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LEADERSHIP

## The Strength of EdTech

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*How it supports educators, empowers students, and changes lives.*

GUEST COLUMN | by Robert Rubin



### Why education technology?

**T**he pressure for educators to ensure student success on state tests has led to a constant balancing act: teaching to the test and then the skills needed to pass the test.

With today's technology, it no longer makes sense to assess students one at a time.

Any tool that doesn't detract from teachers' time provides a critical advantage.

Educational technology's unique capability to ease the daily challenges educators face has earned it its place as an essential component for any educational institution.

Schools can spend hours and days struggling to synchronize a device with a service and then have to wait weeks to receive student reports. However, top-notch education technology (edtech) provides instant, real-time data from student assessments right after the test.

These instant results highlight deficiencies, inform instruction, and include progress monitoring that measures growth regularly and automatically.

Even better, the reported results guide teachers in their instruction by providing suggestions for next steps based directly on assessment results. Digital reporting even automatically organizes students with similar needs, informing small-group instruction so teaching can be the focus instead of classroom organization.

Having the right technological tools to custom fit student needs opens up myriad possibilities for achievement.

Today we ask and expect technology to guide teachers and students on their learning journeys.

Great edtech on the market can accurately predict academic success and produce reliable scores that validate measures of student ability. Beyond adapting to individual students' needs, this consistency is a top advantage of effective edtech.

Moreover, great edtech has the power for immediate placement into existing curriculums.

### Considerations when looking for an edtech product

To create this kind of technology, designers must take a rigorous approach based on algorithms that have been consistently proven effective.

Knowing this, school districts must therefore proceed with caution and ensure that adequate and effective data exists to back up any vendor's claims that they can predict outcomes on high-stakes tests.

The true test for effective and usable edtech is whether it can work within the confines of a school's existing infrastructure. Many schools face issues such as outdated equipment, unreliable networks, and limited bandwidth.

Truly transformative edtech is innovative in its approach to these obstacles, such as:

- functioning properly on a variety of devices — from older desktops to the latest mobile devices;
- conserving bandwidth;
- benefiting all students with a single download;
- serving more student users without demanding more bandwidth; and
- continuing to function effectively even if the internet connection is not robust.

All of this means that the technology can be just as effective in rural areas with slower internet speeds as it is in dense urban areas with fiber-optic connections.

Effective edtech provides students with personalized, one-on-one instruction like never before. It allows students of varying levels to receive instruction specific to their needs and learning levels, effectively decreasing the student fatigue and frustration that can be common in whole-group instruction.

Another wonderful aspect of edtech is its ability to automate assessing, reporting, and intervention-planning, consequently returning valuable time to teachers. Quality computer-adaptive assessments can be set to automatically test students monthly.

These assessments are frequent and simple progress-monitoring tools that do not overtax and typically require 30 minutes or less per month. The overall experience has a transparent and accessible quality that provides data points and insights to teachers, administrators, parents, and even the students themselves, thereby increasing their ownership in the results and their learning path.

### What we strive to provide

Technology must be dynamic and capable of adapting to the growing demands placed upon it.

The development of such technology requires a strong team of subject experts, psychometricians, artists, and programmers capable of and dedicated to responding and improving the technology's ability to help teachers educate and help students learn.

Those of us who work in edtech strive to ensure that students who need individualized education get the full benefit of what is possible today while setting the foundation for even greater leaps forward in the future.

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*Robert Rubin, SVP of Technology and Business Processes at Istation, has been with the educational technology firm since 1998 as one of its founding members. An advocate for software's ability to automate tasks and, in turn, make educators' lives easier, he has been a key contributor in developing the company's data collection and reporting features as well as its server infrastructure to support more than 4 million students using their products. Robert holds a B.S. in Electrical Engineering from the University of Texas at Austin. He is married and the proud father of two independent adults.*