The 2011-2016 Worldwide Game-based Learning Market: All Roads Lead to Mobile

Key Findings from Recent Ambient Insight Research

Serious Play 2012

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Ambient Insight
Agenda

- Introductions - Research Taxonomy
- Worldwide Game-based Learning Revenues
- Global Trends
- Private Investment Patterns
- Edugame Business Models
- All Roads Lead to Mobile
Introductions

Ambient Insight is an integrity-based market research firm that uses predictive analytics to identify revenue opportunities for suppliers.

- Ambient Insight founded in 2004 by Microsoft Training and Certification veterans that built the Microsoft Online Institute (MOLI)
- International “boutique” analysis firm specializing in quantitative analysis, learning technology forecasts, M&A analysis, and competitive intelligence
- Ambient Insight tracks learning technology buying behavior across the planet. We have buying behavior profiles for 82 countries
- Ambient Insight...
  - Does not evaluate, compare, or rank the effectiveness of learning technology products
  - **Does not endorse or promote companies or products**
Ambient Insight’s Learning Technology Research Taxonomy

Seven International Regions
- North America
- South America
- Western Europe
- Eastern Europe
- Asia
- Africa
- The Middle East

Have Eight Buyer Segments
- Consumer
- PreK-12
- Higher Education
- Corporations - Businesses
- Federal Government
- State - Local Government
- Associations & Non-Profits
- Healthcare

That Buy Eight Types of Digital Learning Products
- Self-paced eLearning Courseware
- Digital Video, Text, & Audio Reference
- Collaboration-based Learning
- Social Learning
- Simulation-based Learning
- Game-based Learning
- Cognitive Learning
- Mobile Learning

From Six Types of Suppliers
- Packaged Content
- Custom Content
- Software as a Service (SaaS)
- Value Added Services
- Installed Tools & Technology
- Learning Devices

These six supplier types map directly to the six subcategories of learning technology products
Worldwide Game-based Learning Revenue Forecasts
Key Research Findings: 2011-2016
Worldwide Game-based Learning Market

The Worldwide Game-based Learning market reached $1.2 billion in 2011. The global growth rate is 15.4% and revenues will more than double to $2.5 billion by 2015.

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<td>North America</td>
<td>$286.73</td>
<td>$514.83</td>
<td>12.4%</td>
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<td>Latin America</td>
<td>$21.51</td>
<td>$77.22</td>
<td>29.1%</td>
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<td>Western Europe</td>
<td>$83.15</td>
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<td>Eastern Europe</td>
<td>$11.47</td>
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<td>Asia</td>
<td>$813.18</td>
<td>$1,723.20</td>
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<td>The Middle East</td>
<td>$2.87</td>
<td>$6.18</td>
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<td>Africa</td>
<td>$10.04</td>
<td>$25.74</td>
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<td><strong>Total</strong></td>
<td><strong>$1,228.95</strong></td>
<td><strong>$2,519.64</strong></td>
<td><strong>15.4%</strong></td>
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2011-2016 Worldwide Game-based Learning
Five-year Growth Rates by Region

2011-2016 Growth Rates by Region

- North America: 12%
- Latin America: 28%
- Western Europe: 8%
- Eastern Europe: 24%
- Asia: 16%
- Middle East: 8%
- Africa: 20%
Buying Behavior is Different in Each Country

- Latin America has the highest growth rate in the world at 29.1%, followed by Eastern Europe and Africa at 25.7% and 20.7%, respectively

- Edugame revenues are heavily concentrated in China, South Korea, the US, and Japan
  - In 2011, China was the top edugame buying country in the world, followed by Korea, the US, and Japan.
  - By 2016, the top buying country will still be China (by far), although the US will displace South Korea for second place.

- Until very recently, China uses to import most of their edugames from South Korea. Now China is a major production hub.

