



61
TIPS
on

mLearning: Making Learning Mobile

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61 Tips on mLearning: Making Learning Mobile

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Introduction

Dear Colleagues,

People are using mobile technology everywhere these days: at work, in school, while shopping, while dining out, in front of the TV, at concerts, and more. Most people are probably texting, playing Angry Birds, or checking Facebook for the 347th time that day, but each time someone uses a mobile device, that's an opportunity for learning. As learning professionals, how can we take advantage of these plentiful opportunities? And should we?

Our upcoming Online Forum on “mLearning: Making Learning Mobile” (December 6 & 7) will focus on proven ways to leverage mobile technology for learning. This event will provide information for learning professionals just getting started in mLearning and for those who have already started designing and developing for mobile. Our expert presenters will provide proven and practical strategies, tactics, and tools for creating successful mLearning experiences.

We asked the presenters for that forum— learning professionals who have already taken the mobile plunge—to give us their top tips for making the best of mobile technology for learning. What follows are 61 tips from nine presenters that focus on topics ranging from making the most of the times when the mobile users have access to the Internet to the advantages of using an open format such as XML to the benefits of iterative development to making your mobile interfaces naturally intuitive.

We edited the tips and organized them into five categories: The Why and How of mLearning; Design and Content; Tech, Techies, and You; Trial and Error; and Attracting and Retaining Your Audience.

I hope you find some valuable nuggets of information in this eBook, and are able to use many of the tips to help you on your mLearning journey. I also hope you consider attending or presenting at an upcoming eLearning Guild Online Forum. But, please, no mLearning while you're driving.

Sincerely,

Chris Benz
Director of Online Events, *The eLearning Guild*

About Our Tipsters



Ben Classen, *Consultant, Prophero*

For the past two years, Ben Classen has been involved with continuing education on the Web in the medical and insurance fields. In addition to online education, he has helped launch a mobile application for reviewing beer and helped design two games. He holds a BS degree in information technology with a concentration on web technologies.



Carol L. Cohen, *Learning Program Manager, Hewlett-Packard*

Carol L. Cohen has been active in education for her entire career. After a full career as a high school English teacher, she transitioned to corporate sales learning and development, first at Digital Equipment Corporation and now at Hewlett-Packard. She has led the design and development of many programs recognized with awards from STC, ASTD, and Brandon Hall. She is currently part of a team with HP L&D focused on piloting and fostering adoption of new technologies in learning.



Robert Gadd, *President and Chief Mobile Officer, OnPoint Digital*

Robert Gadd is co-founder and president of OnPoint Digital and directs the company's technology strategy and vision. He is a recognized industry leader and frequent speaker on learning solutions and mobile learning technologies. Before co-founding OnPoint in 2001, Robert was president of eDeploy.com, a web-based project collaboration developer for tech OEMs, carriers, and systems integrators based in Denver, CO. Prior to eDeploy, he was chief technology officer of Datatec Systems, a leading systems integrator for Global 2000 companies with more than 1,000 employees and worldwide operations.



John Low, *Chief Creative Officer, Carney, Inc.*

Over the past 16 years, John Low has led the artistic creation of more than 1,000 technology-based training and performance solutions. Since 1998, these projects were recognized with 50 industry awards. John provides creative direction on projects and consults with federal government clients on how best to use advanced learning technologies to achieve organizational goals. Current focus areas include the use of virtual environments for training simulations and the use of mobile technology and augmented reality for training and performance support.



Scott Patterson, *Global Mobile Learning Platform Project Manager, PricewaterhouseCoopers*

Scott Patterson has worked in learning technology for over 16 years. He has successfully led implementations for evaluation and assessment, virtual classroom, LMSs, external learning content, and video webcasting systems. He is currently managing PricewaterhouseCoopers' implementation of a global mobile-learning platform.



Dawn Poulos, *Vice President of Marketing, Xyleme, Inc.*

With over 12 years of experience in both the US and Europe, Dawn Poulos is responsible for the market strategy that has driven Xyleme's rapid revenue growth. Dawn is the author of the popular Dawn of Learning blog, and has written numerous white papers and trade articles focusing on the topics of mobile learning, social learning, and single-source content development. She began her career as a financial and cost analyst at Procter & Gamble, where she received a company award for excellence within two years of employment. Dawn holds an MBA from the Harvard Business School.



