



The Importance of a K-12 Mobile Publishing Strategy

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Pegeen Wright Associates is an educational technology consulting firm for K–12 publishers and other organizations developing digital learning products. PWA offers K–12 digital product expertise—development, content, market research, and marketing/sales—to minimize risk in building solutions for today’s rapidly changing education market.

The K-12 education landscape has changed markedly in the past five years and the challenges presented to educational publishers are significant. Factors driving market changes include:

- The economic climate has had a dramatic impact on K-12 purchasing decisions. In pursuit of “potential” cost-savings, key adoption states and many districts have expanded the definition of basal curriculum materials to support or even demand digital delivery
- The Common Core State Standards (CCSS) have been developed and 45 states have adopted them
- New digitally delivered assessments are being developed to support state efforts in tracking student progress
- Mobile devices are gaining traction in K-12 schools, requiring publishers to deliver content in new and multiple formats
- The use of Open Education Resources (OER), free resources developed by organizations, teachers, or districts, is increasing, and
- Public and private organizations are collaborating on a variety of technical standards’ initiatives aimed at improving the discoverability and interoperability of digital learning resources and applications.

The Move to Mobile

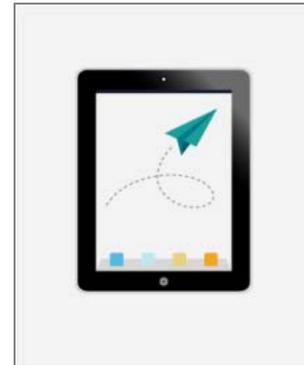
The Complete K-12 Report: Market Facts & Segment Analyses 2013 estimates the educational technology products market (excluding hardware) approached \$2 billion in annual sales for the 2011 calendar year.¹ According to results from *The National Survey on Mobile Technology for Education* (IESD & STEM, 2013), 59.6% of respondents (IT Directors, Media Directors, and CTOs) reported that mobile technology had been adopted in 25% or more schools in their districts. An additional 15% reported that their districts were *very likely* to adopt mobile

¹ *The Complete K-12 Report: Market Facts & Segment Analyses 2013* by Robert M. Resnick, Ph.D. and Glenn Sanislo, Education Market Research, page 61.



technology in the next 1-2 years.² The MDR 2012 *K-12 State of the Market Report* found that 67% of curriculum directors surveyed indicated that tablets were a “must have” component of the 21st century classroom. In the same report, 74% of districts surveyed indicated that an important factor influencing purchasing decisions of instructional materials is the availability of those materials in digital formats. Furthermore, 59% of curriculum directors in 2012 expect to replace print instructional materials with digital materials in the next 3 years.³

In the past two years, large scale adoptions of tablet devices have occurred in K-12 schools, impacting the way content providers develop and deliver instructional materials. Although Apple’s iPad® currently reigns supreme, a number of new tablets targeting K-12 schools have been released in 2013. There are indications that Android™ tablet devices are making serious inroads into the tablet market in general. A number of high profile Android tablets (e.g., Amplify, LearnPad, and KUNO) are directly targeting the K-12 market and are offering comprehensive solutions that purport to address iPad implementation and management challenges that some districts have reported.



Dozens of new mobile learning providers have already entered the market to take advantage of opportunities in digital publishing and content distribution. Also, traditional publishers have enhanced their digital curriculum development and delivery efforts to position themselves for this changing landscape. In the Education Week article, *‘Big Three’ Publishers Rethink K-12 Strategies*, Pearson, Houghton Mifflin Harcourt and McGraw Hill discuss their plans for digital product development, ranging from innovative digital-only creations to blended or hybrid learning models.⁴ These well-funded companies are acquiring and partnering with digital content providers and funding incubators that allow start-up education companies to create innovative products that can later be funneled into the publisher’s product lines. They are experimenting, piloting, and testing a range of digital learning content and platforms.

K-12 content providers cannot ignore the transformation to the digital classroom and must develop strategies for moving forward in this market.

² National Survey on Mobile Technology for Education (2013). Interactive Educational Systems Design, Inc. in collaboration with STEM Market Impact, LLC.

³ State of the Market Report, 2012. Market Data Retrieval.

⁴ “Big Three” Publishers Rethink K-12 Strategies, Education Week Digital Directions, February 6, 2013.



Developing a K-12 Mobile Publishing Strategy

How do mid-sized and regional publishers, start-ups and other organizations producing K-12 digital learning materials compete in a complex, digital marketplace, particularly against their larger, well-funded competitors?

