A Perspective on Adaptive Education

Harnessing the power of technology to improve teaching and learning

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A PERSONALIZED APPROACH *to Learning*

Adaptive learning represents an opportunity to use new instructional tools and new data in bringing the power of learning to more learners more effectively and more efficiently than ever before[1].

At its most basic level, adaptive education is a more personalized approach to learning – moving beyond the one-size-fits-all educational model that is largely ineffective[1]. Another benefit that has become synonymous with adaptive technologies is the large sets of useful data that may be collected from these technologies.

Technology and brain science collaborate with big data to carve out customized pathways through curriculums for individual learners, and to free up teachers to devote their energies in more productive and scalable ways[2].

Detailed statistics not only provide students with a snapshot of their own progress, but provide faculty with invaluable summary data on their classes and individual students. This allows faculty to make interventions with strugglers sooner – which aids in retention and boosts student success. Instructors may also modify their classroom instruction based on overall strengths and misconceptions found through these adaptive programs, which leads to better-prepared students and maximizes instructor efficiencies[3].

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Programs, faculty, and students wishing to pursue adaptive instruction will experience a vast array of distinct benefits, including but not limited to the following:

Adaptive systems are able to make adjustments based on the learner's interactions with material. Over time, adaptive systems begin to anticipate the learner's strengths and weaknesses, and then deliver content based on that knowledge profile. With this type of instruction, students can take advantage of a non-linear, personalized approach to learning[1].

A faster and higher quality of student progression ensures that faculty have time to address unique, individual student needs[4].

A deeper student engagement with the material, through personalized learning, leads to improved outcomes at the individual and program levels[2].

Course instruction may be adjusted based on the information gained from student response data, helping classes progress faster and freeing up instructor time for one-on-one interactions.

Implementing adaptive technologies allows students to use individualized pathways in progressing through their learning materials. This approach increases student engagement and allows programs to aggregate essential data, enhancing value for all participants in the higher education community, including students, faculty, administrators, and ultimately employers[1].

Conclusion

While the concept of adaptive learning has been around for a while, the advances in technology surrounding this concept have pushed the practice in new ways and strengthened its ability to help students study for, prepare for, and predict exam success. Elsevier is committed to supplying the adaptive technologies that educators and students need to excel today and working with partners to develop the technologies that will continue to lead the way in the future.

Contact your Elsevier Education Solutions Consultant to learn more

Works Cited:

[1] *Education Growth Advisors. "Learning to Adapt: A Case for Accelerating Adaptive Learning in Higher Education." Education Growth Advisors, Mar. 2013. PDF File. 25 Aug. 2014.*

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[3] *Oxman, S., & W. Wong. "White Paper: Adaptive Learning Systems." Snapwiz. Integrated Education Solutions, 1 Feb. 2014. PDF File. 25 Aug. 2014.*

[4] *Kerns, D. "Six Key Benefits of Adaptive Learning." Dreambox Learning, 17 July 2013. Web. 25 Aug. 2014.*