Joe Saturnino, *Senior Instructional Media Developer, Terumo BCT*

Joe Saturnino has over 15 years of experience in learning and development. Joe's background in graphic design, web design, and videography helps him create highly engaging eLearning content. He has been an influential member of training organizations in the telecom, real-estate investment, software, and medical-device industries.



Geoff Stead, *Head of Innovation, Tribal*

Geoff Stead is an international thought leader on new technologies and ways to use them for learning, communication, and collaboration—focused particularly on hard-to-reach adult learners. Considered a godfather of mobile learning, Geoff has supported educators' mobile learning across the globe since 2001. He advises the mobile industry (GSMA), education departments, and both UK and US governments on perfecting the blend between mainstream consumer technologies and enhanced learning and teaching. Recent work includes a large-scale US-military-funded international mobile learning project providing mobile apps to support military medics and aid workers in humanitarian relief situations.



Jeff Tillet, *Instructional Technologist and Learning Media Producer, Mojocat Creative Services*

Jeff Tillet is an instructional technologist and learning media producer for Mojocat Creative Services. Jeff has worked with computers and Internet technologies for nearly 20 years; a survivor of the Internet boom, he assisted many startups in successfully building business and eCommerce ventures. As a developer for a distance-learning Internet start-up, Jeff and his team crafted a custom LMS and all the content that went in it. Jeff has worked for various companies as an interactive learning developer and instructional designer, including T-Mobile USA, Microsoft, and Float Mobile Learning. Jeff helps organizations build technology road maps and create engaging media for training.



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THURSDAY, DECEMBER 6

OPENING SESSION

101 - **Expedition: mLearning—Ascent to the Summit**, Robert Gadd, OnPoint Digital

GETTING STARTED

201 - **Navigating the Mobile Learning Landscape**, Jeff Tillett, Mojocat Creative Services

301 - **The PwC mLearning Story—A Path from Planning to Go-Live**, Scott Patterson, PricewaterhouseCoopers

EFFECTIVE TECHNIQUES & PROVEN SOLUTIONS

202 - **Applying Natural User Interface Principles for Better Mobile Learning**, John Low, Carney, Inc.

302 - **Personalization: The Real Force behind Mobile Learning**, Dawn Poulos, Xyleme, Inc.

FRIDAY, DECEMBER 7

GETTING STARTED

401 - **Creating Training for Mobile Devices Using Tools You Already Have**, Joe Saturnino, Terumo BCT

501 - **Creating an Inclusive Mobile Strategy for Millennial Learners**, M. Casdorph & R. Cibirka, Georgia Health Sciences University

EFFECTIVE TECHNIQUES & PROVEN SOLUTIONS

402 - **A Faster Approach to Mobile Application Development**, Ben Classen, Prophero

502 - **Designing with the End in Mind: Short, Effective, Mobile Microlessons**, Carol Cohen, Hewlett-Packard

CLOSING SESSION

601 - **Mobile Learning: An Agent for Change**, Geoff Stead, Tribal



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Fourteen Tips on the Why and How of mLearning

Mobile learning represents more than just portability—it comes with both particular needs and special benefits. Here our experts share the basics everyone should keep in mind when it comes to mLearning.

A mobile device is not just another alternative training delivery method. If it were, we would all be in the business of shrinking classes down to the smartphone form factor. Look at it as a performance-support tool used on the job. That thinking informs the purpose, the design, and the content of the training.

Carol L. Cohen

There is no single ideal mobile learning solution. It is an intersection among the learners, their needs, their social context, and the technology. What works in a school will be wildly different from what works in an ambulance. The most important part of planning for your own mLearning is to understand all those other dimensions and plan around them.

Geoff Stead

It is not about the technology, but rather about the person who uses it. We should design for those sweet spots where we can provide training at the point of work. Mobile is best when we insinuate it into the workflow—such as sneaking a little lesson right into the process.

Carol L. Cohen

The future is mobile, and so too will be learning. We can argue about when this whole mobile revolution started, and there were certainly highly capable smartphones like the BlackBerry available before the introduction of the iPhone and the iTunes App Store, but that's when we actually began to see the potential and the impact mobile would have on our generation. Since then, mobile devices and apps have only gotten better, faster, and more innovative, and if there's something the app development community has shown us, time and time again, it's that mobile offers new possibilities never possible on PCs. This is precisely how we should think about mLearning as compared to eLearning. When you read Luke Wroblewski's book *Mobile First*, you will find lots of statistics that prove this fact.

