
RESEARCH NOTE

DATE: January 16, 2014
TO: Catalyst Investors
FROM: Eric Steele, Mia Ficerai
SUBJECT: **E-Learning Market Map**

MARKET OVERVIEW

e-Learning refers to the use of electronic media and information/communication technologies in education. Broadly inclusive of all forms of educational technology in learning and teaching, e-Learning affects the entire education sector and enhances methods of creating, storing and distributing learning content. The audience for e-Learning includes: consumers (early childhood, adult), institutions (K-12, higher education) and corporations (corporate training).

MARKET OPPORTUNITY

- Global e-Learning expenditures projected to grow at a CAGR of 23% from \$91 billion to \$256 billion from 2012P-2017P
 - K-12 CAGR: 33%
 - Higher Education CAGR: 25%
 - Corporate CAGR: 8%

MARKET TRENDS

We organized the market trends into four main sectors (Content, Management Systems, Distribution, Administrative/BPO Solutions) to align with the e-Learning market map.

Content

- Ongoing development of regulatory and curriculum standards
 - Government initiatives will act as catalysts to encourage mass adoption of e-Learning
 - Common Core movement poses challenges
 - 45 states and D.C. have adopted the Common Core standards
- Increasing levels of personalization
 - Textbooks being replaced by interactive learning programs that link to the progress of individual student as well as to reference data collected from other students
- Content no longer standalone material
 - Supplementary social content, learning experiences and peer-to-peer help form a network of users within the educational ecosystem serve as content inputs from users

Management Systems

- “Big Data” analytics required to enhance efficiency and create adaptive learning environments
 - Learning path for a user within an LMS can be personalized based on data collected from a network of other learning experiences

- Privacy concerns regarding dissemination of student data to education vendors
- Adoption of blended learning solutions
 - Formal content and instruction delivered partially online and partially face-to-face
 - European study revealed that 76% of corporate users preferred this method and planned to increase usage
 - “Flipped” classrooms inverting traditional teaching methods, delivering instruction online outside of class and moving “homework” into the classroom

Distribution

- Shift from “top-down” to “bottoms-up” technology adoption
 - Historically, technology adopted and diffused via bureaucratic “top-down” model (i.e., administrative mandate selected technology to introduce)
 - Students’ and teachers’ technological capabilities far outpace what is mandated
- Biggest challenge to ed-tech procurement is infrastructure (e.g., Internet access, technology)
 - ~85% of US classroom training expenditures is spent delivering it
- Digitization of existing content and creation of next generation interactive content
 - Adoption of “digital first” offerings and tablets
 - Significant m-Education growth and app downloads
 - Clearinghouses for educational apps are emerging
 - “Bring Your Own Device” (BYOD) learning
 - ~20% of schools allow BYOD
 - Print textbooks will remain until there are enough resources for 1:1 devices

Administrative/BPO Solutions

- Schools outsourcing non-core functions
- Focus on quality over quantity of lead generation
 - Increasing importance of compliance and full transparency
 - Data-driven marketing and intensive CRM tools empowering schools to better seek out the “right” students (i.e., proper mix of affluence, academic capacity and behavioral/ethnic diversity)
- Innovation in education marketing to adapt to changing technology and consumer behaviors
 - Focus on mobile advertising and “post-click” experience, including mobile usability
 - Adoption of video expected to continue as production costs/difficulty continue to drop

INVESTMENT THEMES

Authoring Tools: Within the Content sector, Authoring Tools are software solutions that allow non-programmers (i.e., teachers) to create and package e-Learning content. The subsector is of interest to Catalyst given the rapid innovation and expansion of platform capabilities (e.g., multilingual courses, LMS synchronization, avatars/animated characters/scenario backgrounds, HTML5 output). We recently met **Collaborative Learning**, a provider of software that enables K-12 schools to plan, monitor and analyze instruction and curriculum with benchmarks based on Common Core standards. Given that states are allocating billions of dollars to train teachers and administrators on Common Core implementation, we see an opportunity for Catalyst to capitalize on this emerging market. Other interesting companies within the Authoring Tools subsector include **Inkling** and **DominKnow**.

Assessment/Analytics: Educational Assessment/Analytics solutions present another opportunity for Catalyst due to the recent focus on learning outcomes for e-Learning end-users. With the emergence of “Big Data” in education, analytics solutions enable the collection, analysis and use of data patterns to

optimize conditions for improving learning. For example, **BrightBytes** provides a SaaS-based data analytics platform that measures and links technology use in education to learning outcomes. The subsector is particularly attractive to Catalyst in terms of growth and maturity given its early stage in the e-Learning consolidation curve and the lack of clear winner in the space. Other interesting companies within the Assessment/Analytics subsector include **MyKnowledgeMap** and **Learnmetrics**.

m-Education: m-Education has become an increasingly important sector for distributed learning, and the market is expected to continue to grow at a CAGR of 30.8% (2011A-2020P). As designers and instructors shift focus to “mobile first” in e-Learning development and teachers/employers increasingly adopt BYOD, the m-Education subsector is an interesting opportunity for Catalyst. Within m-Education distribution, we are particularly interested in Mobile Assisted Language Learning (MALL), which supports language learning with increased mobile technology and enables students to communicate with teachers and peers anytime, anywhere. For example, **Babbel** offers a comprehensive language learning system that utilizes interactive education methods via multiple channels (online and mobile). Other interesting companies within the m-Education subsector include **Playrific** and **Myngle**.