Parthenon Perspectives

Balancing Opportunity and Risk in North American K-12 Publishing

July 26, 2012
What Informs our Perspective?

Parthenon Perspectives on U.S. K-12 Market Trends

The Implications We See for Providers in the Space
What Informs Our Perspective?
The Parthenon Group has completed 400+ education assignments globally.

- Pre-Kindergarten
- K-12
- Career and Professional
- University
- Vocational and Other

Education Sector Projects Completed by Parthenon Teams
Parthenon Offices
What Informs Our Perspective?
Public and private sector work provides us with a strong sense of what is happening “on the front lines”

We advise a number of leading education institutions…

• Local educational authorities, states, and governments
• Charter schools, private K-12 schools, and other innovative education providers
• Global post-secondary institutions
• Foundations on the forefront of educational reform

…and work with the private companies trying to meet their needs

• Educational publishing
• Assessments
• Tutoring
• Intervention/Special Ed
• Technology providers
• Consumer education products
What Informs our Perspective?

Parthenon Perspectives on U.S. K-12 Market Trends

The Implications We See for Providers in the Space
U.S. Market Perspectives

Within K-12 education, content is considered more “discretionary” and has suffered accordingly.

Total U.S. Education Market, 2008


Note: Figures are from company financials where available; Simba estimates are used for competitors without relevant public data.

Source: U.S. Census Bureau; E-Learning Council; National Center for Education Statistics; BMO Capital Markets; Simba; Company Financials; Company Earnings Calls; Analyst Reports; Veronis Suhler Stevenson
U.S. Market Perspectives

NCLB’s spotlight on performance spurred spending on intervention and assessment – so, what is next?

Impact of No Child Left Behind on Instructional Materials Spending

1. Required assessment of student performance and imposed consequences

   Demand for intervention and assessment materials increased (assessment market grew at 7% CAGR from ‘05-’11)

2. Did not impose new requirements related to basal textbooks

   Basal spending has been mostly flat since 2000

Note: *Based on AAP respondents only, does not equal full market
Source: Association of American Publishers; Parthenon interviews
U.S. Market Perspectives
The sector is addressing challenges through innovative curriculum, pedagogy, and human capital

| Curriculum -  
WHAT is being taught | Pedagogy -  
HOW it is being taught | Human Capital -  
WHO is teaching |
|----------------------|----------------------|----------------------|
| • Common core standards and assessments  
• Balance of cognitive and non-cognitive skills acquisition | • Personalization / Next Generation Models  
• Adaptive assessments  
• Self-directed, competency-based models | • Measuring and making decisions on quality  
• Developing new roles and pathways  
• Personalization of professional development |

Advances in Technology
• Realization of potential for true differentiation at scale through online delivery and proliferation of devices  
• Leveraging the “I” in “IT” - potential rise of business intelligence

Changing Institutional Landscape – Increasing accountability and competition
• Performance management within K-12 systems  
• Post-secondary NCLB-like accountability  
• Rise of non-public competitors (for profit and charter schools)

Changing Federal Role – At least for now
• Competitive grant funds (RTTT, i3)  
• ESEA Reauthorization
### U.S. Market Perspectives

Nearly all successful products and services over the past few years adhere to four broad heuristics:

<table>
<thead>
<tr>
<th>1</th>
<th>Help Close the Performance Gap</th>
<th>The performance gap continues and is still front-and-center on Superintendent’s agendas</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Support Personalization</td>
<td>Personalization has always been a goal but digital solutions and adaptive technologies make it seem just within reach</td>
</tr>
<tr>
<td>3</td>
<td>Enhance Teaching and Administrative Workflows</td>
<td>Products and services that fit within, and enhance, established workflows succeed; those that fight them fail</td>
</tr>
<tr>
<td>4</td>
<td>Get Closer to the Point of Instruction</td>
<td>$50 to $150 of instructional materials expenditure vs. $7,000 to $12,000 of instructional expenditure</td>
</tr>
</tbody>
</table>
Help Close the Performance Gap
Serving the students receiving accountability scrutiny is a challenge for most districts

K-12 Variability in Student Performance (2009-10)

- **Advanced**: (demonstrate competency in required areas)
- **Proficient**: (partially mastery of required areas)
- **Basic**: (below standard; partially mastery of required areas)
- **Below Basic**: (below standard; unable to keep up with grade-level work)

National Assessment Est. (NAEP)
Help Close the Performance Gap
If Common Core has teeth, the “Performance Gap” will get a lot bigger!

State-National Proficiency Delta vs. % Change in Per Student Spending, FY08-FY12

- Low funding, High need
- Low funding, Low need
- High funding, High need
- High funding, Low need

Note: Proficiency delta is for 2008-2009 and is an average of deltas for 4th and 8th grade reading and mathematics proficiency; Source: NCES; Center on Budget and Policy Priorities; National Governors Association.
Support Personalization
Technology is putting “Personalization” within the grasp of educators…

<table>
<thead>
<tr>
<th>Increasing Complexity</th>
<th>Static</th>
<th>Interactive</th>
<th>Individualized</th>
<th>Personalized</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content</strong></td>
<td>• Static digital content (on screen book)</td>
<td>• Supplemental materials over reasonably static content</td>
<td>• Prescriptive options built into program that allow individualized pathways</td>
<td>• Content delivered according to students personal needs</td>
</tr>
<tr>
<td><strong>Assessments</strong></td>
<td>• End of chapter</td>
<td>• Instructor ability to modify/create tests</td>
<td>• Formative with ability to indicate groupings or pathway for instructor through content</td>
<td>• Fully adaptive assessments</td>
</tr>
<tr>
<td></td>
<td>• Digitized item banks</td>
<td></td>
<td>• “Authentic Evaluations”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Test prep</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Delivery/Device</strong></td>
<td>• PC in classroom on school network</td>
<td>• PC-based, accessible anywhere</td>
<td></td>
<td>• Multi-platform, wireless</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• One-to-one</td>
</tr>
</tbody>
</table>
Enhance Teaching and Administrative Workflows

Teaching and Administrative workflows dictate how well your products and services will be adopted.