Robert Gadd

Think in minutes rather than hours for mobile learning.

Carol L. Cohen

Don't let IT staff intimidate you—mLearning is secure! Despite what many IT professionals may suggest, the mobile learning experience can be just as secure as an online learning experience if approached in the right way. In fact, we contend that organizations can deliver a MORE secure experience to mobile workers than they can to online workers by leveraging a variety of available security and authentication methods that are all accessible by modern installed native apps. We can configure apps to interrogate the device they're installed on and verify the learner's identity against a range of known or expected parameters such as the device serial number, phone number, or a renewable security token. If these parameters don't match, we can automatically wipe the content from the suspect device.

Advanced organizations are also taking advantage of sophisticated single-sign-on capabilities, including support for Federated Security Assertion Markup Language (SAML) to restrict access to mobile workers who have successfully authenticated their status against their company's directory service within a defined period.

Robert Gadd

Modular solutions often require more than one platform. Making peace with multiple platforms is necessary and a big deal. The student path must be simple and seamless, so that navigating different platforms is actually invisible. This should be at the heart of a mobile learning strategy.

Carol L. Cohen

We are just getting started with mobile and mLearning. Despite all the advances in mobile made in the past few years, anyone in the field will tell you we are just barely scratching the surface of what's to come. If you are an instructional designer (ID) and you haven't paid much attention to mLearning, you need to start thinking that way immediately. Mobile is the future, and every T&D team must begin planning to support their mobile learning audience before it is too late.

For starters, IDs need to become mobile users themselves (if they aren't already) so they can understand the whole mobile experience before thinking about delivering learning experiences to mobile devices. Appreciating the differences between content delivery and consumption via a native mobile app versus accessing that same content via a mobile web browser is extremely enlightening and important before planning your own content delivery approaches.

Robert Gadd

Realize that we are all on this journey together. The answers are evolving and we are adapting to this very disruptive technology. While we don't have all the answers yet, there is really no good reason to sit on the sidelines and wait for the dust to settle. Be part of the answer with your own innovative ideas.

Carol L. Cohen

Don't set limits on mLearning. It's easy to look at mLearning today and want to assign specific learning tasks to it—performance support and job aides, for example—and while both are valid use cases, we can apply mLearning to many mobile-appropriate use cases if we just open our minds to new ideas. Mobile devices are great for learning-related tasks like just-in-time search, for social interaction with experts via forums or wikis, for the creation and curation of user-generated content, and for filling gaps in the day with learning refreshers, interactive exercises, and even on-the-go game-enabled learning experiences. Don't restrict your thinking to revolve around delivering courses and tests or providing simple checklists.

Robert Gadd

Not everything is perfectly suited for a mobile device. Sometimes I get food at a drive-through and eat in the car, but I still love sitting with my family at the dinner table. Qualify your mobile-learning projects by aligning lessons to performance and knowledge-based goals, then sync with times your students are tied to mobile devices.

Carol L. Cohen

mLearning has vastly more potential than eLearning. Modern mobile devices are highly sophisticated and easy to learn and use technological appliances that make it practical for virtually anyone to perform old tasks or learn new ones using one physical device in a multitude of ways. Mobile is a Swiss Army Knife of functionality in a device that fits in every pocket or purse. And it has the physicality of mobile, with all the other sensor superpowers that include things like digital compasses, gyroscopes, multiple cameras and microphones for video/audio recording and conferencing, Bluetooth connectivity, location awareness, proximity-based communications, and more. You can combine each of these technology features with formal or informal learning tasks and interactions, and design and deliver completely new experiences for workers on the go.

Robert Gadd

Incorporate mobile activities and mini-lessons into traditional instructor-led classes. You can push a short module or challenge to their smartphones and tablets right there in the classroom. Use mobile learning activities to get the students engaged.

Carol L. Cohen

Thinking “mobile first” is an important mantra for anyone transitioning into the mobile realm from traditional eLearning design and delivery with its big screens, persistent Internet connections, and the ubiquity of Flash-based content. The constrained size of the canvas in mobile forces everyone to prioritize what’s important to display, and often eliminates many of the bells and whistles tossed into typical course constructs that are not only distracting but time-consuming and expensive to produce. The axiom of embracing simplicity goes a long way towards designing, creating, and delivering effective mobile-friendly deliverables and, not surprisingly, these same deliverables work just as well for online eLearning audiences as well.