- The use of “shooter” gameplay is unpopular in Japan in general and in all PreK-3 segments
Buying Behavior is Different in Each Country

- The telecoms are major distributors in Asia, Latin America, and Africa
  - The telecoms sell web-based learning platforms to schools and Mobile Learning VAS subscriptions to consumers
    - China has over 200 million online gamers – growing by 28% a year
    - Telecoms have content deals with edugame suppliers to "bundle" the content in their products
  - Revenues in Western Europe are concentrated in the Nordic and Benelux countries
  - Finland, the Netherlands, and Singapore are major hubs of Game-based Learning innovation
  - The Netherlands is unique. Game-based Learning is common across all the buying segments
Mobile edugames are already outselling non-mobile (PC/web/console) edugames:

- Revenues for mobile edugames reached $163.3 million in 2011. The growth rate (CAGR) is 16.9% and revenues will reach $359.3 million by 2016.
- The growth rate for non-mobile edugames is a modest 4.9% and revenues will reach $155.5 million by 2016.

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<td>Mobile Edugames</td>
<td>$163.3</td>
<td>$359.3</td>
<td>16.9%</td>
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<tr>
<td>Non-mobile Edugames</td>
<td>$122.4</td>
<td>$155.5</td>
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<td>Total</td>
<td>$286.7</td>
<td>$514.8</td>
<td>12.4%</td>
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Buying Behavior is Different in Each Buyer Segment

- Consumers gravitate to edugames for young children and language learning games.
- Game-based Learning is ubiquitous in the early grades but starts to taper out in the higher grades.
  - STEM edugames are the exception
  - Using “shooter” gameplay is not a good idea
- There are very few commercial edugames that target higher education
- The use of edugames in the corporate segment has always been problematic
- Federal agencies, particularly the military, are avid users of edugames
- Healthcare edugames are usually designed for patient education, disease prevention, and behavior modification
Worldwide Game-based Learning Market Trends
Trends in the Worldwide Game-based Learning Market

- “Gamification” in the lexicon – debate, hype, and reality
- Big Guns and console makers getting on board
- Mobile-Local-Social (MoLoSo) are the major features in demand
- Location-based edugames emerge
- Augmented reality edugames sputtering
- Brain fitness games still hot
- There has been a recent spike in private investment in Game-based Learning companies.
In late 2011 – University of Washington’s Foldit game. In 10 days 46,000 gamers solve molecular problem that eluded scientists for 15 years

http://fold.it/portal/
DragonBox Comes to America

- Math edugame more popular than Angry Birds in Norway
- Top selling game in Norway (of all games, not just educational)
- Over 10% of all iPad users downloaded the game in two weeks
- July 2012 – launched in 100 US schools
Game elements “bolted on” to legacy content, rapid authoring tools, and corporate training portals (Badgeville)

- In April 2012, Course Hero launched a series of online courses with game mechanics from the Bunchball platform.
  - On average, users spend three times more time on the gamified courses than on the Course Hero courses
  - In August 2012, Course Hero opened their “Gamified Course-Creation Tools” to the public

- July 2012, Oxford University Press adopts SecretBuilder’s game platform – 7 million users
Nintendo Wii has dozens of edugames and was the first to market with next-generation edugames

Microsoft’s Kinect now has Sesame Street and National Geographic games

June 2012 - Institute of Play, Electronic Arts, and Entertainment Software Association launch Glass Lab, “a new lab focused exclusively on making games for students across the US….available at little to no cost”
Valve launches free “Teach With Portals” Classroom Initiative in June 2012 – releases a rapid authoring tool called Puzzle Maker
November 2011, Sweden-based Mojang, creators of Minecraft (36 million users) partner with US and Finnish developers to launch MinecraftEdu. As of May 2012, 300 schools (half in the US), have purchased game licenses.
February 2012, Pearson launches gamified learning platform Alleyoop:

“Structured as a game with missions, Alleyoop is built around achievements and earning a virtual currency - Yoops. It's a learning environment that is empowering, relevant, and a game.”

“Pearson-Backed Startup Aims to Be the Zynga for Learning” (Mashable)

Private Investment Patterns
Leading Indicators: 2007 Through the First Half of 2012 Private Investments in Game-based Learning Companies (in $US Millions)
Lumos Labs is a developer of brain trainer and brain fitness games for older adults and garnered $32.5 million in venture capital in June 2011 - *the single highest investment ever made to an edugame supplier*.

