

Trends

Adaptive Learning Tops Strategic Tech List for Education

- By Dian Schaffhauser
- 03/03/15

Even as education spending is projected to inch up two percent this year to reach \$67.8 billion worldwide, the way in which school districts, colleges and universities are spending that money is evolving to reflect the growing digital nature of teaching and learning, according to [Gartner](#). In a new report, "[Top 10 Strategic Technologies Impacting Education in 2015](#)," the business IT consulting firm ranked 10 innovations and tech trends that it believes the education CIO should plan for in 2015.

Many of the technologies aren't emerging from within education itself, said Gartner Vice President Jan-Martin Lowendahl. They're being "driven by major forces such as digital business and the consumerization and industrialization of IT."

1. Adaptive Learning

Coming in at first place is a technology that has been around in some form for six decades, the firm reported. Now, however, the ability to "capture learner data through online learning" has given adaptive learning new life in schools as a road to personalizing instruction. As Gartner noted, "The real value of adaptive learning lies in the metadata attached to each learning 'morsel,' which must then be combined with enough empirical data of students trying to master the topic to allow personalized learning."

Why does Gartner put it at the top of the list? "Adaptive learning seems to be maturing fast, but has not yet hit the 'Trough of Disillusionment.' A lot of real-world testing remains, but the potential rewards are enormous," the report declared.

2. Adaptive Digital Textbooks

The idea behind this type of e-textbook is to track how students interact with the text and then adapt the content appropriately through assembly and disassembly, the inclusion of material from other sources and the addition of social interaction with others using the content.

3. CRM

Constituent relationship management (CRM) has long been part of the vernacular at least in higher education to stay on top of relationships with potential, current and former students; families; companies; benefactors and other members of the institutional community. However, said Gartner, institutions are struggling to standardize and integrate their other institutional data with this data for better decision making.

4. Big Data

The big data "exhaust" generated by the numerous digital activities of students, parents, instructors and staff is moving beyond the realm of district and institutional research and reporting and into the larger domain of school operations. The application, Gartner suggested, "has the possibility to improve the whole education ecosystem."

5. and 6. Sourcing Strategies and 'Exostructure'

The first of these refers to the accumulation of technologies and vendor services that provide software,

hardware and services that are "required to fulfill an enterprise's business objectives." Strategic sourcing encourages IT to job out the work that's utility-based to steer the focus of its internal resources "toward activities that enable differentiation and innovation."

Along the same lines, exostructure is Gartner's term for building out a school's education ecosystem with external partnerships, tools and services rather than building up strength in those areas internally. As the analyst firm explained, "The future belongs to exostructure rather than to infrastructure."

7. Open 'Microcredentials'

Although badges and points — microcredentials — have been gaining steam among some educational initiatives, what they lack has been openness. Open microcredentials is a move to shift away from proprietary versions of badges and to open initiatives. This technology strikes Gartner as one that requires a "relatively small investment...with good ROI."

8. Digital Assessment

Although the arrival of digital assessment has become a point of contention across the country in K-12, since it's tightly wrapped up into state learning standards that some segments view darkly as federal mandates, at the higher ed level it takes a different form. The focus there is on increasing trust in online education "by applying identification mechanisms, such as keystroke identification or cloud-based face recognition." Gartner noted that this technology will remain "strategic" until its many problems are "solved."

9. Mobile

Although some observers might believe that mobile education has already arrived, Gartner doesn't see it that way. "The domain is maturing surprisingly slowly," the analyst firm insisted, hobbled by several inhibitors: smartphone cost; device limitations, such as battery life; development of true mobile learning course materials; lack of mobile development skills; and the divergent nature of the mobile market. CIOs would do well, Gartner said, "to view this area as "strategic" for "several years."

10. Social Learning

The idea of social learning encompasses a lot: a way for students to interact with others covering the same content, to find and organize learning objects from multiple sources, and to reach beyond personal networks for "other trusted sources of information," and to obtain "online coaching and support," among other endeavors. Gartner noted the propensity for students to gravitate to "open" social platforms such as Google Sites and Facebook rather than use the social functionality built into their learning management system. "Vendors and institutions are still trying to figure out the perfect mix in the learning stack," the company said.

Gartner advised IT leaders to focus on those technologies that are appropriate for the given district or institution. Some will "help you run the institution," the report stated. "Others can help you grow or transform the institution's business model."

About the Author

Dian Schaffhauser is a writer who covers technology and business for a number of publications. Contact her at dian@dischaffhauser.com.

[Campus Technology](#) | [CT Summer Educational Conference](#) | [CT Leadership Symposium](#) | [CT Forum Conference](#)
[THE Journal](#) | [FETC](#) | [FETC Virtual Event](#)

[\[+ \] Feedback \[+ \]](#)

©2001-2015 [1105 Media Inc](#), Ed-Tech Group. See our [Privacy Policy](#) and [Terms of Use](#)