Robert Gadd

Seventeen Tips on Design and Content

Mobile learning that's weak or poorly designed drives people away from this burgeoning learning opportunity; keeping in mind how mobile devices are actually used can be the difference between success and failure. Incorporating these tips can help your project make the most of mobile.

Mobile learning is all about context: where the learner is located and what they are trying to do at the point of learning. Start any content design, app development, or lesson plan from where the learners are and what their needs are—and don't be trapped into a non-mobile lesson structure.

Geoff Stead

We have all heard some version of this statistic: "More people will access the Internet from their mobile device than their desk or laptop by the year 20XX." Design thinking is maturing in its recognition that at some time in the near future, the majority of general-use computing will be through some kind of mobile device.

There is a fundamental shift occurring, predicated on real-world observations of how people actually use their mobile devices. Designers are no longer making assumptions about what someone might want to view on their device vs. their desk or laptop, and instead are thinking about designing single-source content for any device. For example, when someone wants to learn something about a historic landmark, and they look it up on their smartphone, they expect to get all the information that would exist if they were to do the same search on a laptop.

As such, the focus shifts from designing strictly around the context and assumed-use case towards designing essential content for any device and then formatting that content for optimal consumption based on the specific device being used. This is an empowering idea, because it requires designers and writers to think twice about where the essential value exists within their content, based on their objectives. Don't use a paragraph when a sentence will do, and don't make me jump through any hoops to access the information I want. This goes for interface controls, verbose content, lack of user control, and, by the way, I expect this on my smartphone, tablet, and laptop.

John Low

Always consider the bigger program, the larger curriculum. Mobile learning modules can supplement a more formal training program. Make mobile one element of a blended learning approach.

Carol L. Cohen

If you are investing in mobile media, apps, content, or tools, make sure they don't lock you in to one system or device. Mobile standards have been slow on the uptake, but look to the mobile browser for guidelines. Create text and info as HTML, audio as MP3, video as MP4, and eBooks as ePub. Make sure they are still useful in three years' time, when people are replacing their current devices.

Geoff Stead

In many ways, the natural user interface (NUI) removes barriers to computing. These barriers can be physical, in the form of needing to click x number of controls to get a desired result, and they can be cognitive, such as interpreting the functions of an interface to get the result one wants. The NUI, at its best, is good design, and embodies Steve Krug's phrase "don't make me think."

Like earlier interface models such as the command line, followed by the graphical user interface (GUI), the NUI introduces a new paradigm for interaction. In this case, we are moving from a user position of "how do I do it?" to one of "touch it, talk to it, explore it, make things with it." This leads to the concept of the invisible interface and requires deep thinking about what you want someone to be able to accomplish, and in turn how to enable that in an intuitive "natural" way. This typically involves direct manipulation of content instead of an interface control, and takes advantage of gesture patterns such as swipes, pinches, and flicks.

John Low

It's still about the content. We often focus so much on the technology that we neglect the objective of the training. What are we trying to teach here? We need to refine our content first, and then shape it for the delivery method. This is true with any training. I am constantly amazed at how much content people want to cram into one course. Just say no to the fire hose.

Jeff Tillett

Think bite-size content. Mobile content needs to match how people use their mobile devices. People tend to use their phones in short little bursts. They jump on their phone and check messages, post something on social media, and then put it back in their pocket. The screen is small and hard to read for longer periods. We need to be crisp on objectives that need quick accessibility. If you are building content for access via a phone, you should not deliver a 60-minute eLearning module. How about a short YouTube-style video instead?

Jeff Tillett

The concept of scaffolding is important when introducing a natural user interface. Scaffolding is the application of affordances within the digital environment that hint at the way a user will interact with the content. For example, a subtle animation of a page corner lifting up slightly, thus revealing the promise of additional content that the user can

swipe to. There is an inherent “learn by doing” aspect to the use of scaffolding. In this way, we can use scaffolding to selectively guide user interaction with simple sequential hints that demonstrate the features and functionality available within the environment.

