

## SIIA Ed Tech Industry Summit – November 26-27, 2012

### McGraw-Hill Conference Center

**Panel:** Shifts that are Changing How Products are Being Developed

**Moderator:** Thomas Squeo, Chief Technology Officer, Pierson Labs

**Panelists:** Steve Benfield, Head of Solutions - Software Group, Promethean Inc. (USA)  
Jeremy Friedman, CEO and Co-Founder, Schoology  
Babur Habib, Co-Founder and CTO, Kno, Inc.  
Tim Rogers, Vice President, Software Development, Follett Software Company

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*Summary by Paula Maylahn*

There has been an explosion of devices AND expectations in the market that have put developers under tremendous pressure. It's not feasible to tailor every app to every engine. So some companies have embraced an HTML5-only development environment. Others feel it's too early to commit to HTML5, especially since it doesn't allow them to do everything they need to.

For emerging companies, the problem is less pronounced. Companies that are less than three years old don't have the "baggage" (from legacy software and devices to HR salary constraints on new hires) to address that more established companies do.

Developers have moved to Agile development process as a way to compress time to market. However, there's no Agile for managing the organizational change needed to roll out new software. Developers can't radically change things for teachers who have to deal with professional development on the fly.

Developers also need to be mindful of hardware/software requirements put forth by PARCC and Smarter Balance assessment consortiums. Things like screen size resolution and processor speed will affect the adoption of their products.

A key challenge for all companies is the rate of change, which at the same time manages to be both too fast and too slow. Companies need to deal with demands from very vocal iOS-device-using districts, while the majority of education users are still on IE7 and desktop PCs. Touch interface, not to mention gestural interaction, is just techno hype to most of any company's installed base. This means companies need to design products that degrade gracefully and will continue to work if not on a new device. This also means that they have to support "everything", which is hard and quite costly to do.

Another challenge for companies is education customers' expectations, shaped by their experience as general consumers. Education customers want search to work like Google and expect 24/7 access. Down time of days or weeks are simply no longer tolerated. "Liquidated damages" terms for when products don't work are now being written into contracts. With this in mind, companies must:

- communicate with development teams regarding down time
- use customer data in testing, not developer data

- incorporate a high QA ratio into development (4:1 can be achieved with some automation)

A quality team is essential to meet all these challenges. Hire talent and attitude. The education industry is competing with all other industries for great developers. While money is important, it's not the only factor. Developers want a career path that doesn't end in management. They want the opportunity to be challenged and to do interesting things. In the right environment, "Fritos and Cokes" incentives can go a long way.

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