Teaching Workflows

One of the largest workforces in the Country, who:

• Tend to work alone;
• Have established classroom rhythms; and are
• Change resistant – for good reasons

Administrative Workflows

Extreme budgetary and performance pressure grappling with:

• Rising standards and persistent performance gaps;
• Increasing statutory compliance complexity;
• Distributed workforce with high turn-over
• Highly politicized constituents (unions, parents, boards, politicians)

Do not fight these workflows – odds are, you do not know better!
Enhance Teaching and Administrative Workflows

Products and services in a digital world also need to fit within established workflow needs.

### Increasing Complexity

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#### Content
- Static
- Supplemental
- Prescriptive options
- Personalized

#### Assessments
- End of chapter
- Digitized item banks
- Test prep
- Instructor ability to modify/create tests
- Formative with ability to indicate groupings
- “Authentic Evaluations”
- Fully adaptive assessments

#### Delivery/Device
- PC in classroom on school network
- PC-based, accessible anywhere
- Multi-platform, wireless
- One-to-one

#### Teaching Workflows
- Basic Teacher Tools (grade book, calendar)
- Teacher ability to monitor, group and customize (student profiling and grouping, customization of content/assessment, content creation tools)
- Algorithmically drive recommendations for scope, sequence and personalization

#### Admin Workflows
- Data capture and transfer
- Administrative tools
- Business Intelligence
Get Closer to the Point of Instruction
Being at the point of instruction invites higher growth and higher margins

U.S. Commercial Education, 2010-2014F

Source: Company 10K’s; Simba; Outsell; Global Insight; Eduventures; NCES; Parthenon market research
Get Closer to the Point of Instruction
Innovative solutions are accelerating in the K-12 landscape – much as they did in post-secondary

Post-Secondary Online Enrollment, 2003-2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-04</td>
<td>0.5M</td>
</tr>
<tr>
<td>2006-07</td>
<td>1.0M</td>
</tr>
</tbody>
</table>

Online K-12 Public Enrollment, 2005-2008

<table>
<thead>
<tr>
<th>Year</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>0.7M</td>
</tr>
<tr>
<td>2008-09</td>
<td>1.6M</td>
</tr>
</tbody>
</table>

Online K-12 Course Provider Revenues, 2006-2011

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>11M</td>
</tr>
<tr>
<td>2011</td>
<td>31M</td>
</tr>
</tbody>
</table>

Note: K-12 Public Online enrollment includes students who are enrolled in both hybrid and fully virtual schools
Source: Education Public Interest, Eduventures and BMO Capital Markets; SRI International for the U.S. DOE
What Informs our Perspective?

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The Implications We See for Providers in the Space
Parthenon Perspectives: Impact on Industry
Ultimately, scale positions will matter, as only the strong will survive


Source: MIR; AAP; Outsell
Parthenon Perspectives: Impact on Deal Markets
Significant capital has been poured into instruction and services

U.S. Education Market Investment Activity:
Number of Deals (2005-2010)

143
Training and Professional Development
Testing and Assessment
Technology
Student Support Services
Publishing

159
Universities and Colleges
Vocational

46
Corporate Training

Total = 348

Source: Pitchbook, December 2010; Capital IQ Education Industry, December 2010; BMO Education Market Equity Report September 2008; Stifel Nicolas Postsecondary Education Factbook
Parthenon Perspectives: The Caveats

Sorting out winners and losers requires both an educational and business perspective

- Emerging markets are ill-defined and highly fragmented
- Product offerings are relatively undifferentiated (and sometimes downright difficult to understand)
- Few companies have a sales force of any real size
- District purchasing processes evolve slowly and sporadically

There will be winners and losers
About The Parthenon Group
The Parthenon Group is a leading advisory firm focused on strategy consulting with offices in Boston, London, Mumbai, San Francisco, and Shanghai. Since its inception in 1991, the firm has embraced a unique approach to strategic advisory services; long-term client relationships, a willingness to share risk with our clients, an entrepreneurial spirit, and customized insights are the hallmarks for which The Parthenon Group has become recognized in the industry. This unique approach has established the firm as the strategic advisor of choice for CEOs and business leaders of Global 1000 corporations, high-potential growth companies, private equity firms, educational institutions, and healthcare organizations.

Advisory Services for Investing in Education
The Parthenon Group advises clients in all stages of investing in education companies, including target identification and screening, strategic due diligence, portfolio company strategy and operational improvement, and sell-side support. The combination of Parthenon’s Private Equity Practice, which has advised clients on over 1000 transactions, and our Education Center of Excellence, which has worked across all aspects of for-profit and non-profit education, make The Parthenon Group the preeminent advisor to private equity firms considering investments in the education industry.

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