John Low

Content creation across a range of devices is both possible and easy if approached correctly. Despite the claims of many, content creation for mobile learning can actually be straightforward and economical if the right tools and methods are applied. For example, video-based content actually plays well across the full range of mobile devices from older handsets to today’s most sophisticated tablets and eBook readers. True, one size or format does not fit all, but there are a variety of commercial and open-source ways to “transcode” existing video files into a variety of device-specific deliverables that you can then deliver to mobile learners to give them the best possible experience for their chosen device.

Beyond video, HTML content wrapped in responsive web-design templates can easily recast itself to present well across most modern mobile web browsers. Similarly, one ePub document can look great and flow well across handsets, tablets, and online browsers without worrying about making different versions for different audiences and use cases.

Robert Gadd

The NUI is not new. Remember the Clapper? (For those under 30, the Clapper was a device that turned the lights on or off at the sound of a handclap.) The NUI gives us new ways to interact with information, but will not necessarily replace others. Sometimes you need just a button.

John Low

To deliver personalized learning, you must create and manage content as small individual nuggets that you can assemble for different purposes. With personalization, the goal is to provide the most appropriate path to competency. To do that, the users (instructors or learners) need to be able to pick from a variety of educational resources and select the best content to meet their needs. Today, we’ve moved from a course-centric model, where completion and scores are used to measure competency, to discreet skill acquisition, where each user is guided to proficiency in their own way, with their own mix of content

Dawn Poulos

It’s important to recognize that the NUI presents both opportunities and constraints. For example, having to input extensive data via a touch screen can be frustrating, as anyone who has typed on an iPhone can attest. Until voice input becomes more accurate, this will certainly be the province of the physical keyboard. Sophisticated manipulation, such as modeling a three-dimensional object, can also be tricky, often requiring users to learn and apply complex gestures. On the flip side, when NUI principles are

applied well, digital environments and assets are more easily accessed and interacted with, essentially extending our own biological neural capacity by taking into account mobility, accessibility, the physical context in which we exist, and our own human attraction to things that are “fun.”

John Low

Adding metadata to the granular content you create allows matching that content directly to individual user needs. It is flexible, and you can set almost any attribute, such as skill, job role, product line, location, and learning preferences, to meet your business requirements. Metadata is critical as it allows your learning systems and applications to personalize content by either delivering or suggesting the best resources for an individual user.

Dawn Poulos

Capitalize on familiar design patterns. The human interface guidelines (HIG), developed for iOS and Android, are required reading for any interaction or user-interface designer. While not specifically tied to the underlying concepts of natural user interface design, adhering to these principles will give you a good headstart on developing structure and content for devices that increasingly rely on NUI design principles (i.e., touch).

John Low

With the move towards personalization, the LMS, with its course-specific model, will take its place for certain types of training, mostly compliance, but it will no longer be the learning hub that it is today. Learners want to consume and retrieve information for work the same way they do in their everyday lives. This requires training organizations to fundamentally rethink how they deliver content and services to their learners. It means freeing their learning content from the LMS, storing it in the cloud, and delivering sets of personalized content services on a skill-by-skill basis that matches user needs and preferences to the learning resources available.

Dawn Poulos

Use rapid-development tools to capture subject matter expertise. Enable SMEs to quickly and easily record their words of wisdom and leverage it in larger learning programs.

Carol L. Cohen

Open formats like XML allow you to separate content from presentation to make content portable across platforms and accessible to any user on any device without re-authoring. Today’s modern technologies are aware of how users are accessing content and can deliver the most proper rendition for the device being used, so your content needs to be ready.

Dawn Poulos

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Thirteen Tips on Tech, Techies, and You

The technology is changing every day. The IT and programming staff, maybe not so much. It can be a struggle to deal with them sometimes, but when approached carefully, they can be your closest allies in setting up an mLearning project. Our experts will help you to sort through what you can do with mLearning, what you need to do it, and how to play nice with your company's tech experts.

Use video for mobile devices. These days, it's so easy to find a recording device and editing tools for using video. If it weren't, YouTube wouldn't be so popular. Most audiences will forgive you for sub-par footage as long as you are teaching them something and the video quality isn't totally terrible. If giving dictation, the audio might be even more important than the video quality. Obviously, try to get the best footage you can, but surprisingly good quality can be captured by most modern smartphones and consumer video cameras, and even by still and SLR cameras that have video functions.

