

SIIA Ed Tech Industry Summit (May 22-24, 2011; San Francisco)

Frank Catalano, Intrinsic Strategy, frank@intrinsicstrategy.com

Another year, another record. The 2011 Ed Tech Industry Summit drew close to 400 education and technology company executives over two-and-a-half days. It was such an unexpectedly large crowd, the Education Division of the Software and Information Industry Association did last-minute swaps to larger meeting rooms at the Palace Hotel to accommodate the sessions. By comparison, last year's Summit attracted roughly 300 execs – also a record, at the time.

The official 2011 theme was a somewhat general “Growing Business in a Changing Market.” But the real underlying themes were the promise of personalized learning and the threat of open educational (e.g., “free”) resources, as made possible or enhanced by digital technology. (The Summit also was where the SIIA CODiE Awards for education technology were presented; for the winners, see <http://bit.ly/iZsZMP>.)

These notes represent highlights and brief analysis/commentary. They're based on the live-tweeting of the conference by @FrankCatalano and additional notes, and only represent sessions attended (all keynotes and several breakout sessions). Any analysis, commentary or errors are his alone.

Innovation Incubator Program

For the third year, the Summit hosted an Innovation Incubator competition highlighting products or services that could make an impact on education through technology, usually from startups or smaller companies. Ten were selected, had tables at an opening reception, and made brief presentations during the conference. As in previous years, only a handful appeared to be truly innovative. The 2011 emphasis was personalized learning.

Sixredmarbles' **Cabanga** is an entrepreneur simulator, teaching middle school students financial and math skills by turning them into celebrity agents. Web-based, its two most interesting features were an ELL “toggle” to rapidly switch from English to Spanish, and an optional leader board for more of a game-like experience.

Coursification from PrepMe is an e-publishing platform for instructional materials, aimed at allowing materials to be re-organized, mixed and matched by teachers. Publishers provide materials in PDF, Flash or HTML 5, and tag each piece of content with the concept(s) it represents in one of multiple taxonomies. Then educators can personalize the tagged content. The model is a revenue share per student. One has to wonder if education companies with heavy digital assets might prefer their own platform unless a build-or-buy decision heavily favors Coursification.

Virtual Nerd showed **Dynamic Whiteboard**, which is a series of web-based video tutorials. Where these differ from other videos, though, is that if a student doesn't understand a concept being presented, he or she can simply click on part of the video and additional explanation appears. A neat idea – video with optional explanatory layers – but it seems more of a feature to be incorporated than a product in itself.

GiftedSpeech from GiftedSpeech was perhaps the most unusual Incubator fodder. The premise: That prime language-learning age is 4-10, when kids easily learn the roughly one percent of sounds that are not shared among all languages. If kids are taught these sounds at this age, they will more easily learn the language itself later and speak it accent-free. The web-based product teaches sound foundations of Spanish, Mandarin Chinese and French, as well as those of English to non-English speakers. While this seems quite innovative and conceptually works for ANY language, real or made-up (yes, even Klingon or Elvish – this analyst asked), it also seems as though it might eventually become part of a larger language-learning product suite. It enters beta in November.

GoKnow's **GoKnow** is a second Incubator platform play, this one creating a platform that allows any mobile device to consistently represent lessons, and layering on a classroom manager for teachers, filtering and an administration dashboard. While it's currently primarily for Android devices, GoKnow says it's supported by Verizon Wireless, AT&T and Sprint. It has potential if it can solve the headache of digital materials varying in appearance from one mobile device to another.

McGraw-Hill Spark! appeared to be a third platform play, this one a web-based platform for McGraw-Hill content with added student collaboration, games, professional development and learning management system features. Applications that put Spark! on Android and iPad launch this summer. Unfortunately, its Incubator presence suffered from a presentation and glitzy video that never actually said what the product was – until a certain consultant asked a very direct question during Q&A. It was a textbook case, if you will, on how not to present something new to an audience.

Capstone Digital, a startup division of Capstone Publishing, showed **myON reader**, a fully web-based digital literacy environment integrating e-books with multimedia supports, Lexile assessments, and social media features such as a “book wall” where students can recommend books to other students. A version for iOS and Android mobile devices is in the works and will support offline reading as well. (Disclaimer: Intrinsic Strategy has consulted Capstone Digital on myON reader, but that doesn't make the product any less cool in its integrated simplicity.)