Address Mobile Publishing Pain Points

Working with a range of K-12 organizations transitioning to digital product development, I have identified a number of pain points around creating, managing, and selling digital, and specifically, mobile learning products:

- Digital development is not one of our core competencies. We know how to develop instructional resources but how do we translate those skills into developing digital learning materials for PC or mobile devices?
- Isn't mobile technology development expensive?
- How can we move forward in this market when we don't have (and can't afford) extensive internal technical capabilities?
- We hear about a new tablet being released for the K-12 market every month. How do we determine which devices to support and how do we maintain and upgrade our products to work with the latest devices?
- How can we compete with the well-funded publishers? They've built out systems that cost multiple millions of dollars.
- What are the mechanisms for selling our mobile learning resources to K-12 schools?
- How do we handle licensing and digital rights management?
- How do we support mobile devices but also support the current, much larger installation of PCs now found in K-12 schools?
- Schools require reports on student progress; can we afford to build this type of learning management system?

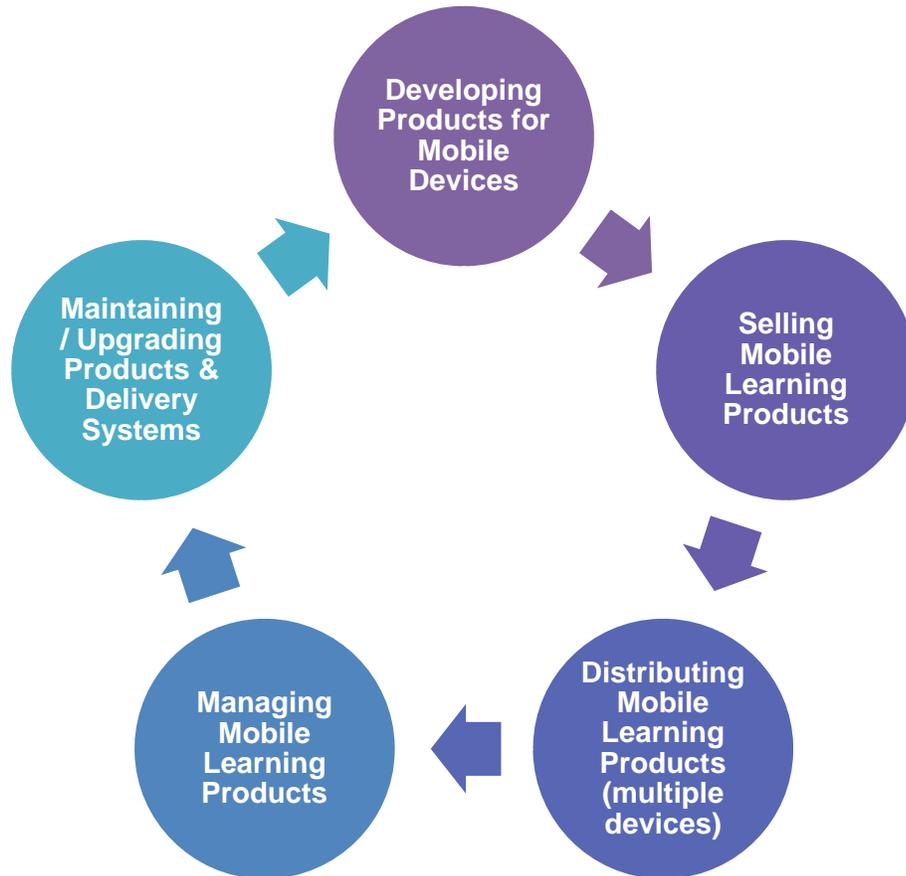


If any of these questions sound familiar, it's time to develop a coherent mobile publishing strategy that addresses these questions and meets the challenges of this complex market.



Develop an End-to-End Strategy

The challenge in moving forward in the K-12 digital education market is to **develop a cohesive end-to-end mobile publishing strategy**. This strategy will be critical to your success in the K-12 market moving forward. A Mobile publishing strategy starts with product development decisions but must also include distribution, marketing and sales decisions.



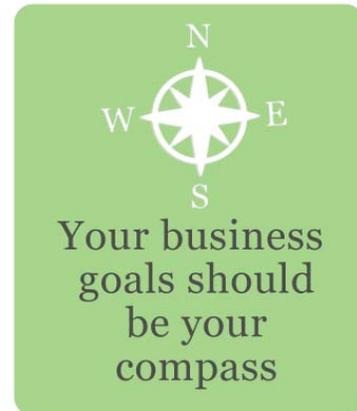
The delivery infrastructure must be extensible to evolve with rapidly changing business requirements. There are many ways to proceed that vary in risk and required resources. As a content provider, you are likely facing a “buy vs. build” decision. Analyzing the options and understanding the benefits and risks of each approach is crucial.