Joe Saturnino

Spread your bets. Many, many mLearning projects have struggled with a supplier. If possible, go with equipment that is as generic (easy to replace) as possible, and use as wide a range of apps, content, and tools as you can. Students don't mind a mix, and that way if one piece fails, the others can still work.

Geoff Stead

Good programmers will really shine when doing mobile development. The constraints are tighter, and they will show how good their code really is when it runs that much faster.

Ben Classen

Partner early with your IT organization on any mLearning efforts. Mobile technology is changing much more quickly than desktop technology, and IT will need time to understand, prepare for, and be able to manage a system that will support a vast array of mobile devices.

Scott Patterson

Use audio for mobile devices. How many of your employees commute more than 30 minutes a day or travel often? Chances are a number do. Why not capture their attention away from work by creating podcasts they can download to their smartphones, tablets, or laptops? It's easy to capture decent audio using a good USB computer microphone or external handheld sound recorder. Many handheld models take SD cards that you can plug into your computer to download the recorded file. Editing is easy with tools like Audacity (free), and uploading to your intranet, LMS, or website is easy—usually just a matter of moving files as you would on your company's computer network.

Joe Saturnino

Just because the modules are short and on a small screen does not mean that metrics don't matter. Establish a feedback mechanism for the training developers. You can track some amazing things. This enables your mobile learning to quickly evolve.

Carol L. Cohen

Cache your app data from the start. Not everyone has unlimited data. It's hard to come back later and add caching.

Ben Classen

You need to think differently about tablets vs. smartphones. Tablets are a bit different; people tend to stay on their device longer. The screen size is much better for presenting more information, and they can use the device to access courseware. We interact differently, by gesturing, so things like mouseovers will not work. This may be the place to have a simple game or some other interactive piece.

Jeff Tillett

If you are serious about building content for mobile devices, you should consider brushing up on HTML5. The main components of HTML5 are JavaScript, cascading style sheets (CSS), and the core HTML syntax. All work together to deliver content that works well across laptops, desktops, smartphones, and tablets. HTML5 also contains a set of other standards and technologies working in tandem. HTML contains the structure and content of your documents. You use CSS to style your documents by creating style sheets that you can share across multiple HTML files; these can be anything from page layouts to the colors and sizes of fonts used in your HTML documents. You use JavaScript to add interactivity and function to your site. Of the main core components of HTML5, JavaScript is probably the hardest to learn. However, those familiar with Adobe Flash ActionScript will find much of the syntax and structure familiar, since ActionScript is based on JavaScript. HTML and CSS are not difficult to pick up for the average instructional designer, and the Web is full of great resources and communities.

Joe Saturnino

Don't forget about PDFs. Sometimes when we focus on building training for mobile devices, we over-complicate the issue. Instead of building a custom app for Android or iOS, you may want to consider creating a simple PDF. Most smartphones, tablets, and computers can read PDF files. These can be fairly small, and deploying PDF files is as easy as sending an email with a PDF or putting the file on a network drive or website. Use this great option for job aids or other performance-support materials for employees who are on the go.

Joe Saturnino

When content is in the cloud, it is fully accessible to anyone, anywhere, on any device. Personalization means there will be specialized learning applications tailored to specific audiences (e.g., sales professionals vs. restaurant employees). The cloud provides a way of accessing content and making it reachable by these ranges of applications. Moreover, the cloud is a two-way street; it facilitates further personalization by allowing social comments and ratings by users to drive continuous content improvement, and detailed analytics will allow you to understand the usefulness of content.

Dawn Poulos

Don't forget about accessibility. People have varied requirements for communication and we have drifted away from the old days of compliance. Be conscious of alternative ways to meet visual and audio needs.

Carol L. Cohen

Developing for iPad? Consider Apple iBooks Author. iBooks Author is a free application for Macintosh computers that allows you to create electronic books (or iBooks) that contain video, audio, Apple Keynote presentations, and HTML5 content. If you are already a Mac user and have used Keynote, Pages, or Numbers for the Mac, the interface will seem very familiar to you. Once you have created your masterpiece, you are allowed to distribute your books freely by any means you see fit (email, LMS, corporate network, website, etc.) as long as you are not charging a fee for the book. If you would like to charge a fee for your book, you have to sell it in the Apple iBooks store, which is part of the Apps Store for iPad.