Rivaling GiftedSpeech for most unusual was Awear Technologies' **Neurocognitive Training for Reading Comprehension**. A hardware product, it's a pair of special glasses attached to an EEG feedback band around the head – and as the wearer gains or loses mental focus, the glasses become more or less transparent. This allows training “executive function control” initially among kids ages 4-12 with learning disabilities. The product's first market is learning centers. It's in prototype stage now.

Sokikom's **Sokikom** is a massively multiplayer online social learning game for grade 1-6 math. Fully web-based, it lets kids and their avatars challenge each other in teams to master math skills in a series of areas. (Disclaimer again: Intrinsic Strategy has consulted Sokikom, and likes the combination of web-based, elementary students and team play.)

Wowzers from Brain Hurricane/Wowzers is a multiplayer game world for grades 3-5 to supplement or replace textbooks in math. While it looked interesting, nothing in particular stood out to highlight.

The most impressive of the ten, upon first look? Setting aside **Sokikom** and **myON reader** due to perception of personal bias, an initial top two were **GiftedSpeech** (for pure novelty and life-long language learning utility) and **GoKnow** (for potentially solving a vexing problem about getting digital lessons to be consistently displayed on a variety of devices).

Summit attendees weighed in with their own favorites. Balloting for *Most Likely to Succeed* was topped by **myON reader** (runner-up **Virtual Nerd**) and for *Most Innovative* was **GiftedSpeech** (runner-up **myON reader**). Full voting results are at <http://bit.ly/IQvyK8>.

Keynote: Genevieve Shore, CIO and Director of Digital Strategy, Pearson plc

Genevieve Shore, who is head of digital strategy for Pearson globally (not just North America), presented several “principals” for industry and a few additional observations. Highlights:

- Be disruptive. “Games will be vitally important (to education) over the next few years,” as will artificial intelligence and tablet computing.
- Be global. Don’t just export, but import. For example, Pearson investment in TutorVista, which provides tutoring for \$100/month from India, was cited as one good idea that was imported.
- Be personal. Not only is personalization of formal education important, it’s also important for informal learning, such as on Facebook.
- Be valuable. “Free” isn’t the most important word for education content and data, “share” is. Business models shouldn’t paralyze digital innovation. “Let’s first find the audience,” and the model will follow.
- A recurring theme was that simplicity will rule in education with many-to-many social learning connections.
- For teachers, the biggest challenge is professional training. Teachers are still being “broadcasters” and taught to use 20-year-old technology, not many-to-many learning approaches and tools. Professional development needs to catch up fast.

Session: Defining Personalized Learning

Cleverly structured as a debate on how to define personalized learning by moderator Todd Brekhus, president of Capstone Digital, the lively, standing-room-only session yielded these data points and highlights:

- Jeff Rice, founder/director, APLUS+ (Association of Personalized Learning Schools & Services), defined personalized learning as “choice and flexibility in how, when, what and where students learn.” When challenged on the “what,” Rice explained that skills to be learned fold around student interests. If a student likes fire engines, math, reading and other subjects might include lessons built around them.

- Karen Cator, director, Office of Education Technology, U.S. Department of Education, held there is no killer app for personalized learning yet, yet the need is equivalent to that for personalized, consumer-driven health care and individual health care records. Education results need to be similarly tracked and kept by students throughout their education.
- Cator said personalized learning isn't just a learning plan, it's "very participatory" for the student. And as to testing's role, "The current generation of standardized tests fall far short of giving us the information we need to go forward ... Current (state) assessments don't help very much at all."
- Cator said the "whole notion of big data," such as that used by web game companies such as Zynga to tweak incentives and desired actions, need to be applied to learning.
- Rice pointed out that struggling and gifted students, "are the best matches for a personalized learning environment." It may not be needed for those who are doing fine.
- What must change quickly to enable personalized learning? Rice says state policies for attendance that only consider "seat time."
- Big issues unresolved, but raised: Who owns and controls the student data in records of personalized learning? How is privacy addressed if "big data" is indeed leveraged to get better personalization? And what will happen at colleges of education to train teachers on personalized learning approaches?