Start with Business Goals

In evaluating their mobile learning options, many K-12 organizations start with concerns over which technologies they should use, which devices they should support, and whether to “build or buy” the distribution system. In order to address a lack of internal technical expertise and reduce business risk, many organizations consider outsourcing or licensing their mobile distribution systems. Your business goals should drive your technology choices and not the reverse. Below are some strategic questions to ask to support decisions regarding your development and distribution strategy.

Begin by understanding your target audience (K-12 students, teachers, administrators, etc.) and their current technology infrastructure. Similar to the process you use when developing your print materials, define the problem you are trying to solve (i.e., the teaching, learning or administrative challenge) and keep that in mind as you build your mobile learning product requirements.



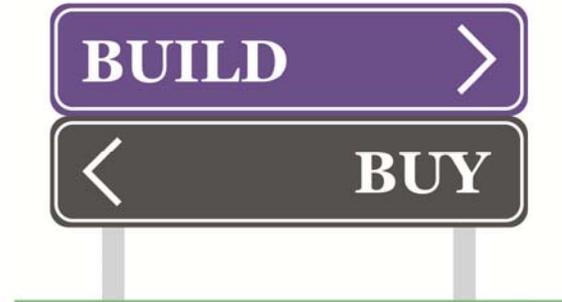


IDENTIFYING YOUR BUSINESS GOALS	
Product Development	<ul style="list-style-type: none"> • Do we need to create a breakthrough product using the specific functionality of a single device? Or, do we want to reach as many customers as possible by creating a product that will work across multiple devices? • Can we produce content in a manner that will facilitate our move to mobile? • Can we move our library of print books and readers (and other legacy content) to a digital format with enhancements? • How do we differentiate our mobile learning products? • Can we support customers with spotty internet services by developing a product where users do not have to be online to participate? • How do we go mobile while still supporting districts with a base of personal computers?
Sales	<ul style="list-style-type: none"> • How do we find or create an online storefront with all its moving parts and pieces? • Do we have the skills and expertise to develop and maintain the store or is it possible to license something that's already been developed – such as a “private label” or branded storefront? • What are the advantages of creating or finding a storefront that we can private label over selling in the existing device app stores in terms of our margin? • Can we develop or find a storefront that truly caters to K-12 schools – how they purchase and how they implement mobile apps? • Can we reach the home market with our online store and possibly open new channels for revenue?
Distribution	<ul style="list-style-type: none"> • How can we distribute our mobile learning products to the multiple devices schools are using (e.g., iPad/iOS, Android and Windows™ tablets, desktop computers)? • How do we protect our intellectual property (digital rights management) and also control the licensing to K-12 schools? How do we manage licenses based on the number of users, devices and/or term of license and how do we make sure our content is secure? • What will be involved in maintaining the distribution platform given ongoing upgrades to the various devices and changes in school's licensing needs? <div style="text-align: right;">  </div>
Product Management	<ul style="list-style-type: none"> • How do we find or build a system that allows our staff to manage our digital products? • How will our product managers push out new digital products, set or change pricing and licensing terms, remove products we no longer want to sell, and determine which products to promote? • Will the system allow my customer service team to manage customers, set up districts or school's within the system, and track product usage? • How can we provide strong customer and technical support for what seems like a pretty complex system?
Maintenance & Upgrades	<ul style="list-style-type: none"> • We know how quickly technology changes. How do we anticipate and deal with changes in operating systems and new devices? • Can we build a product that anticipates the need to add social media and allows us to upgrade to these and other features in the future?



Mobile Content Distribution: Buy vs. Build

Participating in the digital education economy is complicated. Some of the activities are familiar. For example, traditional publishers of all sizes have a close connection to administrators, teachers and students and understand their challenges and the problems they need to solve. On the other hand, many of the logistical issues around mobile product development, sales, distribution, and support are complex and outside many organizations' core competencies. To make matters worse, the rate of change is dramatic and it's difficult to stay on top of these issues without experienced technical staff.



As a result, small to mid-size publishers, start-ups and non-profit organizations delivering mobile content to preK-12 schools often face the buy or license versus build dilemma. How do you find or create the technology infrastructure and platform to implement your digital strategy? Should you license a commercial application or platform that will meet 75-90 percent of your needs, or would it be better to build your own platform, one that will be designed specifically to support your requirements? Is it possible to get the best of both worlds?