Joe Saturnino

Eight Tips on Trial and Error

Those who don't learn from history are bound to repeat it ... but first you need some history to learn from. Pilot programs are your friend; let our tipsters set some guidelines for this necessary step.

Nothing works perfectly the first time. But projects DO work quite a bit better the second time. And even better the third. Plan iteration time into your project; don't spend the entire duration building the perfect solution. Rather, start with an imperfect solution, and use that to help refine a better one.

Geoff Stead

Run a pilot. It will build organizational knowledge and readiness about what your mobile-learning platform can be and what mLearning can do. At the end of the pilot, you'll be surprised how much you didn't know at the beginning, including how quickly mobile platforms and technologies are changing.

Scott Patterson

Pilot programs can help identify pain points in a project before it really kicks off. It also gives users a chance to play with an idea before committing to it.

Ben Classen

He who opens the file wins. In other words, you must experience the tool and test your modules. Try mobile learning out for yourself. Don't assume that if the class was good in a traditional eLearning format, it will have the same effect updated or ported to a mobile device. Get a smartphone and take some mobile learning. Think about what you liked and what you found daunting.

Carol L. Cohen

To run a successful pilot, you will need to coordinate with one or two carefully selected vendors.

Scott Patterson

Don't forget about testing; you can't do it in production. Have a test plan in place and figure out how to know when the app is ready to promote.

Ben Classen

A pilot program will help you understand what systems and operations you'll need to make your mLearning program technically successful, and will help you identify change-management needs.

Scott Patterson

Start with low-hanging fruit; keep it simple and pilot it. If this is your first mobile-learning venture, don't jump in, spend tons of money, and build a complicated game or app. For most companies, mobile is a game changer, and you need to build a good strategy. Start out by including some supportive content as part of a blended learning program. For example, it is great as reinforcement to an eLearning program. After the learners complete a course, they will then receive a simple SMS message reminding them of something that was included in the training tip of the week. It is also helpful to pilot first. Pick a small group, experiment with different ideas, and gather feedback. These people can also help champion mLearning in your organization.

Jeff Tillett

Nine Tips on Attracting and Retaining Your Audience

Your program is ready to go live. But will your audience be there? Our experts offer advice on attracting your learners and holding their attention.

When starting an mLearning effort, identify or assign champions among your learning and development peers and among your expected users. Their enthusiasm and energy will facilitate broader mLearning adoption.

Scott Patterson

Creating user profiles is mandatory for personalization because profiles allow you to match user needs to relevant content. You set up profiles by criteria such as user preferences, history, and job roles, and then match to the content metadata. This allows filtering of massive volumes of content, and you only deliver relevant content to the learner. Think Amazon recommendations where they recommend content based on your browsing patterns, purchase history, and profile data submitted when you set up your account.

Dawn Poulos

It's not about creating an identical experience across platforms; it's about creating a similar and familiar experience.

Ben Classen

Often we develop a training module to push out required content. Think of mobile learning as pulling rather than pushing. Focus your mobile offerings on the point of need that generates the energy to pull, and not so much on what you want to push to the learner.

Carol L. Cohen

With phones, the interaction should be simple; try to keep it to one thumb and one eye. Don't overcomplicate the navigation and don't overrun the user with data to read.

Ben Classen

When designing and implementing mobile learning, think about the network bandwidth (Internet access) issues the user may face. If you have designed a mobile-learning solution that has intense graphics and requires an active Internet connection to work, it can negatively impact the learner experience.

Carol L. Cohen

Know how your audience will use the device you are targeting. For instance, people use mobile phones throughout the day, while they primarily use tablets in front of the television casually.

Ben Classen

Have fun and be creative. Mobile devices offer big opportunities to try new things. People will be more willing to engage if they are having fun. Everyone likes to have fun—well, most people, anyway. Take advantage of the features mobile devices offer, like the camera. Maybe you engage people by letting them be part of something; for example, having them take a photo and posting it on an internal social site. User-generated content is a huge opportunity with mobile.

Jeff Tillett

Make the most of the times mobile users have access to the Internet to download elements and sync with the server to get the latest content. Your mobile-learning solution should be able to store this information in the local cache of the device so the user can view the learning without an active Internet connection.

Carol L. Cohen