Session: Game-based Learning

While game-based learning sessions have cycled through education industry conferences every few years since at least the mid-1990s, new devices (read: iPad) and purely web-based delivery seemed to inspire more companies to "gamify" their products and consider learning games anew. While a lot of old ground was re-trod, a few data points and highlights stood out:

- John Bower, CEO, uBoost, suggested the interesting idea that games need avatars which mature as a student works to finish a course.
- Victoria Van Voorhis, CEO, Second Avenue Software, pointed out re-playability of learning games lets students spend more time in the educational content, so re-playability should be built in. Both Van Voorhis and Her Interactive Chief Strategic Creative Officer Megan Gaiser emphasized better content is the key to better educational games.
- Van Voorhis says labels are still an issue. Her company was forced to re-classify a series of science products as "virtual investigations" instead of "games" due to customer concerns. State adoption committees are reluctant to spend money on anything called "games" since it may be seen as frivolous spending in tough budget times. Publishers are unlikely to sway their customers otherwise, and also have difficulty convincing customers that games can be used for core instruction instead of simply as a nice supplement.

Keynote: Stacey Childress, Deputy Director of Education, Bill & Melinda Gates Foundation

A last-minute substitution for Vicki Phillips (Gates Foundation Director of Education, College Ready), Childress gamely presented Phillips' PowerPoint, but also made several points of her own in discussing the Gates Foundation's work:

- In the United States, the Gates Foundation is specifically focused on education and does little of anything else – a fact many people may not realize.
- On Foundation efforts in education that haven't quite worked out, "We're willing to fail. We're willing to be criticized. But that's only okay if we're willing to learn from our mistakes."
- Technology is not something to be "sprinkled" onto education – that's not sustainable and it doesn't work.
- The Foundation is thinking through how to "uncover nascent entrepreneurs" who have great education ideas, and more on this effort will be announced in the Fall.

Plenary Session: Open Educational Resources Drivers and Definitions

For the second year, the Summit examined what appears to be the inexorable momentum of "free" educational content, with a breakout session last year becoming multiple sessions this year, and with free content going by a more formal name, Open Educational Resources. Data points and highlights:

- Karen Cator, Director, Office of Education Technology, U.S. Department of Education, noted one issue with OER is licensing for use and reuse, and that Creative Commons will be helping deal with OER licensing. Cator said she's really interested in encouraging materials that use Creative Commons licenses which allow the materials to be reused/remixed with attribution.
- Gary Lopez, Executive Director, Monterey Institute for Technology and Education (home of HippoCampus.org, a collection of OER courses), said a major problem with open educational video resources is that schools block YouTube, making them unavailable unless they're mirrored on accessible sites.
- Asked what's driving OER, Cator said what's being created with government dollars should be available for others to use and build upon. She viewed OER as a way to leverage government resources.
- Lopez, responding to what's driving OER, thought K-12 teachers are more interested in digital resources because their students want them. In higher education, the ability to re-mix resources is an important driver. And in both cases, (perceived low) cost is a driver.
- Lopez said if he were a publisher, he'd look for OER resources that meet his customer's needs, and find a way to license them and build a business around them. A big issue in OER is finding business models so open resource projects are sustainable.

Session: Mobile Learning

Another evergreen topic, mobile learning was the explicit focus of a session in both last and this year's Summit, but this year's session was more device-centric. Data points and highlights:

- There was disagreement among the panelists over what “mobile learning” actually meant in terms of devices. Some didn't count laptops (even though they're clearly mobile); others discounted tablets (ditto) and focused solely on mobile phones and smartphones.
- All panelists agreed Bring Your Own Technology efforts are a good idea, since most students have their own devices – but not all do. So schools still need to supply devices for some.
- Sesh Kumar, CEO, Emantras pointed out that companies have to deal with the issue of why they're actually developing for mobile devices. He noted just putting something on a mobile device won't necessarily change learning. Kumar also challenged conventional thinking, saying not to forget “SMS and voice” is a legitimate mobile model that is used, for example, in language learning in countries outside of the U.S.
- Adam Hall, President, SkillsTutor (part of Houghton Mifflin Harcourt) said his company is taking a device-agnostic approach – using HTML 5 because they have to run on all platforms to be successful, and it's risky to bet significant resources on a single device or platform.
- Mary McCaffrey, CEO, THiNQ Ed, added a big issue for existing companies is the “legacy burden” when it comes to mobile, and innovators don't have that hurdle to overcome.
- When asked in Q&A when mobile device access for a product will become a checklist item for schools/districts to purchase digital products/services, Hall estimated student access will be a checklist item in two years; McCaffrey cited estimates of two-to-three years.