Lumos Lab’s Lumosity Brain Trainer is the top grossing app in Canada and the second-highest grossing app in the US.
SCVNGR makes location-based learning games, mostly for higher education and museums, and garnered $27 million in funding (so far) in 2012.

HealthTap, is gamifying “communication in doctor-patient relationships” and got $11.5 million in December 2011.

DreamBox Learning targets the PreK-12 market and obtained $11 million in December 2011.

In August 2012, ClassDojo gets $1.6 million for their “gamified classroom management” platform - 3.5 million teachers and students globally are using the platform.

RallyOn obtained $1.5 million in June 2011 - “brings gaming to work...helps corporations engage employees in any behavior change.”
- Launched in 2010 – have sold over 4 million edugames
- MindSnacks obtained $6 million in August 2012 and makes game-based language learning apps for “people of all ages”
Edugame Business Models
So-called "freemium" is now becoming the prevalent business model for mobile applications with alternative methods used to generate revenue. Alternate revenue generating methods include:

- Sponsorships and advertising
- In-app purchases
- Subscription services
- Micropayments for virtual items
- Partnering with Personal Learning Device makers
- Partnering with the telecoms
- Upgrades to premium content (Be careful about “over-hobbling” free versions)
Sponsorships are viable business models for education games.

The math educational virtual site, Whyville has over 7.5 million kids on the site, mostly females from the US.

- They converted from a subscription model to a sponsorship model in 2008, and now claim they generate more revenues from the new model.

- Their sponsors include both commercial and non-profit organizations that display their logos, so it is very similar to advertising.
On average, 5-6 new Mobile Learning VAS products are launched every month. Most of them are sprouting up in developing economies. This has major implications for the Mobile Learning industry. *Suppliers in developing countries are now driving the innovation in Mobile Learning.*
Alternate Business Models in the Worldwide Game-based Learning Market

- Partner with the Personal Learning Device Makers
  - Personal learning devices are preloaded with educational content and are now a viable distribution channel for developers
  - The devices are quite popular with consumers and academic buyers in Asia and are now gaining traction across the planet.
  - New international and domestic device makers continue to enter the market with new products designed for young children and PreK-12 academic buyers.
  - Over 50 of these devices have been launched since 2010 – 12 in India alone
All Roads Lead to Mobile
Six Types of Mobile Edugames in Ambient Insight’s Research Taxonomy

- Ambient Insight forecasts revenues for six types of Mobile Edugames:
  - Knowledge-based games
    - Will generate the highest revenues by 2016
  - Skills-based games
  - Brain trainers and cognitive fitness games
    - The top selling mobile edugame type in 2011
  - Language learning games
  - *Location-based learning games emerged in 2009*
  - *Mobile augmented reality games emerged in 2010*
“The 2011 Content Trench” – Percent of Total Paid Mobile Learning Apps by Target Demographic

What’s on the Store Shelves?
Consumer-facing Paid Mobile Learning Content
Across All Major Application Stores, Platforms, and Devices

- Preschool: 26%
- Grades K-2: 4%
- Grades 3-5: 1%
- Grades 6-9: 3%
- Grades 10-12: 9%
- Higher Education: 13%
- Adult Professional: 12%
- Adult Consumer: 32%
"The 2011 Content Trench" – Percent of Total Paid Mobile Learning Apps by Target Demographic

What’s on the Store Shelves?
Consumer-facing Paid Mobile Learning Content
Across All Major Application Stores, Platforms, and Devices

The vast majority of PreK-2 Mobile Learning content is game-based.
When did Math Get Popular? (Ask a Four-year Old)

- October 2011 – Stickery’s preschool math game #1 in iPhone Education. Top in-app purchases.

- August 2012 - Broccol-e-games’ Maths with Springbird for 4-6 year olds, reaches 10,000 downloads in less than 1 week after launch - Currently #1 educational iPad app in Australia and New Zealand.
Q & A

Ambient Insight’s Free Resource Library at:

http://www.ambientinsight.com/News/PublishedContent.aspx

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