauge learners’ understanding of material, are used to receive content and ideas from learners (many-to-one). Additionally, you may want to encourage sharing between participants (many-to-many) on platforms such as LinkedIn or Padlet, which let you share notes, references, and ideas. As you develop learning activities, ask yourself if you need to:
• build a community
• help learners find, share, and use content
• facilitate the creation of content
• improve productivity for the learner or learning facilitator.

There are multiple benefits to using social media in your learning processes. Learning effectiveness is improved as learners more quickly
APPLYING LEARNING THEORY TO MOBILE LEARNING

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Disclaimer: The content, views and opinions expressed in this article are exclusively those of the authors and do not represent the views of IBM in any form or fashion.

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It’s in your pocket. It’s in your bag. It’s even snuggled up next to you while you sleep. You know what we’re talking about—mobile devices. Mobile devices have become an important part of our daily lives and, because of our familiarity with the technology, present a terrific opportunity to enhance learning and performance in the workplace. We often use mobile devices to search for information, communicate, and seek performance support. But how do we use our devices for mobile learning? Actually, what is mobile learning?

The first challenge when considering the use of mobile learning (m-learning) is defining what mobile learning is. The second challenge is identifying the movement, adoption, and implementation of mobile learning as a learning strategy. It’s no surprise that mobile devices, which were primarily built for information sharing, communication, and entertainment, are a rapidly changing technology. The mobile learning space, however, has progressed at a much slower pace.

In this TD at Work, we will first focus on formal instruction and the three learning theories: behaviorism, cognitivism, and constructivism, and the techniques that are known to promote learning. We will then examine three informal learning categories: information, performance support or decision support, and social or expert learning. While these may be tangentially influenced by learning and development (L&D) organizations, these types of informal learning are important because learners have come to rely on them and they are becoming integrated into work and personal life. The more you know about these informal learning sources, the better equipped you will be to influence the design of mobile learning applications or blend them with formal instruction.

In this TD at Work, you will learn:

- about varying definitions of mobile learning
- about learning theories, and how to apply those theories to m-learning
- about informal learning methods, and how they can be part of an L&D professional’s toolbox.

WHAT IS MOBILE LEARNING?

Earlier definitions of mobile learning focused on the technology (the provision of training on PDAs, smartphones, mobile devices). Later, the definition of mobile learning evolved to focus on mobility (any learning that happens when the learner is not in a fixed place), then learning (the acquisition of knowledge and skills through mobile devices), and most recently, a focus on performance put forth by The eLearning Guild (any activity that allows individuals to be more productive when consuming, interacting, or creating information mediated by a mobile device).

As we can see, there are a variety of ways to define mobile learning. In fact, Australian researchers are now trying to determine a dynamic definition of mobile learning.

Whether we can define it consistently, whether we can afford it, or whether we can support it—the bottom line is that mobile learning is not going away. We should at least figure out a way to design for it. Porting e-learning, designed for a specific platform that has specific affordances, over to a mobile device does not make m-learning. It makes headaches.

In a comparison of mobile learning drivers and barriers from a 2007 study by The eLearning Guild to a 2014 study by Toward Maturity, we notice that the reasons we wanted to implement mobile learning in 2007 (the drivers) are similar to the reasons we want to implement it in 2014. We also note that the barriers, although in slightly different priority, also remain relatively similar. Our ability to address these barriers has not progressed much in seven years.

FOCUS ON LEARNING

When looking at mobile learning opportunities, instruction can be categorized as formal instruction or informal learning, and participants can learn using both. As educators, we are often focused on formal instruction but we should not ignore the opportunities offered by informal learning applications such as performance support and decision support,
Sean Putman
Sean Putman, the director of training and documentation for Altair Engineering and the principal at Intellectus Learning, has been an instructor, instructional designer, and developer for more than 15 years. He has designed and developed training programs, both instructor-led and online, for engineering design and analysis software. He is interested in using data driven design to create better interventions for end users and how far the Experience API can be pushed to help L&D professionals make more informed decisions.

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Using Storyboards

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Interface prototyping is a technique that has been used for many years in the web application and web development industries. It is meant to solicit end-user and stakeholder feedback early on in the design process. Gathering this critical information helps designers make decisions about the layout and placement of elements, such as buttons, images, and clickable interactions within the overall arrangement of an interface. These critical decisions help designers create an end product that is useful to the target audience, while still meeting the needs and desires of the stakeholders. Prototypes also help designers map out the navigation of a training module so that it is easier for end users to get the information they need.

Design decisions are based on the outcomes of prototype testing, not on one person’s ideas. In his book *A Practical Guide to Web App Success*, Dan Zambonini highlights the need for prototyping and user testing. He writes, “This [prototyping] is the biggest test of our work to date. It highlights real issues with the interface, and our implementation of app features while they are still easy and cheap to change.” By obtaining user feedback, you are making decisions based on real data about how people work within a certain design. If a stakeholder questions the choices that the designer makes during prototyping, she can use the data collected from user testing in support of her decisions. Prototypes help reduce misunderstandings between designers and stakeholders by visually communicating the design, making it easier for stakeholders to provide feedback.

While you can describe what the interactions and interface will look like, it is much more effective to actually show both end users and stakeholders a mock-up of the interface. Oftentimes in learning and development (L&D), not enough time and effort are put into the design and layout of elements within a module. All too often the content is added to the module and the module is deployed to the community without completing user testing. Instead of reinventing the wheel, you should examine how other industries use prototyping techniques to create a better user experience.

In this TD at Work, you will look at different examples of prototypes that can be used as you develop the final design for a learning module. Briefly, we will look at the elements of each prototype and how you as the designer can gather feedback from each stage of your interface design. You will then examine each prototype, how they work, and define best practices to follow when creating them.

This TD at Work will:
- define storyboarding and prototyping
- show you how to create a physical prototype for feedback
- explain how to storyboard your e-learning solution
- instruct on how to create a wireframe digital prototype
- help you create a refined prototype for final interface design.

**STORYBOARDING AND PROTOTYPES**

It can be intimidating to think about creating your own interface when starting a new e-learning project. There seems to be a never-ending stream of questions that come up. Where do I start? How do I get approval from the decision makers? Is this going to resonate with the end user? The desire to find a neatly packaged solution to all of these questions can cause designers to focus on creating content so that it fits into a one-size-fits-all template. However, a general template may not be the best way to deliver content to the end user.

While much time is often spent creating high quality content, too little time is spent on how content is presented. You can have the best content in the world, but if the interface is hard to navigate, or the material is difficult to find, you are likely to lose the end user. The key is to get feedback from stakeholders and, if possible, end users as early as possible in the design process.