Session: Challenges and Opportunities of Open Educational Resources

Digging more deeply into the business issues raised by OER than the plenary session's emphasis on drivers and definitions, this session's speakers were very candid in an illuminating, almost desultory been-there, done-that way. Data points and highlights:

- Judah Karkowsky, Director Business Development, Wireless Generation, reflected on the challenge his company faced when it released a free online reading curriculum for Florida, FreeReading.net. The state itself didn't do much to promote it, since it turned out the textbook depository normally gets a cut of six cents of each copy sold – and with a free resource, there is no cut. So there is no incentive to promote.
- Bruce Friend, Director, Curriculum Pathways Education Practice, SAS Institute Education Group, said terminology and educator expectations are an issue: “If you lined up ten teachers and ask them what ‘OER’ is, they wouldn't know. They only know ‘free.’”

- Friend and Karkowsky also said those who highlight the vast amount of “free” educational content available don’t mention its quality, citing a study that estimated less than 10% of “free” content is actually usable.
- Friend said distributing bad content freely is not necessarily a benefit to educators. “I don’t think every teacher should” be a content developer, “because I don’t think every teacher has the skill set ... There is something worse than teachers who write bad lesson plans. It’s teachers who share them with 300,000 others.”
- Karkowsky added one objection to OER in states is not that it’s not fantastic content, but that there’s no way to weave it together. And one state lawmaker recently told him the state believes the ability to do so is at least five years out.

Keynote: Margery Mayer, President, Scholastic Education

As with many education executive conference keynotes, Mayer’s talk was relatively high level (and entertaining), but two points stood out as takeaways:

- To model data dashboards for education technology products, Scholastic reviewed Mint.com, WeightWatchers.com and NikeRunning.com – all consumer websites. Mayer thinks consumers will increasingly be part of education buying decisions and education products must appeal to them.
- When asked where to find education technology inspiration outside of education, Mayer responded, “I say look at everything except stuff that sucks.”

Additional thoughts

The surge in attendance at the 2011 Ed Tech Industry Summit was unprecedented and unexpected, apparently even to SIIA Education Division staff. There are likely several drivers:

- An increase in investor interest in the education space (visibly represented by last year’s purchase of Wireless Generation by Rupert Murdoch’s News Corp),
- New, high-profile Gates Foundation activity in education technology,
- An emphasis on digital learning by the Obama Administration (indirectly supported by both Federal stimulus and Race to the Top programs), and
- Cash-strapped states and districts looking to expand digital learning to potentially cut costs (either through commercial web-based or “free” OER materials).

There certainly appears to be an increase in edtech startup activity, which likely also contributed to the surge.

When it comes to Open Educational Resources, the Summit as a whole reflected a huge amount of industry uncertainty and concern, especially with the emphasis the U.S. Department of Education and the Gates Foundation are putting on OER. At an informal closing session, top executives of four companies (Kaplan Publishing, Promethean's Learner Response Systems and Assessment Division, DreamBox Learning and ConnectYard) were asked if their strategy for OER was to directly compete with, integrate, or ignore OER. Of those who chose to answer, the response was "integrate." But how clearly remains an open question.

The increasing influence of consumer technology preferences on education was also reflected in several sessions, including Margery Mayer's keynote, Genevieve Shore's keynote, the mobile learning panel, and in just about every finalist product or service in the Innovation Incubator (most of which were web-based and the design of which reflected consumer sensibilities). What used to be a decade-long lag for education to reflect consumer trends has been compressed to no more than three-to-four years, and more likely only one or two.

Presentations, videos and related session materials, along with the full program, are on the Summit website (<http://bit.ly/eG7Htg>). An essay explaining three digital learning trends that have no equivalents in business or consumer digital technology, citing examples at the Summit, was written by Frank Catalano for the tech news site GeekWire (<http://bit.ly/kCZwmp>) for those outside of education.

The next SIIA Ed Tech Industry Summit is May 6-8, 2012, at the Palace Hotel in San Francisco.

Frank Catalano is an author, analyst and the principal of Intrinsic Strategy, a strategic consulting firm for digital education and consumer companies. He tweets from <http://twitter.com/FrankCatalano>. More information about Frank is available at <http://intrinsicstrategy.com/about-intrinsic-strategy>.