I've worked with clients who have traveled both paths and would like to share some observations I've made during different software implementations. The following table highlights issues critical to a buy (or license) vs. build decision.

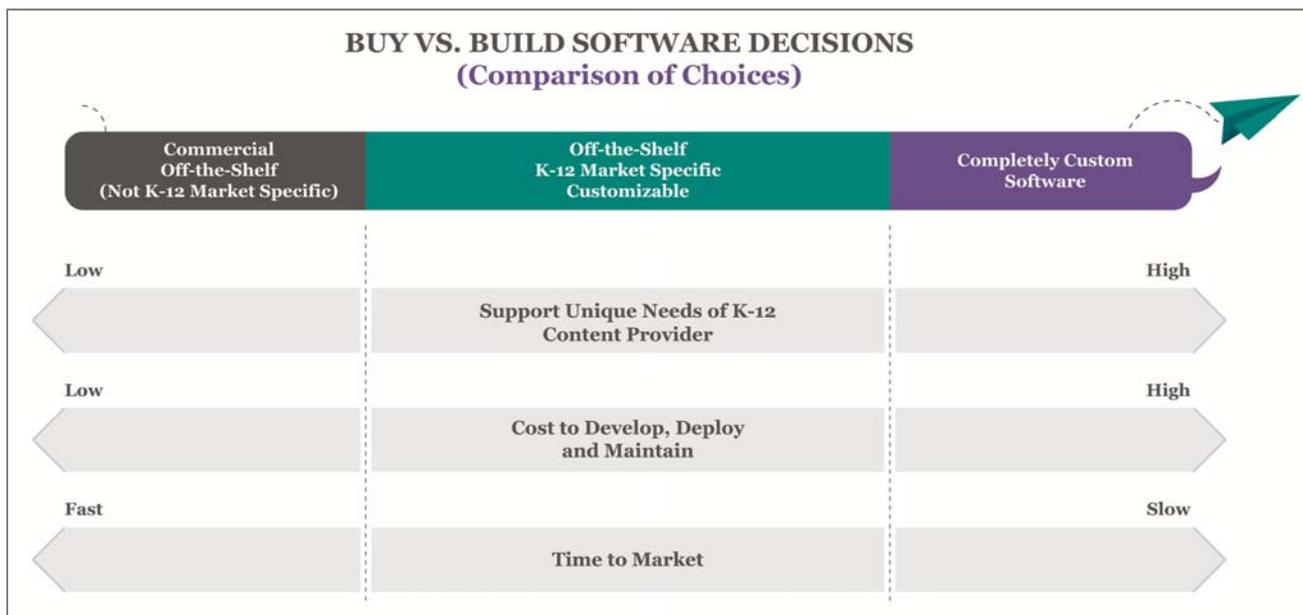
Criteria	Build	Buy/License
Support for your unique needs	Custom built to support your specific needs	Can often meet the majority of your needs out of the box; additional customization is available
Cost	Cost to design, develop, test, deploy, maintain, and train is high	Costs to deploy and maintain can be significantly lower
Time to market	Usually takes a year or more to develop	Relatively fast deployment since core product is mature and tested
Technology and obsolescence risk	Borne by publisher	Borne by vendor
Reliability of system	Usually known after market release	Lower risk as product will usually have an installed customer base
Maintenance and support	High investment required	Relatively lower investment



Publishers and other digital content providers should look at both options closely when making a decision. However, many small to mid-size organizations pursue the buy or license option as it requires fewer resources, carries fewer risks and, in some cases, is the only way they can participate in the digital marketplace.

When looking at the Buy option, publishers should consider the following:

1. What is the background and track record of the vendor?
2. Is the application designed specifically for the K-12 market or is it a consumer solution that we will need to customize (i.e., spend more \$) to support K-12 market needs?
3. How flexible is the application? Can it be configured to support our company's unique needs? Is it extensible so that we can add functionality as our business grows or as the market dictates?
4. Can the vendor support the software beyond the initial implementation? This would include help-desk, updates, bug fixes, on-going customizations, and future implementations.



Achieving your business goals in a cost effective manner with reduced risk is imperative in this complex, competitive market. Building out your own systems may be costly and fraught with risk, particularly for smaller K-12 content providers without an experienced, internal technical team. A buy or license decision may make sense for competing in the current K-12 market. The key to success here is identifying a reputable vendor who can provide a mature, configurable platform. This can reduce your risk, provide a competitive advantage, and allow you to focus on what you do best – develop market-leading learning materials.

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